



**DIMENSIONS OF ENTREPRENEURIAL
INTENTION OF SENIOR HIGH SCHOOL STUDENTS:
AN EXPLORATORY FACTOR ANALYSIS**

**Joelito T. Mante¹ⁱ,
Gaudencio G. Abellanos²**

¹Senior High School Teacher,
Department of Education,
Davao City, Philippines

²Professor VI,
University of Southeastern Philippines,
Philippines
&

Part-time Professor,
University of Mindanao,
Davao City, Philippines

Abstract:

This research aimed to figure out the factors of entrepreneurial intention among senior high school students in various public secondary schools in Tugbok District, Davao City. The non-experimental quantitative research design adopting exploratory factor analysis was used. Three hundred ninety-one respondents were chosen from various public secondary schools through the stratified, random technique. An online instrument using google forms was used to gather the data. Data reduction analysis reduced the multi-dimensionality set of data. Varimax rotation explored the data set with 25 iterations. Factor loadings below .500 were eliminated to realize a more vital separation of components, and eigenvalues greater than one were exposed. The data adequacy was determined by Keiser-Meyer-Olken and Bartlett's Test of Sphericity tested the facts if it is appropriate for factor analysis. Catteel-Scree Plot determined the factors retained, and Thematic analysis was used to generate the constructs. Results showed six dimensions of the entrepreneurial intention of senior high school students, including self-efficacy, perceived desirability, entrepreneurship education, need for achievement, the propensity to risk, and the propensity to act.

Keywords: entrepreneurial intention, self-efficacy, perceived desirability, entrepreneurship education, need for achievement, propensity to risk, propensity to act, quantitative research, exploratory factor analysis, Philippines

ⁱ Correspondence: email joelitomante@gmail.com

1. Introduction

Students' entrepreneurial intention has been challenged for some reasons. Rudhumbu et al., (2016, p. 83) reported that students' interest in engaging in business was challenged by inaccessible sources of funds, inadequate specialized support at start-ups, and lack of business opportunities. The tendency to take risks has a detrimental impact on entrepreneurial ambitions; nevertheless, self-confidence and the will to succeed positively impact (Dinis et al., 2013, p. 763).

Intentions played a vital role in the decision to create a new company (Ozaralli & Rivenburgh (2016, p.1). Entrepreneurs are becoming increasingly crucial in today's wealth generation. Examining entrepreneurial purpose, according to Ajzen, can help us better comprehend possible entrepreneurial action. Individuals who intend to start a business are highly likely to bring it out (Ajzen, 1991, cited in Zhang, Wang, & Owen, 2015, p. 62).

The Economic-Psychological model of factors of individuals' intentions to go into business of Davidsson (1995, p. 1) states that a person's conviction is the main factor of entrepreneurial intention that opening and managing their own business is an appropriate for them as an alternative. This conviction is founded on general attitudes that refer to universal psychological dispositions and domain attitudes that concern business and owner-managed firms. In addition to this model, Jumamil, Depositario, and Zapata (2017, p. 577) proposed that entrepreneurial self-efficacy, personal attitude toward entrepreneurship, and knowledge of the availability of entrepreneurial support were found to be the most important predictors of entrepreneurial intention among behavioral characteristics. Aliman and Jalal (2013, p. 363) have indicated that the significant predictors of entrepreneurial intention are gender, family background, personality traits of creativity, entrepreneurial knowledge, environment, and attitudes towards entrepreneurship.

Earlier studies worldwide have been conducted to determine entrepreneurial intention among students. Still, researchers have not come across a study where the respondents were senior high school students in various public secondary schools in Tugbok, District, Davao City using Exploratory Factor Analysis.

1.1 Theoretical Framework

This study was anchored on the Economic-Psychological model of factors of individuals' intentions to go into business (Davidsson, 1995, p. 1). This model states that a person's conviction is the main factor of entrepreneurial intention and that opening and managing their company is an appropriate substitute for him/her. This conviction is founded on a set of broad attitudes as well as specific domain attitudes. The former pertains to more general psychological traits, whilst the latter is more specific to businesses and owner-managed businesses. In addition to this model, Jumamil, Depositario, and Zapata (2017, p. 577) proposed that entrepreneurial self-efficacy, personal attitude toward entrepreneurship, and knowledge of the availability of entrepreneurial support were the

most important predictors of entrepreneurial intention among behavioral characteristics. Aliman and Jalal (2013, p. 363) indicate that the significant predictors of entrepreneurial intention are gender, family background, personality traits of creativity, entrepreneurial information, environment, and attitudes towards entrepreneurship.

1.2 Conceptual Framework

Presented in Figure 1 is the perceived framework of the study. It is composed of a dependent variable which is the entrepreneurial intention and the supposed dimensions affecting it. Entrepreneurial intention can be considered as a cognizant identification of mind, targeting to encourage essential actions to start a business (Thomson, 2009 as cited in Bui et al., 2020, p. 370). Research confirms that intentions play an important role in deciding whether or not to start a new business (Ozaralli & Rivenburgh, 2016, p. 1). It is recognized also to kindle and inspire students' inclination to involve in business behavior in the future arising from certain variables (Wah, Yusuf, & Suanda, 2017, p. 80). The Economic-Psychological model of factors of individuals' intentions to go into business pointed person's conviction is the main factor of entrepreneurial intention that opening and managing their company is an appropriate alternative for him/her. This conviction is founded on a set of broad attitudes as well as specific domain attitudes. The former pertains to more general psychological traits, whilst the latter is more specific to businesses and owner-managed businesses (Davidsson (1995, p. 1). This indicates that there is a variety of dimensions affecting the business intention of students in senior high school.

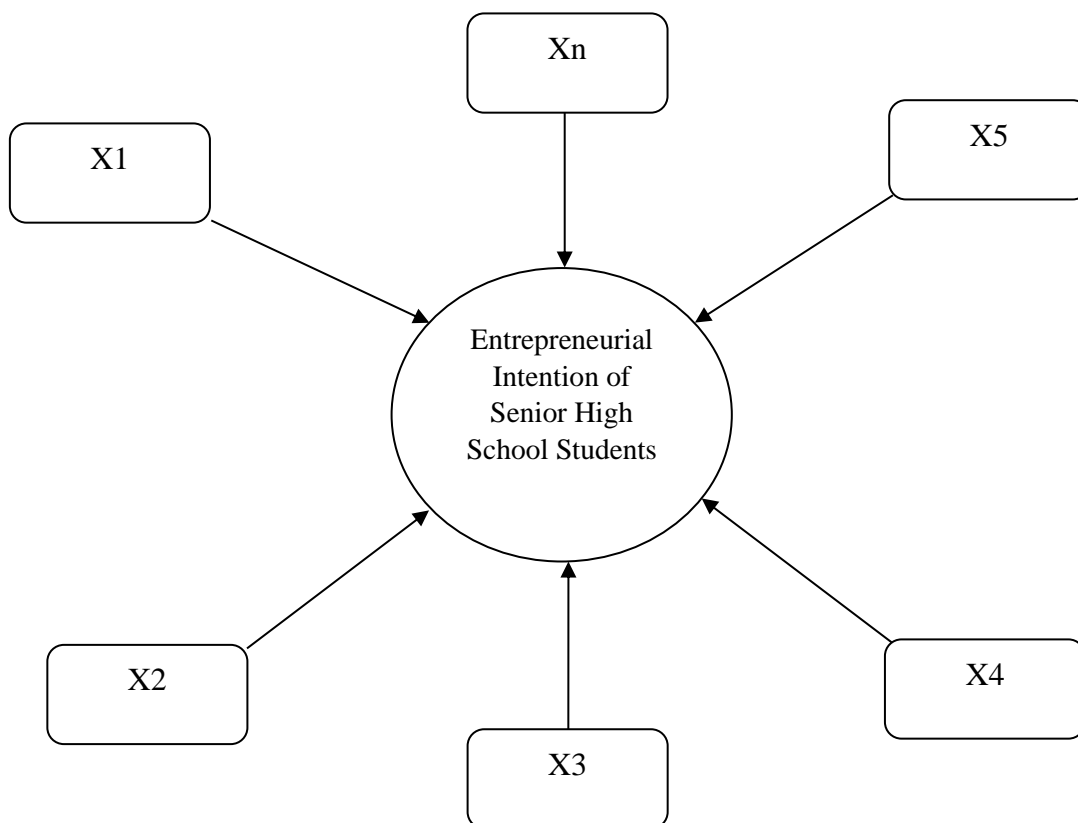


Figure 1: Perceived framework of the study

1.3 Research Objective

The objective of the study is to determine the factors of entrepreneurial intention among senior high school students in public secondary schools.

Specifically, the study's goal was to answer the following research questions:

- 1) To identify the dimensions of entrepreneurial intention among senior high school students in public secondary schools.
- 2) Develop a framework based on the findings.

