Entrepreneurship from an Emerging Nation: A Case Study from Cebu, Philippines

Tiffany Adelaine G. Tan, PhD*, Ernesto G. Yap and Allen F. Vicente

This study looked at entrepreneurship from the entrepreneurs' viewpoint on what enabled them to start their businesses. A semi-structured survey was used on 124 respondents – all business owners of micro-, small-, and medium-sized enterprises – who were selected via purposive and snowball sampling. Cross-tabulation, the Mann-Whitney U test (or Wilcoxon Rank Sum test), odds ratio, and logistic regression were performed to analyze the data and determine their enabling factors.

The results reveal that those who planned to become entrepreneurs and those who did not have a similar personality, come from diverse educational backgrounds, and have social support and network. These findings highlight the importance of self-confidence, being inspired by successful entrepreneurs, and belonging to a peer group engaged in business. The results also reveal that the entrepreneurs' confidence to start their businesses is triggered by the positive motivation from their social support and network. The motivation is enough to surmount their perceived obstacles to entrepreneurship – the lack of capital and government support.

Keywords: Poverty alleviation, Central Visayas, technopreneurship, unemployment

1 Introduction

Common sense dictates that reducing poverty incidence is a good setup for any economy. In the Philippines, official reports on poverty incidence show a decrease from 23.3% in 2015 to 16.6% in 2018 (PSA, 2019). Although it seems to be an improvement statistically, this percentage translates to 17.6 million Filipinos still living below the poverty threshold of P10,727 (PSA, 2019, para. 1) or US\$214.54 per month (at P50/US\$1 exchange rate) set by the government. However, Filipinos consider the country's poverty incidence to be much higher than what the government reports because they believe the monthly income of a family of five should be higher. With a monthly threshold of P12,000 (or US\$240), the self-rated poverty for 2019 averages at 45% (slightly lower than the number in 2018 of 48%) (SWS, 2020).

A common observation is that entrepreneurship is considered a critical factor in the reduction of poverty in developing countries (Abraham, 2012, para. 2). Abraham (2012) mentions how economic reforms, such as creating a business-friendly environment, pull millions of people out of poverty in countries like China, South Korea, and India. He further proposes that creating wealth through entrepreneurship in emerging nations is favorable and "sustainable without dependence on handouts and aids" (para. 4). Others agree that it "offers the best opportunity to create substantial and significant positive change within poverty settings" (Bruton, Ketchen, & Ireland, 2013, p. 688). Moreover, studies have proposed that the development of entrepreneurship in the education system helps solve some social, economic problems (Garba, 2010; Ogundele, Akingbade, & Akinlabi, 2012).

To promote entrepreneurship, government agencies have established the following programs. Mandated to encourage and support the establishment of business enterprises (OPP, 1987), the Department of Trade and Industry (DTI), through its Negosyo Centers, has several programs that help individuals start and grow their businesses. One such project is the KAPATID or the Kapatid Mentor Me (KMM) training. The workshop includes capacitating micro- and small-sized business owners of entrepreneurship fundamentals and equipping them with skill sets to scale up and sustain their business operations (DTI, n.d.). In Cebu, the regional office of DTI reaches out to Cebu's business chambers to participate in the mentorship program (Saavedra, 2019). Another project is the Negosyo Serbisyo sa Barangay which helps entrepreneurs with less than ₱25,000 (US\$500) in average annual income to grow their businesses (Canivel, 2019).

^{*} Correspondence: tgtan@up.edu.ph, University of the Philippines Cebu

The Commission on Higher Education (CHED) has instigated to include entrepreneurship in priority programs by mandating "Technopreneurship 101" in science, technology, engineering, agriculture, and mathematic disciplines (CHED, 2016). The proposed course exposes the students from these disciplines "to the entrepreneurial mindset and the fundamentals of entrepreneurship" (p. 1). Another agency mandated to supervise the country's technical education is the Technical Education and Skills Development Authority or TESDA (tesda.gov.ph). TESDA offers an online entrepreneurship program it developed in partnership with Coca-Cola Philippines, covering topics from starting a business, growing it, and making it profitable (e-tesda.gov.ph). Another initiative of TESDA and DTI is to encourage technical-vocational graduates to engage in entrepreneurship through the Trabaho, Negosyo at Kabuhayan program of DTI (TESDA, n.d.). Even the Department of Education (DepEd) has exerted efforts to include entrepreneurship in its secondary education in the recently implemented K to 12 programs (Garcia, 2019). DepEd has worked with CHED, TESDA, and DTI to develop the program for K to 12 learners. But are these the programs that will enable individuals to venture into entrepreneurship? The authors argue that a study is needed to understand the entrepreneurs' mindset, what made them pursue entrepreneurship, and what government and academia need to do to encourage them.

The importance of entrepreneurship is evident in the plethora of published academic articles on individuals' enabling factors to become entrepreneurs. Entrepreneurship research in the Philippines focuses on the youth and university students (e.g., Lai, Chan, Dentoni, & Neyra, 2017; Mendoza & Lacap, 2015; Reyes & Manipol, 2015). These studies focus on the factors that may encourage them to engage in entrepreneurship in the future. These articles also advise universities to adopt innovative approaches (e.g., experiential form of teaching and learning) to motivate the students to engage in entrepreneurship when they graduate. But does entrepreneural education (EE) make the students engage in entrepreneurship, or do they become better entrepreneurs? The authors argue that a study is needed to shed light on what these courses can contribute to increasing students' likelihood of pursuing and becoming better entrepreneurs.

Although several articles support that EE is positively correlated with the intent to pursue entrepreneurship (e.g., Handayati, Wulandari, Soetjipto, Wibowo, & Narmaditya, 2020; Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017), perceived increase in entrepreneurial skills (Hahn, Minola, Bosio, & Cassia, 2020), and competencies (Nabi et al., 2017), Shane (2010) purports that there is not enough research to conclude that it does. Is it possible that personal factors, such as personality, may influence one's decision to venture into entrepreneurship? Or is it that situational factors, such as belonging to a family or network of business people, may encourage one to pursue it?

Moreover, to the authors' knowledge, there appears to be no published academic article that examines the impact of Philippine EE in becoming an entrepreneur. There is a need for studies to explore the factors that encourage and sustain entrepreneurship from the entrepreneurs' viewpoint, not students. Thus, this current study aims to shed light on the impact of personality, entrepreneurial education, and social support and network in enabling the entrepreneurs to pursue their businesses. The study's findings may guide government and academic institutions in crafting or improving programs supporting entrepreneurial pursuits.

Lastly, this study focused on Cebu entrepreneurs since Central Visayas was the fourth largest contributor to the country's economy, as reported by the Philippine Statistics Authority (PSA) (Nazario, Damicog, & Panaligan, 2019)¹. From 2015 to 2019, the average growth rate of the regional gross domestic product (RGDP) of Central Visayas was 6.85%, higher than the country's 6.025% during the same period (PSA, n.d.b.). Furthermore, 70% of Central Visayas's performance came from Cebu (Fajardo, 2018), recognizing Cebu's value to the region and the national economy.

DTI also reported that in 2019, there were over a million businesses operating in the Philippines. Of these, 99.5% were micro-, small-, medium-sized enterprises (MSMEs), while 0.5% were large corporations. Central Visayas had over 70,000 MSMEs, of which 87% were considered micro-sized businesses.

¹ The top three contributors were the National Capital Region (NCR), CALABARZON, and the Cordillera Autonomous Region.

Figure 1 shows that Central Visayas has the fourth-highest number of registered MSMEs². Dagooc (2020) has also reported that Cebu's economy is robust and is expected to grow, driven by tourism, real estate, and knowledge and business process outsourcing (para. 32). The article also identifies food, fashion, furnishing, and fun as Cebu's economic drivers. Moreover, Cebu is a preferred hub for various industries, from online retailing (Galolo, 2015) to outsourcing (Lorenciana, 2018). The ASEAN Ministers of Culture and the Arts has also declared Cebu a "City of Culture" (Codilla, 2011), a boon to tourism. Consequently, tourism drives the growth of the MSMEs in Cebu, especially those in the hotel, food, and other tourism-related businesses (Bunachita, 2018; Cacho, 2018).



Figure 1. Distribution of MSMEs by region in the Philippines (2019)

Source: DTI, 2019

Thus, this current study aims to add to the body of knowledge on entrepreneurship by addressing the overall research question, "what enabled the businessperson to pursue entrepreneurship in Cebu?" Although there is a plethora of research on the enabling factors of entrepreneurship worldwide, there is still a need to understand the issues that encouraged entrepreneurship, especially from the entrepreneurs themselves. For this reason, this study focuses on respondents who are already in business to know what made them pursue entrepreneurship, and not just the intentions of pursuing it.

Thus, the following are the research objectives:

- 1. To examine the impact of personality, entrepreneurial education, and societal support and network on one's pursuit of starting a business;
- 2. To learn the perceived challenges of the entrepreneurs; and
- 3. To discover the perceived needs of the entrepreneurs from the government and academia.

² The top three are NCR (20%), CALABARZON (15%), and Central Luzon (12%).

2 Literature Review and Hypothesis Development

Dollinger (2008, p. 8) defined entrepreneurship as "the control and deployment of resources to create an innovative economic organization for the purpose of gain or growth under conditions of risk and uncertainty." Fairlie and Fossen (2018, p. 1) presented two kinds of entrepreneurs, those that created businesses based on a business opportunity and those who were forced to start a business because there were no options in the labor market. Regardless of the reason behind pursuing a business, entrepreneurship, for this study, is defined as creating a business from nothing or taking over an existing business.

Krueger and Carsrud (1993) proposed that planned behaviors or intentions were the single best predictor of behavior, in this case, starting a business. They argued that one's behavior might be influenced by situational or personal factors. Applied to business ventures, situational factors may include employment status or social network, while personal factors may consist of personality traits and education. They presented several theories to support the link between intentions and behaviors and argued that intentions need to be present to engage in starting up a business. Indeed, several studies showed and advocated that entrepreneurial intentions positively predicted entrepreneurial behavior (e.g., Doanh & Bernat 2019; Fayolle, 2005; Shinnar, Hsu, Powell, & Zhou, 2018).

From here on, this study explores the literature on the three factors of interest that may influence entrepreneurial behavior. These are personality, entrepreneurial education, and social support and network.

2.1 Personality

Past literature has proposed that personality affects one's entrepreneurial intentions. Personality is the "sum of ways in which an individual reacts to and interacts with others," and is "described in terms of the measurable traits that a person exhibits" (Robbins & Judge, 2017, p. 175). For instance, individuals who are likely to become entrepreneurs have a Type A personality, or those with a high degree of aggression, leadership, and responsibility (Viinikainen et al., 2017). They are innovative, have an internal locus of control, and have a high need for achievement (Karabulut, 2016; Koh, 1996).

Rauch and Frese (2007, p. 353) examined the effects of the need for achievement, generalized selfefficacy, innovativeness, stress tolerance, need for autonomy, proactive personality, and heterogeneity on business creation and success. They noted that the traits that were matched to the task of running a business had a larger effect on business creation and business success than those traits that were not matched to the task of running an enterprise. Li et al.'s (2020) findings showed that individuals who had a proactive personality (the tendency to act regardless of situational constraints) were more inclined to venture into entrepreneurship. Furthermore, De Janasz, de Pillis, and Reardon (2007, p. 382) found a correlation between achievement motivation and entrepreneurial intention for their US respondents, but no association for their Irish participants, indicating the possible influence of culture. However, those who believed that being an entrepreneur was consistent with their self-image showed strong entrepreneurial intentions across cultures.

Various studies across culture also examined the impact of the big five personality dimensions (i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism) on entrepreneurship intention. They found a positive relationship between the four personality dimensions, except for agreeableness, and plan to engage in entrepreneurship (e.g., Mei et al., 2017; Nga & Shamuganathan, 2010; Zhao, Seibert, & Lumpkin, 2010). Similarly, López-Núñez, Rubio-Valdehita, Aparicio-García, and Díaz-Ramiro (2020, p. 1) found that real entrepreneurs scored highest in conscientiousness, openness, and extraversion.