1.4 Assumption

The study assumes that the entrepreneurial intention of senior high school students in public secondary schools is multi-dimensional and is a function of factors X1 to factors Xn.

2. Literature Review

This part of the paper presents literature related to the dimensions of the entrepreneurial intention of senior high school students in public secondary schools. This section discusses the theories, concepts, insights, and opinions of authorities relevant to the study to give sufficient background and evidence necessary for the realization of this study. These readings are very vital in enriching the contents of the study.

2.1 Entrepreneurial Intention

A study claimed that entrepreneurial intention could be considered a cognizant identification of mind, encouraging necessary actions to start a business (Thompson, 2009 as cited in Bui et al., 2020, p. 370). Research confirms that intentions play a vital part in deciding to establish a new business (Ozaralli & Rivenburgh, 2016, p. 1). It is also recognized to kindle and inspire students' inclination to involve in business behavior in the future arising from certain variables (Wah, Yusuf, & Suanda, 2017, p. 80).

2.2 Self-efficacy

As described by psychologist Albert Bandura, self-efficacy is people's belief in their ability to exert control over their functioning and events that affect their lives. Inspiration, well-being, and individual achievement can all stem from a person's sense of self-efficacy (Lopez-Garrido, 2020).

The study revealed that self-efficacy has a favorable and vital effect on the interest of learners in entrepreneurship (Sandi & Nurhayati, 2020, p. 9; Park & Choi, 2016, p. 9; Santoso, 2016, p. 131; H.K Lee, & I.H. Lee, 2016 p. 111; Wang & Huang 2019, p. 183). Together with self-personality and self-confidence, self-efficacy impacts entrepreneurial intention (Garaika, Margahana, & Negara, 2019, p. 1). Self-efficacy, business knowledge, and family influence significantly impact students' desire to start their own business, respectively; findings also established a link between self-efficacy and the desire to start a business (Hutasuhut, 2018, p. 90).

Research suggests that self-efficacy is significantly related to entrepreneurial intention, as shown by students (Farrukh et al., 2017, p. 303). In addition, to social connection and tolerance to risk, Kuwaiti people's entrepreneurial goals are influenced by their desire to succeed and their self-efficacy (Elali & Al-Yacoub, 2016, p. 18).

Entrepreneurial supposed behavioral control, entrepreneurial education demand, and entrepreneurial self-efficacy directly affected entrepreneurial intention among nursing students in South Korea. In contrast, individual entrepreneurial attitudes and subjective entrepreneurial norms had indirect effects. The adjusted model had a 76.0 percent explanatory power for entrepreneurial intention. These findings suggested that expanding business education opportunities and new involvements to improve entrepreneurial self-efficacy are critical for advancing entrepreneurial intent (Lim, G.M. Kim & E.J. Kim, 2021, p. 533).

From subjective norms, attitudes, self-efficacy, locus of control perspectives, and comprehension of the part of entrepreneurship education, an Indonesian study intends to examine cause variables affecting students' business purpose. The study's findings reveal that subjective norm, attitude, self-efficacy, locus of control, entrepreneurship education, and the adversity quotient all impact students' entrepreneurial intentions. This research suggests focusing on these factors when motivating students' entrepreneurial inclinations (Yohana, 2021, p. 54).

More likely, self-efficacy and motivation variables showed to be completely important to entrepreneurial intention (Santoso, 2018, p. 14). Meanwhile, the significance of including psychological traits such as technical creativity and self-efficacy when evaluating methods for efficiently fostering students' entrepreneurial intentions in entrepreneurship education (Ndofirepi, Rambe, & Dzansi, 2018, p. 1). As theorized by Shaheen and AL-Haddad (2018, p. 2385), entrepreneurial self-efficacy influences entrepreneurial behavior.

A recent study claimed that entrepreneurial self-efficacy and creativity were essential predictors of entrepreneurial intentions. At the same time, only proactive character implicitly predicted communal entrepreneurial intentions (Osiri, Kungu, & Dilbeck, 2019, p. 42). In Lagos, Nigeria, a study conducted among the selected youth recommended including self-efficacy in the school curriculum to improve entrepreneurial intentions among new graduates and, by so doing, reduce the high rate of jobless in society (Moa-Liberty, Tunde, & Tinuola, 2016, p. 63). Research hypothesizes that student-beginners showed entrepreneurial self-efficacy appears to impact their later entrepreneurial behavior statistically - potentially making entrepreneurial self-efficacy a valuable primary predictor of future business activities (Zieba & Golik, 2018, p. 91).

Also, among the 600 students from Brazil and Portugal, it was concluded that personality qualities, self-efficacy, and entrepreneurial attitude are essential predictors of entrepreneurial purpose. At the same time, communal recognition and country of origin have no influence (Fragoso, Rocha-Junior, and Xavier, 2020, p. 33). Lately, the study reported that self-efficacy powerfully foresees entrepreneurial intention, implying that

floatation would have a beneficial relationship with entrepreneurial intention (Anwar & Abdullah, 2021, p. 183).

In a study on entrepreneurship Intention Prediction using a Decision Tree and Support Vector Machine by Nasution et al. (2018, p. 135), the top predictor, according to the model, was self-efficacy, which influenced business intention. Entrepreneurial inclinations are significantly influenced by attitudes toward entrepreneurship, subjective norms, and self-efficacy (Shah, Amjed, & Jaboob, 2020, p. 1). University students established an advanced inclination toward business behavior and a higher likelihood of starting their enterprise if they feel more self-efficient (Koenig, 2016, p. 31). Both self-efficacy and self-freedom have a substantial relationship with self-employment intention (Hassan & Bakri, 2016, p. 888).

A study declared entrepreneurial self-efficacy and domestic entrepreneurial background are entirely related to entrepreneurial intention (Hadjimanolis, 2016, p. 20). Concerning this, self-efficacy is recommended in the school curriculum to improve entrepreneurial intentions among new graduates and, by so doing, reduce the high rate of jobless in society (Moa-Liberty, Tunde, & Tinuola, 2016, p. 63). This implies that self-efficacy should be included in the school program because it increases the level of entrepreneurial intention among students.

2.3 Perceived Desirability

Shapero defined perceived desirability as the appeal of beginning a business to an individual, taking into account intrapersonal and extrapersonal factors (Solesvik et al., 2014 as cited in Patricia & Silangen, 2016, p. 70). Similarly, Perceived Desirability is defined by Shapero and Sokol as the attractiveness of opening a business with each subject, or the level of concentration of a person, the attitude of an individual towards starting a business venture (Bui et al., 2020, p. 372).

In Indonesia, the impact of perceived desirability and anticipated feasibility on entrepreneurial intention among undergraduate students at Universitas Muhammadiyah Surakarta was investigated using Linan and Rodriguez's Entrepreneurial Intention Model as a theoretical framework. Confirmatory factor analysis and Cronbach's alpha were used for legitimacy and reliability. The information in this study was investigated using multiple regression analysis. The study's findings show that all variables positively and significantly impact entrepreneurial ambition. This research also recommends college students, Universitas Muhammadiyah Surakarta, and the government (Jauhar Masrury, 2016, p.1).

The study shows that perceived desirability has the most significant effect on students' intention to start a company (Bui et al., 2020, p. 369; Chornidio, 2018, p. 15). Attitude toward sustainability and perceived business desirability increase sustainability-oriented entrepreneurial intentions (Vuorio, Puumalainen, and Fellnhofer, 2018, p. 359). Among the 318 Malaysian agriculture students in higher educational institutions (HEIs), agro-preneurship programs, agro-preneurship experiential

knowledge, perceived desirability, and perceived viability are meaningfully explained agro-preneurial intentions significantly (Yusoff, Ahmad, & Halim, 2016 p. 156).

A study stated that perceived desirability, feasibility, and willingness to act positively increased entrepreneurial ambition (Darmanto, 2016, p. 159). Perceived desirability is a strong predictor of entrepreneurial inclinations among Indian college students. It means that students who have a strong ambition to be managers, take advantage of opportunities, and begin their careers are more likely to succeed as entrepreneurs (Reddy & Podile, 2021, p. 1234). Students' business intentions are positively influenced by perceived desirability and feasibility (Kaushik et al., 2020, p. 607; Moghavvemi, Salleh, & Standing, 2016, p. 1181).

A study revealed that the most significant influence on students' intentions to establish a business is perceived desirability (Bui et al., 2020, p. 369; Chornidio (2018, p. 15). Similarly, perceived desirability is a significant predictor of entrepreneurial inclinations among Indian college students (Reddy & Podile, 2021, p. 1234). This emphasizes that perceived desirability increases the level of entrepreneurial intention among students.

2.3 Entrepreneurship Education

Fayolle and Gailly defined entrepreneurship education as a perception that has developed vital to both economic and social phenomena and as a field of study. It has also been acknowledged in academics and teaching (Hashim, 2017, p. 99). It is essential in society's social and economic progress to provide self-employment and job opportunities for the people. Entrepreneurship education can catalyze a business mindset through the emerging entrepreneurial intentions of graduates (Asghar et al., 2019, p. 383).

Entrepreneurial awareness was discovered to have a positive impact on business intention. In addition to the conceptual model, the result of the study developed a digital application to boost the entrepreneurial purpose of students studying information technology. The application is evaluated online, and the results demonstrate that it has the potential to significantly enhance entrepreneurial intent (Tomy, Sarath & Pardede, 2020, p. 1423). Entrepreneurial education in college has a strong positive impact on students' business intentions. (Liu et al., 2019, p. 869; Alshebami et al., 2020, p. 3605; Mei, Lee, & Xiang, 2020, p. 257; Saraih, 2019, p. 139; Deliana, Rahardjo, & Afriyanti, 2019, p. 125).

The excellence of entrepreneurship education will affect entrepreneurial intention (Jiang, Xiong, & Cao, 2017, p. 3709). Entrepreneurial education and opportunity appreciation indirectly affect entrepreneurial intention through the mediating effect of self-efficiency (Anwar, Thoudam, & Saleem, 2021, p. 1). Entrepreneurship education, prior business experience, and the external environment substantially impact good entrepreneurship insight. (Alkhatib et al., 2021, p. 53). Results show that entrepreneurial education is related to starting a business activity (Asimakopoulos, Hernandez, & Pena Miguel, 2019, p. 1).

In Brazil, a study has established that entrepreneurial education has a good impact on undergraduate management and engineering students' entrepreneurial intentions (Passoni & Glavam, 2018, p. 92); Also, in Indonesia, results of the study revealed that entrepreneurial education has an impact on entrepreneurial intent among university students (Saptono et al., 2019, p. 505). In neighboring country Vietnam, entrepreneurial education substantially affected entrepreneurial intention. At the same time, entrepreneurial education also positively impacted entrepreneurship desire and business self-efficacy (Doan & Phan, 2020, p. 1787).

In Malaysia, entrepreneurial education and capital access play a key role in postgraduate, undergraduate, international, and local students' entrepreneurial intentions (Adelaja et al., 2018, p. 35). Entrepreneurial education and entrepreneurial attitude significantly impact the entrepreneurial intentions of Nigerian university graduates (Bayero, 2020, p. 26). Individual aspects and entrepreneurship education directly impact business intentions (Boahemaah et al., 2020, p. 180).

Further, a study in Malaysia revealed that students' ability to recognize business opportunities, entrepreneurial training and skills, innovativeness, and knowledge-seeking competencies has a significant impact on their entrepreneurial intention; as a result, emphasis should be placed on plans and curriculums to improve students' ability to recognize income-generating opportunities, entrepreneurial training and skills, innovativeness, and information-seeking competencies, which are likely to reduce student entrepreneurial intention (Al Mamun, Nawi, & Shamsudin, 2016, p. 119). All the research hypotheses confirmed that there is a meaningful positive relationship between entrepreneurship knowledge and goal purpose, application intention, and obligation of students to their business goals (Sherkat & Chenari, 2020, p. 1).

Furthermore, entrepreneurial education is critical in identifying the information and business mindset that leads to students' entrepreneurial readiness. The study also discovered that entrepreneurial knowledge has a favorable impact on entrepreneurial mentality and preparation and successfully mediates the impact of entrepreneurial education and training (Saptono et al., 2020, p. 1). The study proposes that policymakers should focus on individual entrepreneurial information and strengthen the appeal of a business career if they are concerned about fostering entrepreneurial behavior among employed age with experience (Miralles, Giones, & Riverola, 2016, p. 791).

There is a solid favorable relationship between various kinds of business education on entrepreneurship development (Hasan, Khan, & Nabi 2017, p. 888). Entrepreneurship education and monetary provision inspire the entrepreneurial attitude of young people to venture into business (Hassan, Sade, & Rahman, 2020, p. 235). Entrepreneurial knowledge played a significant part in determining entrepreneurial intention in Saudi Arabia and Malaysia (Parveen, Kassim, & Zain, 2018, p. 21). Students who appeared in an entrepreneurial education tended to keep entrepreneurial characteristics and build new businesses in the future (Thoyib, Maskie, & Ashar, 2016, p. 24).

It was proposed that entrepreneurial education positively affects students' business intentions. The universities and other business colleges must offer entrepreneurial education courses to inspire the students to bring original ideas of earning to the community as entrepreneurship education emphasizes increasing antecedents of intentions and planned behavior (Sultan, Maqsood, & Shrif, 2016, p. 131). However, Entrepreneurship education had no connection with entrepreneurial orientation or business performance (Cho & Lee, 2018, p. 124). A study in Bangladesh found that entrepreneurial education will deliver skills and knowledge that might help students shift their typical attitude from searching for work to generating jobs. Hence, focusing on developing a business mind through education will have importance for the growth of business culture and sustainable socio-economic development (Kabir, Haque & Sarwar, 2017, p. 10).

There is a favorable solid relationship between various kinds of business education on entrepreneurship development (Hasan, Khan, & Nabi, 2017, p.888). On the opposing, the study revealed that entrepreneurship education had no connection with entrepreneurial orientation or business performance (Cho & Lee, 2018, p.124).

2.4 Need for Achievement

The need for achievement is the determination of a person to do well. People who have a high need for achievement have entrepreneurial intentions. They are keen on success. They want to express themselves as businessmen who can launch thriving businesses in competitive markets (Karabulut, 2016, p. 14).

It is also an interactive character enabling people to proceed with specific activities. A brilliant standard is needed for this kind of activity so that individuals can self-evaluate in the face of stimulating demanding abilities and desire for success. Individuals with a strong need for achievement wish to resolve issues independently. They create goals and then make private efforts to attain them and perform better when responsibilities are challenging. They find creative methods for better performance (Çolakoğlu & Gözükar, 2016, p. 135).

Situational considerations had a more significant impact on entrepreneurial intent than personality traits. Regarding gender differences, professional autonomy and job stability were significant predictors for women. Still, males' drive for achievement and a willingness to take risks was essential predictors (Yukongdi & Lopa, 2017, p. 333). Innovativeness, self-confidence, a willingness to take risks, a will to succeed, and an openness to ambiguity are all positively associated with entrepreneurial intent among undergraduate students (Nasip et al., 2017, p. 825).

In Romania, a study illustrates that the need for achievement, the center of control, and business education proved to be significant predictors for business creation among young students (Vodă & Florea, 2019, p.1192). Kuwaiti people's entrepreneurial goals are influenced by social interaction, risk tolerance, the need for achievement, and self-efficacy (Elali & Al-Yacoub 2016, p. 18). A linear regression model examined the contributory link between motivation factors and engineering students' entrepreneurial intentions. The

results showed that monetary motivation and the need for independence directly and positively affect entrepreneurial intention. In contrast, the need for achievement has a minor impact (Barba-Sánchez & Atienza-Sahuquillo (2018, p. 57).

On the other hand, the study presented a substantial relationship between the need for achievement and the business intention of students (Primandaro, 2017, p. 68). It was attested that the desire for success and the willingness to take risks are essential factors in defining entrepreneurial purpose (Popescu et al., 2016, p. 771). Personality qualities, situational situation, need for achievement. Involvement was the initial factor inspiring graduate entrepreneurs in Nigeria to engage in business pursuits (Nur'arifah, 2017, p. 4; Fems, Poazi, & Opigo, 2017, p. 744).

In Indonesia, research reported that the individual's character toward business and young people's entrepreneurial intention is determined by numerous factors such as the need for achievement, risk perception, and locus of control (Wardana et al., 2020, p. 555). While in Vietnam, the need for achievement and challenge, attitude toward business, perceived behavioral control, involvement with entrepreneurship, and creativity correlated with entrepreneurial intentions (Nguyen et al., 2019, p. 186). Mexican students take three of the six components of entrepreneurial intention into account, believing that entrepreneurial intent in higher education students results from creativity, innovation, and a desire to succeed (Martínez, Ríos-Manríquez, & Cervantes, 2019, p. 128).

In a study among Sudanese and Omani University students, the entrepreneurial characteristics of undergraduate scholars (desire for achievement, self-efficacy, and locus of control) have a statistically significant impact on their entrepreneurial intention. The survey also discovered statistically significant differences in respondents' perspectives on the locus of control and entrepreneurial intent based on their colleges (Atiya et al., 2019. P. 1857). Several elements influence the intention, including the demand for achievement and the locus of control. Both of these criteria are psychological motivators and strong traits that impact entrepreneurial behavior. Individuals with a solid drive to complete activities according to specified success criteria need achievement (Ermawati, Soesilowati, & Prasetyo, 2017, p. 66).