Based on the theoretical concepts and the empirical results of previous literature, the first hypothesis (H1) is formulated: Entrepreneurs are more likely to show similar personalities with each other.

2.2 Entrepreneurship Education

Without a doubt, entrepreneurship education (EE) had an impact on the students' propensity and intentionality (e.g., Galvão, Ferreira, & Marques, 2018; Rauch & Hulsink, 2015, p. 16; Sánchez, 2011); it is unclear, though, whether such knowledge enabled the students to become effective entrepreneurs (Pittaway & Cope, 2007; Shane, 2010). Several studies agreed that EE positively influenced a student's intention to engage in entrepreneurship (e.g., Shinnar et al., 2018, p. 4; Nowiński, Haddoud, Lančarič, Egerová, & Czeglédi, 2019; Westhead & Solesvik, 2016). The results of the United Kingdom study of Matlay (2008) indicated that entrepreneurship education positively impacted all 64 graduates in the research sample to pursue entrepreneurship. Matlay (2008) followed the graduates' career path for 10 years. The results showed that all 64 respondents were either sole traders, owner of micro-sized businesses, a partner in the new firm, or a partner in an established enterprise one to 10 years after graduation. Karlsson and Moberg's (2013, p. 6) findings also suggested that EE had a "near significant, positive impact" on the students' nascent entrepreneurial behavior. However, these respondents were still in university and were "trying to start a business." Barba-Sánchez and Atienza-Sahuquillo (2018, p. 1) also found that the need for independence positively impacted the intention of the engineering students to pursue entrepreneurship, and that this supported the contribution that EE had on entrepreneurial intentions.

On the other hand, several studies contradicted EE's contribution to individuals' intention to create a business. The findings of Oosterbeek, Praag, and Ijsselstein (2010, p. 452) noted a negative impact of the EE program on entrepreneurial competencies and intentions. Herman and Stefanescu (2016) found that the engineering students sampled in their study were more likely to be influenced by their families, who were entrepreneurs, to create their businesses than by their EE. Van der Sluis, Praag, and Vijverberg (2008, p. 795) also argued that the impact of education on entrepreneurship to be insignificant.

In addition, it is also common knowledge that business moguls such as Bill Gates (Microsoft), Amancio Ortega (Inditext Group, Zara), Mark Zuckerberg (Facebook), Steve Jobs (Apple), Ralph Lauren (Polo Ralph Lauren), and Richard Branson (Virgin Group) did not even finish college (Jonas, 2019). The situation in the Philippines is similar. However, though several business tycoons in the Philippines do not have a college degree, they continue to stress education's importance (Uy, 2017). Bill Gates also notes the impact of education on employment and the value of staying curious (Uy, 2017).

Al-Awlaqi, Aamer, and Habtoo's (2018, p. 1) article focused on entrepreneurial training and found a positive and significant relationship between entrepreneurship training and entrepreneurship orientation. They defined entrepreneurship education as focused on theoretical knowledge, while entrepreneurship training concentrated on developing attitude and business skills. In developing skills, Galvão et al. (2018) proposed that entrepreneurship training was more effective than EE. Still, some aspects of entrepreneurship could be taught, such as accounting, finance, marketing, and management information system. However, skills like judgment, handling people, patience, and responsibility could only be learned in the real world (Henry, Hill, & Leitch, 2005, p. 107).

Based on the preceding arguments, the second hypothesis (H2) is formulated: The courses taken in college do not enable individuals to pursue entrepreneurship.

2.3 Social Support and Network

Another enabling factor of entrepreneurship is the "people behind the people" (Thompson, 2010). Entrepreneurship enablers are individuals who are in the business themselves, and those who affect the infrastructure and culture for entrepreneurs to emerge and grow. These entrepreneurship enablers provide the necessary support for new entrepreneurs. Qureshi, Kistruck, and Bhatt (2016) also propose that social ties are enabling factors, suggesting that there are relationships that encourage individuals not to contradict existing norms and encourage people to engage in activities to change their circumstances.

Furthermore, studies noted that individuals with high levels of social capital and organization membership (particularly family) had more likelihood of being self-employed than their counterparts (e.g., Kwon, Heflin, & Ruef, 2013; Pham & Talavera, 2018). For instance, female business owners benefited from their family ties in terms of the firm's performance and women's role in the family

(Mari, Poggesi, & De Vita, 2016). Another example was migrants who were forced to go to their spouses' country would likely engage in entrepreneurial activity than employment (Williams & Krasniqi, 2018). Similarly, Nguyen (2018) also noted that family background was a predictor of an individual's likelihood to pursue firm ownership of Vietnamese business students.

In a study on the network approach to entrepreneurship, Brüderl and Preisendörfer (1998, p. 213) argued that network resources, networking activities, and network support were heavily used to establish new firms (network founding hypothesis). Gelard and Saleh (2011) found that the entrepreneurial intention was related to formal networks. Their findings revealed that the first question that would arise in student entrepreneurs' minds was, "which organization would help me start my business?"

In studies on contextual influences on entrepreneurship, Kacperczyk (2013) showed that past entrepreneurial behaviors of university peers were important drivers for entrepreneurship. Specifically, social influence had a more substantial effect on transmission when the individual was in closer proximity to peers who were entrepreneurs. In another related study by Sørensen and Sharkey (2014), formal business organizations played important roles in shaping entrepreneurs.

Based on empirical results, the third hypothesis (H3) is formulated: Social support and networks enable individuals to pursue entrepreneurship.

Figure 2 offers a graphical illustration of this current study's hypothesized relationships derived from previous studies' theoretical concepts and empirical results.

Figure 2. Graphical illustration of hypothesized relationships



3 Methodology

Both qualitative and quantitative approaches were used to understand what made the entrepreneurs start their own businesses., A semi-structured survey was formulated, composed of questions from the literature and from the interviews of key informants who themselves were long-time entrepreneurs (See Appendix A). These entrepreneurs have had extensive business experience, have been in the business for more than a decade, and have assisted and advised other entrepreneurs. To establish the validity of the interview questions, the draft was reviewed by two business professors to ensure coherence and completeness. Open-ended questions were added to allow the participants to explain their thoughts further. Before sending out the questionnaire to the participants, the survey was tested on four research assistants for clarity and possible concerns. After the final edits, the survey was distributed. On average, the survey could be accomplished between 14 to 16 minutes.

In the Philippines, MSMEs employ about 63% of the workforce (DTI, 2019), and DTI classifies enterprises as presented in Table 1.

Type of enterprise	Capitalization in PHP (₱50/US\$1)	Number of workers
Micro	Less than ₱3,000,000 (\$60,000)	Less than 10
Small	₱3,000,000 to 15,000,000 (\$60,000 to 300,000)	Less than 100
Medium	₱15,000,000 to 100,000,000 (\$300,000 to 2,000,000)	100 to 199

Table 1. DTI classification of enterprises

Source: DTI, 2019

The MSMEs located in Metropolitan Cebu (Metro Cebu) are the focus of this current study since Metro Cebu comprises 61.5% of the total population of Cebu province based on the 2015 census (PSA, n.d.a.). Moreover, Cebu province contributes 70% to the RGDP of Central Visayas (Fajardo 2018), and Central Visayas has the fourth biggest RGDP in the Philippines (Newman, 2019). As shown in Figure 1, Central Visayas is in the top four in terms of its contribution to the Philippine economy, and has the fourth-largest number of MSMEs in the country.

Initially, the plan was to randomly choose the survey participants from an official DTI list of MSMEs, that was requested from the DTI Negosyo Center situated in a state university in Cebu City; however, access to their database was denied for data privacy reasons. Therefore, the participants were chosen with the help of this study's research assistants and various business organizations in Metropolitan Cebu. Purposive and snowball sampling were used to invite participants. The disinterest of several business owners to join the study was unanticipated. After eight months of contacting and following up with potential participants, a total of 124 business owners of MSMEs from various industries, social, cultural, and personal backgrounds agreed to join this study. Purposive sampling was deemed appropriate for this study since the unit of analysis were individuals who pursued opening their businesses in Metropolitan Cebu over gaining employment. The selection of respondents was based on the availability of the business owners.

Since the participants in this study were individuals who have at least one running business, the respondents were categized into "those who planned to become an entrepreneur" and "those who did not plan to be one." The hypotheses were tested by comparing these two groups of entrepreneurs.

Several methods were used to conduct the data analysis. An initial exploratory data analysis was implemented to investigate personality, entrepreneurial education, and social support and network relative to the respondents' pursuit of becoming entrepreneurs. To test H1, cluster analysis and the Mann-Whitney U test were performed. The null hypothesis for the Mann-Whitney U test was that the distribution of scores for the two groups was equal, and the alternative hypothesis was that the distribution of scores for the two groups was not equal (McKnight & Najab, 2010). The nonparametric Mann-Whitney U test, or popularly known as the Mann Whitney Wilcoxon Test or Wilcoxon Rank Sum Test, was deemed appropriate for this study since the two populations being compared were independent, the data was not normally distributed (McKnight & Najab, 2010), and was on an ordinal scale (Corder & Foreman, 2009).

For H2, the Pearson Chi-square was used to test whether a relationship existed between two categorical variables (Light & Margolin, 1971). Since the data were categorical and expressed in counts or frequency, the Pearson Chi-square test was deemed appropriate (Corder & Foreman, 2009). In this case, it tested if the "plan to pursue entrepreneurship" (i.e., yes or no) was dependent on their college degree (i.e., business or non-business course).

For H3, the odds ratio was calculated to measure the likelihood of the subjects' plan on becoming an entrepreneur relative to social support and network. The odds ratio was deemed appropriate to testing H3 for the following reasons, as argued by Bland & Altman (2000, p.1468): (1) it provided "an estimate (with a confidence interval) for the relationship between two binary variables"; and (2) it enabled "to examine the effects of other variables on that relationship, using logistic regression." Wald statistic was then applied to test the significance of the odds ratio (Hair, Black, Babin, & Anderson, 2014).

A multiple logistic regression was also conducted to measure the relationship of the personality, educational background, and social support and network relative to the plan of becoming an entrepreneur. Since a linear model was applied for binary response data, the use of logistic regression was appropriate (Agresti, 2007). The variance inflation factor (VIF) was also calculated to detect possible multicollinearity in the regression analysis (Neter, Wasserman, & Kutner, 1989).

Furthermore, a lasso regression was applied as a variable selection to retain only the important variables before running the final multiple logistic regression (James, Witten, Hastie, & Tibshirani., 2013). Lastly, hierarchical clustering was also implemented to check if the subjects could be grouped/clustered based on their response to the survey questions. Hierarchical clustering was used to identify possible or reasonable clusters based on their similarities measured using the Euclidean distance (Johnson & Wichern, 2002). The Statistical Package for Social Science (SPSS) and R programs were used to come up with the statistical results.

Lastly, to fulfill the ethical requirements, the study's researchers explained the rationale and gave instructions to the respondents who were willing to participate in this study. They secured their verbal consent and assured the participants' confidentiality. They also informed the participants that all information obtained from them would solely be used for this study.

4 Findings

A total of 124 entrepreneurs in Cebu City responded to the survey. Among these subjects, 60% were female, 56% were married, 90% had at least a college degree, 62% did not have a business-related degree, and 50% had plans of becoming an entrepreneur before becoming one. The non-business degrees included nursing, secretarial, engineering, psychology, medicine, computer science, social work, and fisheries. Though more than half of the respondents did not take business courses in college, 78% claimed they sold goods for profit during their childhood or teen years, and as one explained, which allowed them to earn extra income while studying.

The age of the business owners in this study skewed towards the younger generation, with an average age of 27.5 and a standard deviation of 4.5. All the respondents were Filipino citizens, though some were of Chinese (18%) and Spanish (2%) descent. The data also revealed that the businesses were almost an equal mixture of product manufacturing and service entities and that 80% of the respondents did not attend any training programs on entrepreneurship before they started their businesses.

Table 2 shows the descriptive statistics of the respondents.