A study entitled "The Influence of Adversity Quotient, Need for Achievement, and Entrepreneurial Attitude on Entrepreneurial Intentions" by Maharani, Indrawati, & Saraswati (2020, p. 9) shows that need for achievement influences entrepreneurial intention. Those who have a business aim are more mature, have a more significant demand for achievement, and have a more excellent internal center of control than those who do not (Çolakoğlu & Gözükara, 2016, p. 133).

Moreover, the need for achievement has an imperative outcome on business intentions. The need for achievement, ingenuity, individuality, courage to take risks, tolerance of ambiguity, parental influence, and self-efficacy have a practical and substantial effect on entrepreneurial purposes. Based on the description of the problem of the study, "The impact of business education, the need for achievement and self-efficacy on entrepreneurial intentions" is still exciting to investigate, particularly among

students to inspire the construction of young businessmen in Indonesia (Melinda & Usman, 2021, p. 1).

Studies showed an essential connection between the need for achievement and the business intention of students (Primandaro, 2017, p. 68). On the contrary, the linear regression model results show that monetary incentive and the desire for independence both have a direct and favorable impact on entrepreneurial intention. In contrast, the need for achievement has a minor impact (Barba-Sánchez & Atienza-Sahuquillo, 2018, p. 57).

2.5 Propensity to Risk

A person's risk-taking propensity can be described as their willingness to accept risks. Risk-taking propensity, which is a component of businesspersons' character, is considered critical for the choice to go into the entrepreneurship profession (Antoncic et al., 2016, p.1). Captivating calculated risk is the latest method in entrepreneurship. Risk-taking can lead equally to achievement and disappointment. Thus, entrepreneurs should calculate the hazards of their activities before they take them and evaluate the advantages and difficulties of risk-taking in all phases of business.

Business people bear risks more than other individuals. Tolerating risks is a significant attribute for entrepreneurs to prosper. Entrepreneurs take a professional, economic, family, and status risks when they decide to establish their business. Individuals who can tolerate risks can have entrepreneurial intentions and start their business ventures (Karabulut, 2016). It is recognized that entrepreneurs must have a high propensity to risk. They have to face uncertain circumstances and continually make decisions grounded on minor information and without future data (Torres et al., 2017).

The study proves that risk-taking propensity has an important and affirmative influence on business intention. The research instrument of risk-taking propensity results showed that learners are interested in entrepreneurship in taking risks because more significant risks will grant high prizes. Still, the risk is already taken with a strategy to diminish its risk (Herdjiono, 2017 et al., p. 13). Risk propensity plays a persuading part in corporate decisions, activities, and results, such as entrepreneurial intentions (Machmud & Sidharta 2016, p. 66); willingness to take risks has a detrimental impact on their entrepreneurial goals (Dinis et al., 2013, p.763).

According to the study, the demand for achievement and the willingness to take risks are critical factors in developing entrepreneurial ambition (Popescu et al., 2016, p. 771; Nur'arifah, 2017, p. 4). Both risks taking ability and entrepreneurial education meaningfully impact the entrepreneurial intentions of Technical University students (Voda, Covatariu, & Ghiuta, 2019, p. 1527). Contradictory risk-taking inclination did not impact monetary business and nonfinancial corporate performance (Cho & Lee, 2018, p. 124).

Findings of the path analysis utilizing variance-based structural equation modeling (SEM-PLS) exposed that casual micro-entrepreneur self-efficacy and risk-taking proclivity have a significant favorable impact on micro-enterprise performance

(Al Mamun, Nawi, & Zainol, 2016, p. 273). Attitudes and propensity to risk affect entrepreneurial intention (Zovko, Bilić, and Dulčić, 2020, p. 25). The desire to succeed and the willingness to take risks are essential factors in evaluating entrepreneurial purpose (Popescu et al., 2016, p. 771; Nur'arifah, 2017).

Similarly, the willingness to take risks was crucial in influencing students' entrepreneurial intents; it was determined that the desire to take chances was the most relevant of the three elements of social norms, perceived barriers, and risk-taking—only the willingness to accept risks substantially impacted students' entrepreneurial inclinations. The students' business goals were not determined by the other two (Weda, 2017, p. 1). In South America, the hypothesis is established in a study of Brazilian university students with the outcomes signifying that age, occupation of father, and risk-taking propensity affect a person's intention to engage in entrepreneurial conduct (Ferreira, Fernandes, & Ratten, 2017, p. 19).

Entrepreneurial risk attitudes are well-known drivers of corporate performance. The majority of empirical studies in this sector focus just on risk propensity, ignoring the critical issue of risk perception. It shows that risk perception is positively associated with company performance using data from 611 Tanzanian entrepreneurs. Furthermore, according to the findings, among the entrepreneurs that were grouped into four based on their risk profiles, the worst-performing entrepreneurs had a low-risk perception and a high-risk inclination (Boermans & Willebrands, 2017, p. 557).

A study conducted result revealed that students' willingness to take risks has a detrimental impact on their entrepreneurial goals (Dinis et al., 2013, p.763). Meanwhile, Herdjiono (2017 et al., p. 13) contrasted the idea and proved that risk-taking propensity has a significant and positive influence on business intention.

2.6 Propensity to Act

Shapero defines "*the propensity to act*" as an individual's character to act upon their own decisions. Thus, the propensity to act imitates the much-deliberated element of intention. Theoretically speaking, this propensity to act depends on both the framework and how the individual sees their capability to control the penalties of their activities in the situation (Badel, 2017).

According to Krueger, it is also tough to mold an "*intention*" without this propensity to act. In this theory, it reflects the person's wish to control by acting. To measure this variable, the gauge needs to be thoroughly connected to the action and persist in following an action to attain the goal, regardless of hesitation from the outside situations of every person. Shapero recommends measuring this variable through a correlated variable, which is considered the most significant to the "*propensity to act*", that is the internal locus of control (Bui et al., 2020, p. 372).

Shapero & Sokol said that intentions are influenced by three dimensions and one of them is a propensity to act. Propensity to act displayed an improvement in an individual to perform and their strength varies importantly for each individual. The

determinant not only has a direct influence on the intention but also has an indirect influence (Riyanti & Sandroto, 2017, p. 123).

The concept of a positive relationship between undergraduates' propensity to act and their intention to start an enterprise is supported in the study of Bui et al., (2020, p. 369). In one of the schools in Nigeria, according to a study based on Multiple Regression Analysis (MRA), the Igbo Traditional Business School has a positive and significant impact on entrepreneurial potential and intention, and that perceived desirability, perceived feasibility, and propensity to act are all important predictors of business intention (Agu & Nwachukwu, 2020, p. 223).

The outcome of regression analysis revealed that university provision, social values, and propensity to act have important and favorable relationships towards entrepreneurial intentions among students in two Kenyan universities (Ingabo, 2017, p. 108); perceived desirability, perceived feasibility, and propensity to act certainly and meaningfully inclined on entrepreneurial intention (Darmanto, 2016).

The concept of a positive connection between the propensity to act and the business intention of students is supported in the study of Bui et al., (2020, p. 369). In the same manner, the Regression analysis of Ingabo (2017, p. 108) showed a propensity to act as an important and favorable relationship with entrepreneurial intention. With this, it is recommended to encourage students to act on their own decisions, and explore and carry out business opportunities.

2.7 Entrepreneurship as a Career

Entrepreneurship has fast attained implications due to global rivalry, industrial change, and the expansion of the market economy (Bilgiseven, 2019, p. 885). The percentage of jobless graduates is steadily growing over the years and some have decided to involve in business. Government initiatives such as entrepreneurship agendas and resources have been established to encourage youth to venture into business. However, becoming a businessman is a great challenge as it necessitates certain characteristics that affect a person's entrepreneurial intention (Halim et al., 2019, p. 545).

According to a study from Harvard Business School, 70-80 percent of all business ventures fail to give any return to stockholders, and a notable 90-95 percent of all new businesses fall short of performance forecasts (Toft-Kehler, 2018, p. 19). Meanwhile, entrepreneurship is a growing related career choice in the current labor market, which is intricate and ever less severely structured and one of its main importance is flexibility, which is the person's ability to cope with hard circumstances and to adapt to contrary situations (Pérez-López, González-López, & Rodríguez-Ariza, 2016, p. 214).

Likewise, only 10 percent of businesses funded by venture capital funds lead to important monetary revenues despite watchful pre-investment due diligence and considerable supply distribution. Despite the little possibility of financial achievement businessmen are constantly being called upon as driving forces of the current economy. This contradiction implies an exciting potential for economic development and

technological advancements through enhanced knowledge in creating and sustaining new businesses (Toft-Kehler, 2018, p. 19).