Gender	Marital Status	Age
Male – 49 (40%)	Single – 43 (35%)	20 – 29 – 33 (27%)
Female – 75 (60%)	Married – 69 (56%)	30 - 39 - 22 (18%)
	Widowed/Separated – 12 (10%)	40 - 49 - 28 (23%)
		50 – 59 – 28 (23%)
Race	Size of the Enterprise	60 above – 13 (10%)
Filipino – 99 (80%)	Micro – 81 (65%)	
Chinese – 23 (18%)	Small – 30 (24%)	
Spanish – 2 (2%)	Medium – 13 (10%)	
Highest Educational Attained	Nature of Business	Courses in College
High School – 13 (10%)	Products – 62 (50%)	No college degree – 13 (10%)
College – 99 (80%)	Services – 57 (46%)	Business-related – 47 (38%)
Post Grad – 12 (10%)	Real Estate – 5 (4%)	Non-business related - 64 (52%)

Table 2. Descriptive statistics of the respondents, n=124 (%	%))
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4.1 Personality

To test H1 that the entrepreneurs were more likely to show similar personalities with each other, descriptive and cluster analysis, binomial, and the Wilcoxon-Mann-Whitney U test were performed.

Table 3, Figure 3, Table 4, and Figure 4 show the distribution, binomial, and Mann-Whitney U test results.

Overall, most of the participants responded that they: (1) had the desire to achieve (91%); (2) were not easily contended (67%), (3) had self-confidence (78%); (4) were competitive (75%); and (5) wanted to become rich (71%) before becoming an entrepreneur. The proportion of entrepreneurs who had all five personalities was at least 67% (Table 3).

	I am very	I am	I cannot say	I am not
Rate how you were with desire to achieve value before you became an entrepreneur	73 (59%)	40 (32%)	7 (6%)	4 (3%)
Rate how you were with not easily contented value before you became an entrepreneur	37 (30%)	46 (37%)	27 (22%)	14 (11%)
Rate how you were with confident to self- value before you became an entrepreneur	34 (27%)	63 (51%)	15 (12%)	12 (10%)
Rate how you were with competitive value before you became an entrepreneur	44 (36%)	48 (39%)	27 (22%)	5 (4%)
Rate how you were with want to be rich value before you became an entrepreneur	52 (42%)	36 (29%)	26 (21%)	10 (8%)

Table 3. Distribution of the respondents based on their answer to the personality questions (n=124)





 Table 4. Overall personality of the respondents based on the binomial test (n=124)

Personality	Proportion	P-value
Desire to achieve	0.91	< 0.01
Not Easily Contented	0.67	< 0.01
Self-Confident	0.78	< 0.01
Competitive	0.74	< 0.01
Want to be Rich	0.73	< 0.01

The nonparametric Wilcoxon-Mann-Whitney U test results (Table 5) suggest no significant difference in the distribution scores of the two groups (those who planned to become entrepreneurs and those who did not). Thus, these results offer support to H1 that the entrepreneurs show similar personalities with each other, whether they plan to pursue entrepreneurship or not.

Two groups result from the cluster analysis (Figure 4). Based on the clustering, most of the respondents fall into the definition of Type A personality (e.g., desire to achieve, not easily contented, confident, competitive, and want to get rich). Figure 5 shows the distribution based on the cluster analysis. Ninety-five percent of the respondents may be considered to be more Type A than Type B. Based on the conceptual review of the different types of personality, Kanten, Gümüştekin, and Kanten (2017) posit that individuals with Type A personalities tend to be ambitious, competitive, and perfectionist.

	Null hypothesis	Significance	Decision
1.	The distribution of Desire to Achieve is the same across categories of Did you plan to become an entrepreneur.	.381	Retain the null hypothesis
2.	The distribution of Not Easily Contented is the same across categories of Did you plan to become an entrepreneur.	.471	Retain the null hypothesis
3.	The distribution of Self-Confidence is the same across categories of Did you plan to become an entrepreneur.	.104	Retain the null hypothesis
4.	The distribution of Competitive is the same across categories of Did you plan to become an entrepreneur.	.943	Retain the null hypothesis
5.	The distribution of Want to be Rich is the same across categories of Did you plan to become an entrepreneur.	.167	Retain the null hypothesis

Table 5. Hypothesis test summary of the independent-samples Mann-Whitney U Test

Figure 4. Graphical presentation of the two clustered groups based on their means







Moreover, the survey results show that 82% of the respondents believe that entrepreneurship can be learned and not necessarily be born to it. A good majority sees entrepreneurship as a choice; that is, individuals are given the opportunity to improve their life situations. They believe they control their ambitions and the amount of effort they are willing to exert in terms of hard work and perseverance to pursue their goals.

4.2 Entrepreneurship Education

A cross-tabulation was conducted to test H2 that the course taken in college did not enable one to pursue entrepreneurship. The chi-square test was also done to test whether one's plan to pursue a business was related to the course one had taken in college.

Table 6 shows the SPSS results.

		Did you plan to become an entrepreneur		
		Yes	No	Total
Degree Taken	Did not attend college	7 (54%)	6 (46%)	13 (10%)
	Business-related courses	26 (55%)	21 (45%)	47 (38%)
	non-business-related course	29 (45%)	35 (55%)	64 (52%)
Total		62 (50%)	62 (50%)	124

Table 6. Cross tabulation results of H2

The Pearson Chi-square results in a value of 1.1713 and a *p*-value of 0.557. The distribution of the proportion of entrepreneurs who planned and did not plan to become entrepreneurs across educational backgrounds does not seem to differ. That is, the partner is the same between the two groups, such that the highest proportion is the "non-business-related course" group and the least is the "did not attend college" group. These results may imply that the formal degree taken in college does not necessarily affect the individual's decision to pursue entrepreneurship. Thus, the data support H2.

Moreover, when the respondents were asked whether they agreed that entrepreneurship could be taught effectively in a classroom setting, a little less than 50% said no. In comparison, only 33% agreed that it could be taught in a classroom setting (Figure 6). The respondents were also asked what they learned in school that encouraged them to become an entrepreneur. The following were their responses: (1) theories on accounting principles; (2) sales and marketing management; (3) the potential of making more money; (4) being their own bosses; (5) values of hard work; (6) how to deal with people; and (7) the learnings from their school projects. From the list of their answers, no specific learning led them or influenced them to become entrepreneurs.