The popularity of entrepreneurship as a vocation appears to be on the rise. Studies highlight the importance of looking into the factors that influence students' decision to pursue entrepreneurship as a career path, and it has remained the subject of recent research. (Kim-Soon, Ahmad & Ibrahim, 2018, p. 291); with inadequate job opportunities, entrepreneurship is becoming a practical option to fight unemployment (Ashour, 2016, p. 1). As of now, where job openings after graduation are turning out to be inadequate, graduates are becoming fascinated by entrepreneurial activities instead of choosing an old career path.

In addition to engaging people in serving their community, social entrepreneurship is becoming one of the answers to battle unemployment in general, e.g., by providing job prospects for others (Buckner, Beges, & Khatib, 2012, as cited in Ashour, 2016, p. 2). It is commonly known that being a businessperson is a hard easy thing, the entrepreneurship development involves not only problem-solving in a specific field of supervision, but also making a decision. Being an entrepreneur means having the capability to look for and assess opportunities. The main reason that motivates an individual to do entrepreneurial activity is from having the desire and curiosity to do business (Nurhayati, 2018, p. 71).

2.8 Entrepreneurship as a Driver of the Economy

Entrepreneurship is a significant element of economic progress because it does not only produce tangible products and offers services but also produces livelihood at the same time. Businessmen develop original concepts through creativity and innovativeness and harness available resources to obtain income from their business activities (Yaacob, Shaupi, & Shuaib, 2016, p. 50).

Entrepreneurship fosters employment creation, economic progress, and national development. It is critical to a country's economic growth. An entrepreneur starts a new business, takes a risk, and faces uncertainty to make a profit and develop the company by discovering accessible possibilities and assembling the resources needed to capitalize on those opportunities. (Scarborough, 2012 as cited Kim-Soon, Ahmad, & Ibrahim, 2018). The field of business has been highly considered an important generator of economic development, modernization, and the creation of careers (Taha, Ramlan, & Noor, 2017, p. 190).

In the same manner, building an enterprise is an important socio-economic growth of regions subject because job creation depends mostly on them, revenue, and the well-being of the community (Peng, Lu & Kang, 2012 as cited in Tarapuez 2016, p. 138). Because of this, the problem of the growing rate of being without a job is given a solution by creating jobs in a new business venture (De Silva, & Koggalage, 2020, p. 19923). Entrepreneurship today is very vital to the economic growth of a nation. With so much entrepreneurship in a country, it will develop its economic growth innovatively and creatively to become a developed country (Melinda & Usman, 2021, p. 2).

Lastly, to generate economic development and move towards the business society, it is authoritative, in the opinion of financial theorists, to have a development of business capital, which reflects several various lawful, recognized, and social influences and forces, and comprises also a social acceptance of entrepreneurial conduct, persons who are enthusiastic to contract with the risk of building new businesses and positive entrepreneurial environment. Their study indicated also that entrepreneurial creativity of individuals is a significant aspect of economic development, whereas the main role in working up attitudes towards life, raising innovative individuals is played by the educational organizations, which should be emerging and spreading entrepreneurial creativity among students and graduates. Entrepreneurship has a chief and imperative role in the economic progress of any nation (Weda, 2017, p. 1).

To sum up, the review of the related literature has highlighted the significant dimensions that affect the entrepreneurial intention of senior high school students, namely: self-efficacy, perceived desirability, entrepreneurship education, need for achievement, the propensity to risk, and propensity to act. Likewise, with intentions to converse these dimensions and their significance to the dependent variable entrepreneurial intention have surged the discernment of the researcher on some perspectives, theories, dispositions, and propositions. With this, it benefits the researcher in gaining an in-depth understanding of the significance of these dimensions to the entrepreneurial intention of senior high school students. The importance also of entrepreneurship as a career and as a driver of the economy is highlighted in the related literature. This will give the readers an idea of the benefits of entrepreneurship to individuals and the whole nation as well.

3. Material and Methods

This section presents the discussions of the research design, location, population and sample, the research instrument employed, data collection, statistical techniques, and ethical considerations.

3.1 Research Design

The researcher made use of non-experimental quantitative research using exploratory factor analysis. According to Williams, Onsmann, and Brown (2010, p. 1), Factor analysis is a helpful method for developing, refining, and evaluating tests, scales, and measurements that paramedics can use in the clinical context and academe. An exploratory factor analysis (EFA) was used to determine the measure's factorial validity.

Exploratory factor analysis (EFA) is a multi-step, sophisticated technique. It is a commonly used and widely applied statistical method (Costello & Osborne, 2005, p. 1). EFA tries to reveal multifaceted designs by discovering the dataset and challenging forecasts (Child, 2006, cited in Yong & Pearce, 2013, p. 79). When a researcher wants to figure out how many factors influence variables and which variables 'go together,' they use exploratory factor analysis. The underlying premise of EFA is that each set of data

has m common 'latent' elements. The goal is to determine the fewest number of common factors that account for the correlations (McDonald, 1985 as cited in Yong & Pearce, 2013, p. 80). Thematic analysis was used in generating the constructs or domain of the entrepreneurial intention among senior high school students.

3.2 Research Location

The Philippines' Davao Region, also known as Region XI, is an administrative region. Davao de Oro, Davao del Norte, Davao del Sur, Davao Oriental, and Davao Occidental are the five provinces that make up the southeastern part of Mindanao. The city is Mindanao's principal trade, business, and industrial center and the Davao Region's regional center. It is a first-class, highly urbanized city located in Davao del Sur. Yet, it is controlled and operated separately. The city is divided into three congressional districts, further subdivided into 11 administrative districts with 182 barangays. As of 2020, the city has total inhabitants of 1.7 million. Currently, there are more or less 100 public secondary schools, and most of them offer senior high school programs.

In the Tugbok District of Davao city, specifically in Tagakpan National High School, the entrepreneurial intention of senior high school students has been observed. Some of them sell stuff like foods, drinks, electronic loads, and ready-to-wear clothes both online and face to face selling. This shows that business is apparent, even by high-school students, as a buffer for probable joblessness and social mobility (Patuelli, Santarelli, & Tubadji, 2020, p. 225).

3.3 Population and Sample

There were 391 senior high school students from the nine public secondary schools in Tugbok District, Davao City, namely: Tagakpan NHS, Emilio J. Estipona NHS, Optaciano Hilay NHS, Los Amigos NHS, Biao NHS, Tugbok NHS, Mintal Comprehensive NS, Tacunan NHS, and Sto. Nino NHS was selected regardless of the strand as the study's respondents. In senior high school, all SHS students will take applied subjects, including Entrepreneurship, regardless of the strand (SHS in the Philippines: Curriculum Breakdown, n.d). Comrey and Lee recommended that the sample size be at least 300. The variables should have at least 5-10 observations; EFA works effectively with a larger sample size since it reduces data inaccuracy. If you have a 70-items instrument, you should have 350-700 respondents (Comrey & Lee, 1992, as cited in Yong & Pearce, 2013, p. 80).

The respondents were selected through the Stratified, random sampling technique. This is more appropriate since the researcher identified first a set of criteria as qualifiers for respondents of the study. Stratified sampling divides the population into divisions (or subgroups) from which a random sample is chosen. A subgroup is a regular group of elements. Subgroups might be based on the organization's size, gender, or occupation (to name but a few). When there is a lot of variation within a population, stratified sampling is commonly used. Its goal is to ensure that every stratum is adequately represented (Ackoff, 1953).

Grade 12 students who were 18 years old and above during the conduct of the study were included as respondents. This is based on the assumption that minors lack full cognitive functioning due to their cognitive-developmental stage. A less sophisticated question-answer process was projected for these respondents (Fuchs, 2005, p. 701). Those students who were below 18 years old were excluded, while those who did not indicate their age in the survey form and those who requested to withdraw were taken out from the list.

3.4 Research Instrument

The researcher downloaded and adopted the instruments of Ngugi et al., (2012); Linan (2008); Ho et al., (2018); Liñán, Rodríguez-Cohard, & Rueda-Cantuche (2011); Cavazos-Arroyo, Puente-Díaz, & Agarwal (2017). The researcher used the adopted instruments because these instruments measure the entrepreneurial intention that suits the study's objective. Downloaded instruments were exported to Google Forms, an online platform suitable for gathering data wherein the government prohibits physical interaction. Face-to-face interviews to augment the sources of the research instrument were not conducted because of the current covid-19 pandemic, and the adopted instruments were sufficient to realize the study's objectives.

The one-part research instrument was submitted to validation experts to realize the study's objectives. Five experts reviewed and checked the instrument. A total mean of 4.34 with an equivalent of "very good" was given by the validators for the research instrument's content and construct. Final revisions were made by incorporating the experts' corrections, comments, and suggestions before the questionnaire were ready for distribution and administration. To interpret the responses, the following scale was used:

Range of Means	Level	Interpretation
4.20 – 5.00	Very High	Measures of entrepreneurial Intention is always essential
3.40 – 4.19	High	Measures of entrepreneurial Intention is often important
2.60 – 3.39	Neutral	Measures of entrepreneurial Intention is sometimes important
1.80 – 2.59	Low	Measures of entrepreneurial Intention is seldom important
1.00 – 1.79	Very Low	Measures of entrepreneurial Intention is not important

3.5 Data Collection

Data collection started with reviewing the related literature and searching for a suitable questionnaire on the internet. The questionnaire's items were carefully written according

to the level of comprehension of the senior high school students to make sure they could comprehend the items. The researcher sought two kinds of the panel of experts, the internal and the external validators in which the external validator came from the College of Business Administration of the University of Southeastern Philippines.

Upon approval, the researcher made sure that protocol was followed to inform and give due respect to the involved agencies and persons. These were the steps undertaken in gathering the pertinent data for the study. First, the researcher asked for consent to conduct the study by giving an endorsement letter from the Professional School of the University of Mindanao to Mr. Reynaldo M. Guillena, CESO V, Schools Division Superintendent, asking permission to conduct the study in public secondary schools in Tugbok, Davao City.

After the approval was sought, the researcher drafted another letter to the school principals, requesting permission to use the students as the respondents of the study. Upon the approval of the letter from the principals, with the help of the school research coordinators and grade 12 advisers, the online questionnaires were distributed through the link sent to sections' group chats. To secure full consent from the respondents, an "Agree" button is indicated in the opening statement of the instrument. The online responses were extracted and sorted according to inclusion, exclusion, and withdrawal criteria. The final responses were subject to analysis, tabulation, and interpretation.

During this pandemic, the traditional way of gathering data in research is affected by this new normal. The researcher utilized google forms instead of face-to-face administration. It is challenging for the researcher since not all students have internet connections at home, and physical interaction is prohibited. But this current situation did not hinder the researcher in pursuing this study. The researcher coordinated with class advisers to develop the appropriate number of respondents, and reliable data will be taken.

The survey was conducted from the last week of May 2021 to June 2021 while students were at home answering their modules. But the researcher sees to it that answering the survey instrument did not affect their time answering their self-learning modules.

3.6 Statistical Tools

Exploratory Factor Analysis (EFA). This was used to determine the dimensions of the entrepreneurial intention of senior high school students.

- **Data Reduction Analysis.** This was used to reduce the multidimensional set of data.
- **Keiser-Meyer-Olkin (KMO) measure.** This was used to assess the data sampling adequacy.
- **Bartlett's Test of Sphericity.** The correlation matrix was utilized to test the null hypothesis that it is an identity matrix. An identical correlation matrix indicates that your variables are unrelated, making factor analysis difficult.

- **Initial Eigenvalue (1.0) above.** This was used to determine how much variance a factor explains in the observed variables. A single observed variable explains less variance than any factor with an eigenvalue of one.
- **VARIMAX Rotation:** This was utilized to reduce the number of variables with significant loadings on each component while also attempting to make tiny loadings even lower.
- **Cattell-Scree Plot.** This was used to determine how many factors were kept.
- **Thematic Analysis.** This was used to name the extracted dimensions of the entrepreneurial intention of senior high school students.

3.7 Ethical Considerations

This study is conducted with a firm adherence to the ethical procedures and guidelines set forth by the Contingent to UMERG approval number UMERG-2021-039 dated March 24, 2021. The researcher faithfully requested and secured from the Division and school officials corresponding permission required to complete this study. The researcher guaranteed the correctness of identified recruiting parties and assessed the amount of risk and the measures in place to mitigate it (including physical, psychological, and social-economic). Proper authorization and consent are also obtained from the sample of the study, in which they are assured that all their rights would be fully protected, specifically in handling the data such as, but not limited to:

3.7.1 Voluntary Participation

The participation of the respondents is entirely voluntary and confidential to protect their privacy, and information is given whenever the respondents do not understand, before deciding whether to continue or not in completing the survey. Respondents' name was optional, and for those respondents who indicated their identity in the instrument, their personal information was kept. No one except the researcher knew about their specific responses.

3.7.2 Privacy and Confidentiality

Inline to safeguard the rights of the study participants, all the information gathered from this study, including the personal information of the respondents, was kept private and confidential.

3.7.3 Informed Consent Process

The survey questionnaire used in this study is straightforward and can be easily understood by the respondents; the researcher makes sure that the respondents fully know the benefits the school may get from the study. The survey is conducted with the approval of the concerned school authorities, such as the Schools Division Superintendent, School officials, and the respondents themselves.

3.7.4 Risks

This research did not involve a high-risk situation that the population may experience in physical, psychological, or socioeconomic concerns. It protected and secured the rights of the individuals in the study.

3.7.5 Benefits

Teachers used this study to guide students' entrepreneurship learning by This study has a probable global implication to the extent that it created new and original results in the sphere of business intention, and its result is considered as a reference to evaluate the existing entrepreneurship program of various educational institutions. This study served as a frame of reference for the officials of the Department of Education in refining the quality of education in the senior high school curriculum. Likewise, this study served as a basis to evaluate if the SHS curriculum has been effective in increasing the level of students' entrepreneurial intention. emphasizing the specific skills that will increase the level of students' entrepreneurial intention. Finally, this study will benefit future researchers who will study a similar problem. It will give those insights and significant literature on the entrepreneurial intention among students.

3.7.6 Plagiarism

The researcher makes sure that the correct and accurate way of citing ideas from other writers and scholars was fully observed. To do this, this paper underwent grammar and plagiarism checking via Grammarly and Turnitin software.

3.7.7 Fabrication

As this study is based on several existing studies, the researcher ensured that he did not make any tale from his literature. Thus, all the information presented was carefully written and cited. All sources used in this study came from reliable journals and other scholarly works.

3.7.8 Falsification

This research complies with the citation rules set forth by the Harvard citation style; hence there are no misrepresentations of work or alterations of any data gathered in the study. The data and information obtained are presented in the most accurate way of writing.

3.7.9 Conflict of Interest

There was no evidence of a conflict of interest (COI). There were no conditions under which a professional judgment about a primary interest, such as the welfare of participants or the validity of the research, is influenced by a secondary interest, such as financial or academic gains or recognitions.

3.7.10 Deceit

The writings in this paper did not utilize any form of untruthfulness to harm the respondents' welfare. All the information written was checked and validated by the panel of experts.

3.7.11 Permission from Organization/Location

The research is conducted with formality and precise adherence to the ethical standards; thus, a formal letter is sent to the Division of Davao City authorities. The research is only conducted after approval from the authorities.

3.7.12 Technology Issues

The researcher underwent an online outline defense, instrument validation, and final defense since face-to-face interaction is prohibited. Google forms were utilized to collect data from the respondents, wherein a link was sent to their section's group chat through their adviser. And also, email and Google drive were used in communicating and viewing information in an online environment.

3.7.13 Authorship

Lastly, this study considers authorship qualifications in the course of the research. Together with the help and guidance of the research adviser, the researcher had substantially contributed to the design and conceptualization, or data gathering, data analysis, and interpretation. In every chapter of the paper, the researcher sees that the adviser was adequately informed and consulted on the content. Likewise, the researcher always seeks the adviser's comments and suggestions to improve the paper further. The researcher and adviser collaboratively drafted the article, and it was thoroughly updated for important intellectual content. Both have contributed to the study leading to the publication of the research.

4. Results and Discussion

This section presents the results, interpretation, and analysis of data obtained from the respondents of the study concerning the Dimensions of Entrepreneurial Intention of Senior High School Students in public secondary schools. Figures and tables are presented to explain the appropriateness of data for factor analysis and the multi-dimensionality of the dimensions of entrepreneurial intention. Presented in this chapter also are the discussions of data, conclusion, and recommendations on the Dimensions of Entrepreneurial Intention of senior high school students in public secondary schools.