Figure 6. Entrepreneurship can be taught effectively in a classroom setting (n=124)



4.3 Social Support and Network

To test for H3, the distribution and the odds ratio were examined. Social support and network were determined through the following 10 questions: (1) Were parents engaged in business?; (2) Do they have siblings who are entrepreneurs?; (3) Was lack of capital a major obstacle to starting a business?; (4) Did they avail any financial assistance?; (5) Would they have started if their family did not support them?; (6) Did they derive inspiration from a person who had excelled in business?; (7) Did they know people who were in business as they were growing up?; (8) Did they have a peer group engaged in business?; (9) Did they have a mentor to help them in business?; and (10) If they discussed business matters with their friends?

Except for the "lack of capital is a major obstacle in starting a business" (3) under social support and network, the proportion of those who responded "POSITIVE [YES]" in the other survey questions was higher compared to those who did not plan to become an entrepreneur.

Figure 7 shows the distribution of pursuit (or those who planned to become entrepreneurs) relative to social support and network.





Do you discuss business matters with your friends?

Table 7 shows the odds ratio results. These results suggest higher odds of planning to become an entrepreneur among those who have social support and networks. Specifically, those who: (1) have their parents and siblings engaged in business; (2) derive inspiration from successful businessperson; (3) know people engaged in business while they were growing up; and (4) have peer groups engaged in business – are more likely to plan and pursue entrepreneurship than those who do not have the social ties and network.

Social Ties & Network	Odds Ratio	Lower	Upper	P-value
Parents engaged in business? [Yes]	2.55	1.15	5.64	<0.05
Siblings who are entrepreneurs? [Yes]	2.89	1.39	6.00	<0.01
Lack of capital a major obstacle? [Yes]	1.12	0.51	2.44	0.7796
Availed financial assistance? [Yes]	1.43	0.68	3.01	0.3455
Started entrep if family supports? [Yes]	1.07	0.52	2.19	0.8552
Derived inspiration from successful businessperson? [Yes]	3.51	1.51	8.19	<0.01
Growing, did you get to know people in business? [Yes]	3.33	1.12	9.90	<0.05
Peer group engaged in business? [Yes]	3.58	1.57	8.14	<0.01
Have mentor in business? [Yes]	1.14	0.56	2.31	0.7182
Discuss business matters w/ friends? [Yes]	2.13	0.89	5.08	0.0858

Table 7. Odds ratio results for H3

Two respondents also shared what finally triggered them to start their businesses. One said: "It was finally my best friend who talked me into it. My parents themselves and I were involved in livelihood activities in the past, but I never dared to venture into a real enterprise until my newly found best friend in my MBA classes encouraged me." The second entrepreneur replied:

"I always was a risk-averse person. I studied business management in college and

always thought of having my own business. But I never dared to venture into entrepreneurship. I worked before in a company and felt like a corporate slave. What triggered me to venture into entrepreneurship was my boyfriend, who was more of a risk-taker. Together I then felt confident enough to start our business finally. We did start, and I am happy to say that it is doing very good."

The need for more income or money to support the immediate family and to carry the family tradition was the most common reason cited by those who planned on becoming entrepreneurs. On the other hand, those who did not plan to become entrepreneurs claimed that entrepreneurship's opportunity unexpectedly came to them through their friends, families, workmates, and other networks. The self-realization of the respondents wanting more money and more autonomy with their lives to help their families was the other reason why they pursued entrepreneurship. Others claimed that they had the aptitude for it.

These results support H3 that social support and network enable the individual to pursue entrepreneurship.

Lastly, a logistic regression was performed to identify the specific items that significantly contribute to one's pursuit of becoming an entrepreneur. The relationship of the personality, education, and social support and network relative to their pursuit of becoming entrepreneurs was explored. Initially included were the responses from the survey relative to these factors as independent variables. However, upon checking the variance inflation factor (VIF), some values exceeded the threshold of VIF > 5, which implied multicollinearity. A lasso regression was implemented to select and retain the important variables to address this problem. These variables were then used in the final logistic regression model, with "plan or did not plan to become an entrepreneur" as the dependent variable.

The estimates and summary of the final model are shown in Table 8.

Odds Ratio	Estimate	Std. Error	Z – value	<i>p</i> -value
2.741	1.0092	0.4967	2.0317	0.0422*
2.10	0.7418	0.4516	1.6428	0.1004
1.73	0.5479	0.4910	1.1158	0.2645
1.78	0.5766	0.4390	1.3134	0.1890
2.43	0.8886	0.4787	1.8564	0.0634**
2.30	0.8343	0.4637	1.7991	0.0720**
	Ratio 2.741 2.10 1.73 1.78 2.43	Ratio Estimate 2.741 1.0092 2.10 0.7418 1.73 0.5479 1.78 0.5766 2.43 0.8886	RatioEstimateError2.7411.00920.49672.100.74180.45161.730.54790.49101.780.57660.43902.430.88860.4787	RatioEstimateErrorZ - value2.7411.00920.49672.03172.100.74180.45161.64281.730.54790.49101.11581.780.57660.43901.31342.430.88860.47871.8564

Table 8. Summary from logistic regression

* significant at alpha = .05; ** significant at alpha = .10

The logistic regression suggests that holding other variables constant, those who are confident (*p*-value = .05), has a higher likelihood of pursuing entrepreneurship. The model also implies that social support and network (by way of inspiration from successful entrepreneurs and belonging in a peer group engaged in business) have a higher likelihood for individuals to plan to become entrepreneurs, holding other variables constant. The non-significance of parents and siblings who are in business comes as a surprise, but not impossible. Somehow it makes sense because not all the respondents come from families who have their own businesses (parents not in business – 31%, and siblings not in business – 47%), and several of those who do not initially plan to be entrepreneurs have families in business (parents in business – 30%, and siblings in business – 20%).

These results somewhat supported the observation of Von Graevenitz, Harhoff, and Weber (2010). They examined the student's entrepreneurial intentions before (ex-ante) and after (ex-post) taking an entrepreneurial course (p. 90). They found that the course reduced several students' entrepreneurial intentions, including those with self-employed parents or friends (p. 98). In their observation, they proposed that entrepreneurship training may serve as "creating learning opportunities for calibrating and refining their (students) assessments of which career is more suitable" (p. 104).