4.1 Results

4.1.1 KMO and Bartlett's Test

The Keiser Meyer Olkin Measure of Sampling Adequacy and Bartlett's sphericity test are shown in Table 1. The 0.954 value of the Keiser Meyer Olkin measure indicates that the

samples are highly correlated, and it enables data-fitting factor analysis. If the Kaiser Meyer Olkin (KMO) value is more than 0.5, the sampling is sufficient (Hadi, Abdullah, & Sentosa, 2016). As indicated, Bartlett's test of sphericity produces a value of 16786.723. A significance level less than .001 indicates that the data may be factored to factor in the underlying aspects of senior high school students' entrepreneurial intention.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.954
Bartlett's Test of Sphericity	Approx. Chi-Square	16786.723
	df	2415
	Sig.	.000

4.1.2 Total Variance Explained

The number of extracted dimensions, the starting eigenvalues associated with the given dimensions, the percentage of the total variance, and the cumulative percentage of each dimension are all listed in Table 2. The components are arranged in descending order by the amount of variance they explain. Except for factors with eigenvalues smaller than one, the Extraction of Sums of Squared Loadings is identical to the original eigenvalues. As shown in the table, the 6 dimensions of senior high school students' entrepreneurial intention have eigenvalues more significant than one.

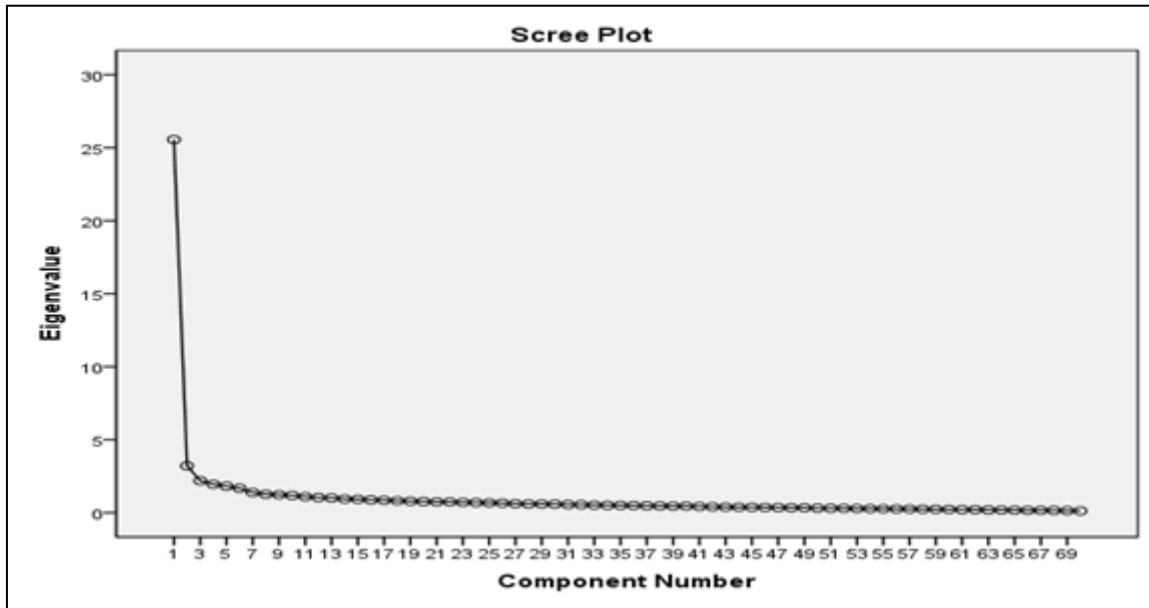
Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	25.557	36.50	36.510	25.557	36.510	36.510	8.774	12.535	12.535
2	3.209	4.584	41.095	3.209	4.584	41.095	7.741	11.058	23.593
3	2.188	3.126	44.220	2.188	3.126	44.220	6.635	9.479	33.071
4	1.945	2.778	46.999	1.945	2.778	46.999	4.914	7.020	40.091
5	1.815	2.593	49.591	1.815	2.593	49.591	4.351	6.215	46.307
6	1.673	2.390	51.981	1.673	2.390	51.981	3.972	5.675	51.981

Extraction Method: Principal Component Analysis.

4.1.3 Cattell Scree Plot

Figure 3 presents a graph of the eigenvalues against all of the components and a graphical explanation of the overall variance explained. The Scree Plot depicts the eigenvalues' gradual lagging. It determines the relative fit of each component based on its relative relevance. The graph is extremely helpful in calculating the number of components that will be kept. The flattening of the curve is the point of interest. As can be seen, the curve flattens down as component number 6 approaches, as this is where eigenvalues less than 1 begin, and if the items in each dimension are fewer than the minimum, the dimension is deleted. As a result, only six dimensions are regarded to be structures.



4.1.4 Rotated Component Matrix with the 70 Attributes

As presented, there are seventy items categorized into six dimensions. As presented in the table, twenty-nine items are not included. Only 41 items are measured in the categorization that made up the dimensions of entrepreneurial intention. KMO (Measure of Sampling Adequacy) with outliers of loadings below .500 were eliminated to realize a stronger separation of factors, and eigenvalues above 1 were recognized (Hair et al., 1998).

4.1.5 Rotated Component Matrix with Group Attributes

A factor analysis component with varimax rotation was used for the questionnaire's seventy items with 25 iterations, a statistical strategy for reducing the number of variables with significant loadings on each component while also attempting to reduce modest loadings. (Gorsuch, 1983). There are six dimensions have been identified with their respective indicators. These dimensions are presented in tables that correspond to the dimensions of entrepreneurial intention.

The researcher may utilize previously selected factor names when naming the extracted dimensions. Still, after reviewing the actual items and factors, the researcher may believe that a different name is more appropriate. For each factor, one naming technique is to use the top one or two loading elements. A well-characterized factor provides an accurate and appropriate explanation of the underlying construct, clarifying the report (Neill, 2008, p. 3).

Table 3: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
Item52	.660					
Item53	.644					
Item37	.635					

Joelito T. Mante, Gaudencio G. Abellanos
 DIMENSIONS OF ENTREPRENEURIAL INTENTION OF SENIOR
 HIGH SCHOOL STUDENTS: AN EXPLORATORY FACTOR ANALYSIS

Item40	.624					
Item46	.590					
Item43	.575					
Item59	.547					
Item61	.537					
Item58	.530					
Item62	.527					
Item27	.513					
Item6		.668				
Item13		.643				
Item7		.631				
Item10		.613				
Item4		.561				
Item16		.559				
Item2		.558				
Item12		.552				
Item1		.548				
Item8		.517				
Item9		.500				
Item48			.681			
Item70			.587			
Item56			.586			
Item63			.579			
Item47			.556			
Item68			.550			
Item25				.702		
Item24				.649		
Item23				.643		
Item26				.629		
Item22				.507		
Item11					.571	
Item66					.557	
Item3					.546	
Item29					.535	
Item38					.509	
Item33						.705
Item34						.643
Item30						.504
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 25 iterations.						

4.1.6 Self-Efficacy

The exploratory factor analysis showed the first dimension of senior high school students' entrepreneurial intent. The traits are referred to as self-efficacy in Table 3. Item 52, item 53, item 37, item 40, item 46, item 43, item 59, item 61, item 58, item 62, and item 27 make up the first dimension. The majority of these items indicate respondents' perceptions of their ability to carry out the actions required to achieve specified company performance

goals. These things also demonstrate self-assurance in their potential to achieve if they venture into business with the skills they already possess.

Table 4: Rotated Component Matrix with Grouped Attributes of Self-Efficacy

Dimension	Attributes	Loadings
Self-Efficacy	Item52: Familiar with the attitude of customers and how to sell my products and services to them.	.660
	Item53: Ready to know how to conduct market research by myself.	.644
	Item37: Ease in developing a business idea.	.635
	Item40: Immediate family gives more importance to business activity than any other activities	.624
	Item46: Creativity would help them create business ideas.	.590
	Item43: Their Friends value business activity over traveling and sports activities and other professions.	.575
	Item59: Able to determine the proper pricing technique in selling my products and services.	.547
	Item61: Having the potential to recognize business opportunities.	.537
	Item58: Having the skill to sell products and services to people.	.530
	Item62: Can communicate my ideas about business to my mentors, potential customers, and potential business partners.	.527
Item27: Can start a business and keeping it working would be easy	.513	

4.1.7 Perceived Desirability

EFA revealed the second dimension of the entrepreneurial intention of senior high school students. Presented in Table 5, the attributes are named as perceived desirability. The second dimension consists of 11 items item 6, item 13, item 7, item 10, item 4, item 16, item 2, item 12, item 1, item 8, and item 9. Commonly, these items describe the extent to which respondents find entrepreneurship attractive and the possibility of starting a business is evident, and thus, these attributes display a positive entrepreneurial attitude of the respondents.