5 Discussion and Conclusion

This current study examines several factors that encouraged individuals living in Cebu to pursue entrepreneurship, such as personality, the degree taken in college, and the social support and network. The paper aims to gain knowledge on the issues that encouraged entrepreneurship from the entrepreneurs themselves.

5.1 Theoretical and Academic Implications and Contributions

The results are as follows.

(1) The respondents, whether they planned to pursue entrepreneurship or not, show similar personalities with each other. Ninety-six percent of the participants in this study belong to one cluster. The cluster is described to have a relatively higher tendency towards a desire to achieve, confidence in self, competitiveness, and want to be rich. Thus, the data support H1.

This result is consistent with the findings of Kerr, Kerr, and Yu (2018). Their review of literature since 2000 on the personality traits of entrepreneurs suggests that entrepreneurs differ from waged earners in terms of self-efficacy (confidence in one's ability), the need for achievement, internal locus of control, and their ability to take risks (p. 279). The results also conform to Urbig, Bönte, Procher, and Lombardo's findings (2020, p. 193) that entrepreneurs are more likely to be competitive than non-entrepreneurs. They further explain that entrepreneurs tend to be more aggressive and have a high need for motivation (p. 203), which may be the "desire to get rich" in this study.

This result implies that entrepreneurship can be learned, as viewed by 82% of the respondents. They see entrepreneurship as a choice; that is, individuals are given the opportunity to improve their life situations. The results also imply that these individuals believe they are in control of their ambitions and the amount of effort they are willing to exert in terms of hard work and perseverance to pursue their goals.

(2) The distribution of the proportion of entrepreneurs who planned and did not plan to become entrepreneurs across educational backgrounds does not seem to differ. This result implies that the formal degree taken in college does not necessarily affect the individual's decision to pursue entrepreneurship. Thus, the data support H2.

This result is consistent with Liu, Lin, Zhao, and Zhao (2019) that though entrepreneurial education may significantly affect entrepreneurial intentions positively, their data showed no impact on the entrepreneurial attitude. As they mentioned in their study, the entrepreneurial attitude was a predictor of one's behavioral intention. Since their subjects were students still in the university, there was no guarantee that these respondents who went through entrepreneurial education would pursue entrepreneurship once they left the university.

Furthermore, this result finds support from the opinions of several business experts. As Schooley (2019) reported, the founder of an international event management firm suggested that it was not a specific degree program that would help one start the business because it depended on the industry one planned to venture in. The CEO stressed that the aspiring entrepreneur needed to have "some basic knowledge in business management, marketing, taxes, and sales (para. 5)." These topics could be infused into any degree program.

This finding suggests that though entrepreneurship education has its benefits (i.e., positively correlated to entrepreneurial intention), one does not necessarily venture into starting a business. It implies that it is not what the students are officially learning from the entrepreneurship degree (e.g., theories and concepts) that will make them entrepreneurs, but the respondents' extra-curricular activities, like selling items, while still in school. Three-fourths of the respondents claim they have engaged in selling small items to their fellow students and other people while even in school. The reasons vary from needing money to support their studies and families to wanting certain goods and services that are beyond their allowances.

(3) The odds ratio results suggest that there are higher odds of planning to become an entrepreneur among those who: (1) have parents and siblings engaged in business; (2) derive inspiration from a successful businessperson; (3) know people engaged in business while they were growing up; and (4) have peer groups engaged in business. Thus, the data support H3.

Several empirical studies support this finding (e.g., Farooq et al., 2018; Kwon et al., 2013; Pham & Talavera, 2018). This result implies that individuals are likely to start a business when surrounded by people who can support them in providing care, empathy, and encouragement.

Results also show that the respondents' ability to pursue entrepreneurship is driven by their confidence in self and their social supports and networks. Among all the variables considered in this study, the results suggest that having confidence is the one factor that significantly impacts one's decision to pursue entrepreneurship. At a 95% confidence level, it is the only factor influencing the respondents' decision to start their own businesses. This makes sense since one's behavior is likely to be influenced by what he or she thinks. The results also suggest that social support and network may help influence the entrepreneurs' decision to starting their businesses (at a 90% confidence level). Although almost 60% of the respondents claim they will still have started their business even if their family does not support them, 82% agree that a family who is in business helps one become an entrepreneur. The argument of Thorton and Riberio-Soriano (2011) supports this idea that the individual's social network may provide the final component to entrepreneurship after taking into consideration one's entrepreneurial aptitudes.

Prior employment seems to be necessary to entrepreneurship. Several respondents claim that their self-confidence is enhanced through their work, while knowledge and skill of relating to others more productively are developed. The empirical results of Miranda, Chamorro-Mera, and Rubio (2017) support this study's findings that business experience significantly affects one's intention to pursue business. Prior employment likely allows for committing fewer mistakes in decision-making once the individual pursues entrepreneurship (Shepherd, Williams, & Patzelt, 2015).

As for the perceived challenges, the respondents mention the lack of capital and support from the government agencies as the two biggest hurdles to entrepreneurship. Though these are not significant

enablers, these concerns are still valid as the Philippines has the second-highest business income tax in the ASEAN (Dela Paz, 2015, para. 5), and its ranking in the ease of doing business has dropped from 113 in 2018 to 124 in 2019 (Punongbayan, 2018). At least 25% of the respondents clamor for lower taxes or subsidies from the government. They also claim that government agencies must provide the mandated essential services to support the business owners and supply technical training to prospective entrepreneurs.

5.2 Practical Implications and Suggestions

These results imply that the government, academia, and business associations can encourage more Filipinos to pursue entrepreneurship. They can provide a series of training that focuses on different aspects of becoming entrepreneurs to develop their confidence in starting up their businesses.

Government agencies such as DTI, through its Negosyo Centers, can organize activities for nonentrepreneurs to listen to testimonies about the successes and failures of starting a business and attend workshops that can help build the confidence of those interested but still undecided. The forums can be made available on online platforms or even on radios to reach as many would-be entrepreneurs as possible.

Also, the universities are in a unique position to empower individuals to pursue entrepreneurship rather than employment when they graduate. Starting with the professors, the universities may strive to recruit entrepreneurs to handle courses related to entrepreneurship. Professors in college may positively influence their students' confidence, affecting their mindset from vying to work for the best employer to become employers themselves. This study's results can also be considered as universities develop their entrepreneurship courses. For instance, in addition to teaching how and what the requirements are to start a business and developing the students' skills, entrepreneurship courses may include topics on values like hard work, respect for people, and continuous learning. Moreover, universities may intentionally organize events with business chambers to build networks for their students while still in school.

Finally, this study's results reveal that almost three-fourths of the respondents engaged in selling small items during their grade and high school days. To help build the students' confidence, business associations may work with schools to teach students to look for business opportunities and even assist them in starting up their businesses while still in school. Business chambers may organize competitions, and prominent businesspeople can act as business advisers to student groups.

6 Limitations and Recommendations for Future Research

There are several limitations to this study. First, the limited number of MSMEs that agreed to join this study affects the generalizability of the results. Even with this limitation, the findings may be substantial to the government agencies and academia in developing and implementing programs that encourage more individuals to pursue entrepreneurship. For future research, it is recommended that more MSMEs be involved in the study.

Secondly, the respondents are limited to existing MSMEs and did not consider individuals who pursued entrepreneurship and failed or those who had intentions to pursue entrepreneurship in the medium- to long run. Thus, the results may not apply to non-entrepreneurs, and they must be tested in the future. Therefore, a possible extension to this research is to study the risks that hinder individuals from considering entrepreneurship.

Lastly, this study's scope is limited to factors that influenced existing entrepreneurs to engage in business creation or continuation. This study does not include the impact of entrepreneurship in the province or in Central Visayas. For future research, the effects of MSMEs on poverty in the region can be examined.

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Appendix A Survey Instrument

Respondent's Demographics:

Name	[Optional]
Marital Status	Single, Married, Widowed, Separated
Age	20s, 30s, 40s, 50s, 60s
Gender	Male, Female
Race	Filipino, Chinese, Others (specify)
Size of enterprise	Micro (asset size below ₱3 Million, with less than 10 workforce), Small (asset size between ₱3 to 15 Million, with 10 to 99 workforce), Medium (asset size between ₱15 to 100 Million, with 100 to 199 workforce)
Industry your business belongs to	Products (or goods), Services, Others (specify the industry)
Highest Educational Attainment	Grade School, High School, College, Masters, Doctorate
What is/are your college degree/s?	
What is/are your Postgraduate degree/s?	

Educational background and entrepreneurship:

- 1. Was your first business (if your current business is not your first business) in line with your college degree? [Yes, definitely; Yes, maybe; Maybe not; Definitely no]
- 2. Is your postgraduate degree(s) important for you to start your business? [Yes, definitely; Yes, maybe; Maybe not; Definitely no; Not Applicable]
- 3. What did you learn in school that you can say led you to become an entrepreneur?
- 4. Did you sell anything for profit during your childhood or teen years? [Yes; No]
- 5. Did you attend any training on entrepreneurship before starting your first business? [Yes; No]

Personal character of the respondent:

Please rate yourself how you think you fared with the list of characteristics below BEFORE you became an entrepreneur. Rating is as follows: 1-I am very; 2-I am; 3-cannot say; 4-I am not.

- 1. Desire to achieve
- 2. Not easily contented
- 3. Confident of self
- 4. Competitive
- 5. Want to be rich

Employment history of the respondent:

- 1. Were you employed (working for someone) before engaging in business? [Yes; No]
- 2. If yes, what was your gross monthly salary? ₱
- 3. Were you satisfied/happy/content with your salary? [Yes; No]
- 4. If no, please explain why not?

The respondent's thoughts about entrepreneurship.

1. Did you plan to become an entrepreneur, or was it by accident? [Planned; unplanned] Please explain your answer.

- 2. Do you think an entrepreneur is born? [Yes; Maybe yes, maybe no; No] Please explain your answer.
- 3. Do you think any individual can learn to become an entrepreneur? [Yes; Maybe yes, maybe no; No] Please explain your answer.

Family background and financing capability of the respondent.

- 1. Were your parents engaged in business? [Yes; No]
- 2. Do you have any siblings who are entrepreneurs? [Yes; No]
- 3. Was a lack of capital a major obstacle to starting your business before? [Yes; No]
- 4. Did you avail a financial assistance from family, friends, government, private institutions in starting your business? [No, I did not avail from anyone; Yes, from family; Yes, from friends; Yes, from the government; Yes, from private institutions]

Social relationships of the respondent:

- 1. Did you derive inspiration from a person who excelled in business? The person can still be alive or not. [Yes; No]
- 2. As you were growing up, did you know people who were in a business? [Yes; No]
- 3. Do you have a peer group who are/were engaged in business when you were starting your company? [Yes; No]
- 4. Do you have mentors to help you in business? [Yes; No]
- 5. Do you discuss business matters with your peer group or friends? [Yes; No]

Opinion about entrepreneurship:

Please rate the statements below based on how much you agree with them? Choose "4" if you total agree with the statement; choose "3" if you agree; choose "2" if you don't know how to answer it; and choose "1" if you do not agree with the statement.

- 1. Families who are into business help one to be an entrepreneur.
- 2. A mentor is essential to have as a starting entrepreneur.
- 3. A wealthy family is necessary for an entrepreneur.
- 4. An entrepreneur must conform to rules and regulations.
- 5. Entrepreneurship can be taught effectively in a classroom setting.
- 6. Having some money saved is essential to starting a new business.
- 7. It is necessary to have a life-long learning attitude for an entrepreneur.
- 8. Talking to business persons helps significantly in developing entrepreneurs.

We appreciate you for taking the time to answer this survey. Thank you.

End of survey.

	Estimate	Odds Ratio	Std. Error	z value	p-value
With training [YES]	1.2909	3.64	0.5187	2.4888	0.0128
Education: High School	0057	0.99	0.6501	0087	0.9931
Education: Non- business course	-0.2325	0.79	0.4019	-0.5785	0.5629

Appendix B Logistic regression results