Table 5: Rotated Component Matrix with Grouped Attributes of Perceived Desirability

Dimension	Attributes	Loadings
Perceived Desirability	Item6: Attracted to the business profession.	.668
	Item13: Companies will give helpful comments for future entrepreneurs like me with useful terms.	.643
	Item7: Business opportunity and financial capitals are very important in starting a business.	.631
	Item10: There is special training for an interested future young businessman like me.	.613
	Item4: Ready to discover products and services that will solve the problems of my community in terms of the availability of products and services	.561
	Item16: Readily available chance to start a business within my community.	.559
	Item2: Preference to be an entrepreneur	.558
	Item12: Interested in designing product ideas that will meet customers' expectations.	.552
	Item1: Interested to know more about business.	.548

	Item8: Future entrepreneur needs great contentment for me.	.517
	Item9: Among the different options would choose to be an entrepreneur after studies.	.500

4.1.8 Entrepreneurship Education

EFA revealed the third dimension of the entrepreneurial intention of senior high school students. Presented in Table 6 are the attributes that are named entrepreneurship education. The third dimension consists of 6 items item 48, item 70, item 56, item 63, item 47, and item 48. Most of these attributes show information about the entrepreneurial skills that a businessman should possess and basic business knowledge that students should know before undertaking business.

Table 6: Rotated Component Matrix with Grouped Attributes of Entrepreneurship Education

Dimension	Attributes	Loadings
Entrepreneurship Education	Item48: Leadership and communication skills are very important in managing a business	0.681
	Item70: Making income growth is the main reason for the existence of a business enterprise.	0.587
	Item56: Running a business should be guided by moral values, even though its main purpose is to earn money.	0.586
	Item63: Ready to learn about financing requirements and considerations to start a business	0.579
	Item47: Problem-solving skill is important in running a business	0.556
	Item68: Agree on selling goods and services for an income	0.550

4.1.9 Need for Achievement

EFA revealed the fourth dimension of the entrepreneurial intention of senior high school students. Presented in Table 7 are the attributes that are named need for achievement. The fourth dimension consists of 5 items item 25, item 24, item 23, item 26, and item 22. These items reveal respondents' desire for significant accomplishment, mastering of skills, control, or high standards. These items also express that the respondents are keen for success and recognition.

Table 7: Rotated Component Matrix with Grouped Attributes of Need for Achievement

Dimension	Attributes	Loadings
Need for Achievement	Item25: Keeping business implementation projects in school alive	.702
	Item24: Aiming for great recognition in a business implementation project in school	.649
	Item23: Aiming for a high level of income if there is a business implementation project in school	.643
	Item26: Keeping track of positive development in the business implementation project	.629
	Item22: Competing hard in business implementation projects in school	.507

4.1.10 Propensity to Risk

EFA revealed the fifth dimension of the entrepreneurial intention of senior high school students. Presented in Table 8 are the attributes that are named propensity to risk. The fifth dimension consists of 5 items item 11, item 66, item 3, item 39, and item 29. Mostly, these items show the willingness of the respondents to take chance when making decisions. These items also show the character of businesspersons when it comes to career options.

Table 8: Rotated Component Matrix with Grouped Attributes of Propensity to Risk

Dimension	Attributes	Loadings
Propensity to Risk	Item11: Available loan with a favorable agreement for a future entrepreneur like me	.571
	Item66: Starting immediately my own business after finishing senior high school.	.557
	Item3: Having the necessary abilities to be a businessman /businesswoman	.546
	Item29: Ready to do the required things that are needed to be an entrepreneur	.535
	Item38: My career goal is to be a businessman	.509

4.1.11 Propensity to Act

EFA revealed the sixth dimension of the entrepreneurial intention of students. Presented in Table 9 are the attributes that are named propensity to act. The last dimension consists of 3 items item 30, item 33, and item 34. Generally, these attributes described the determination of the respondents to act independently in doing business and be able to see their capabilities to control the penalties of their activities in the situation.

Table 9: Rotated Component Matrix with Grouped Attributes of Propensity to Act

Dimension	Attributes	Loadings
Propensity to Act	Item30: Able to start a business	.705
	Item33: Being sure of starting a business in the future	.643
	Item34: Determined to build a business in the future	.504

4.2 The framework of Entrepreneurial Intention

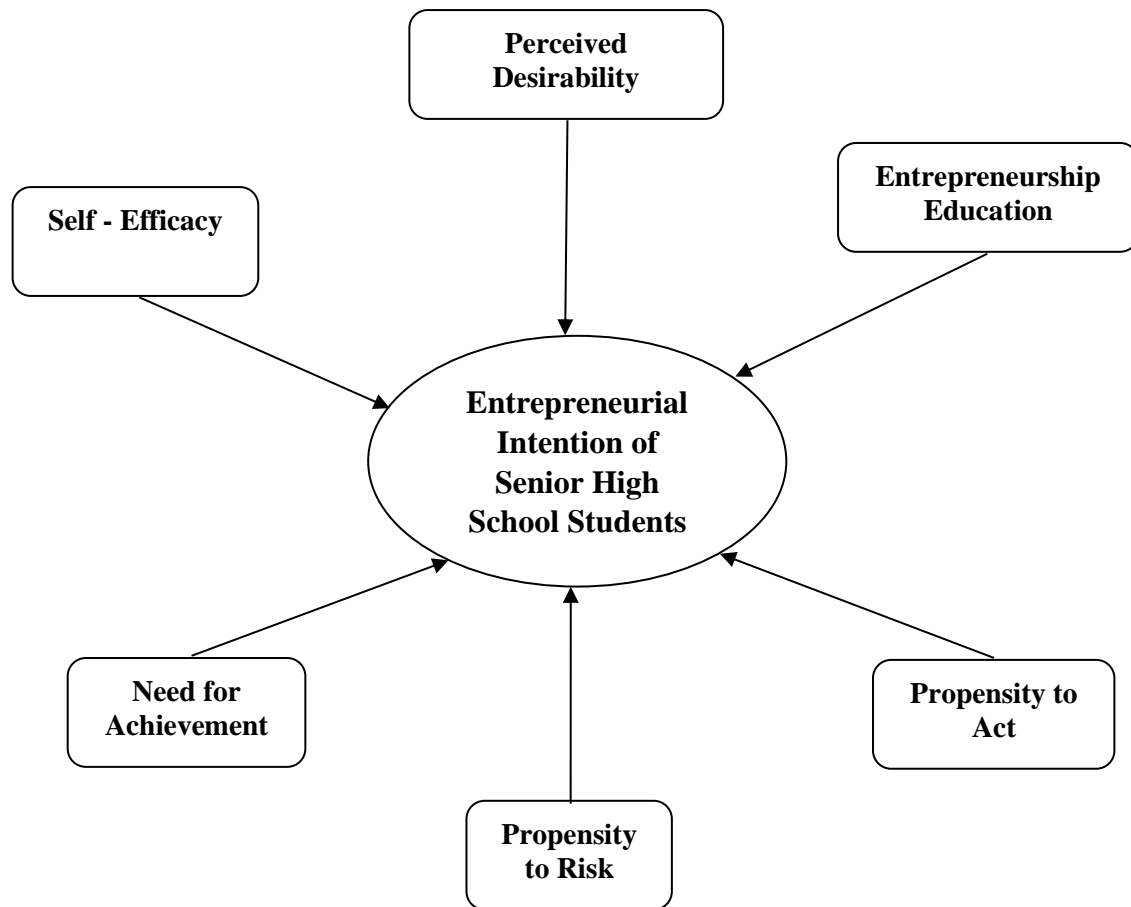


Figure 4: Entrepreneurial Intention Revealing the Extracted Six Dimensions

4.3 Discussions

4.3.1 Self–efficacy

Self-efficacy, as described by psychologist Albert Bandura, is people's belief in their ability to exert control over their functioning and events that affect their lives. Inspiration, well-being, and individual achievement can all stem from a person's sense of self-efficacy (Lopez-Garrido, 2020).

The findings of the study indicate that students' entrepreneurial intention is affected by self – efficacy and this was confirmed by Sandi and Nurhayati (2020, p. 9); Park and Choi (2016, p. 9); Santoso (2016, p. 131); H.H. Lee, and I.H. Lee, (2016, p. 111); Wang and Huang, 2019, p. 183) that self-efficacy influences students' motivation in entrepreneurship in a positive and meaningful way. And it was also attested by Shaheen and AL-Haddad (2018, p. 2385) that entrepreneurial self-efficacy influences the entrepreneurial behavior of a person. This Implies that self–efficacy should be emphasized in entrepreneurship instruction to increase the degree of the entrepreneurial intention of senior high school students in public secondary schools.

4.3.2 Perceived Desirability

Shapero defined perceived desirability as the appeal of beginning a business to an individual, taking into account both intrapersonal and extrapersonal factors (Solesvik et al., 2014 as cited in Patricia & Silangen, 2016, p. 70). Similarly, Perceived Desirability is defined by Shapero and Sokol as the attractiveness of opening a business with each subject, or the level of concentration of a person, the attitude of an individual towards starting a business venture (Bui et al., 2020, p. 372).

This study discloses that the intention of learners to venture into business is influenced by perceived desirability. This was attested also by Bui, et al., (2020, p. 369); Chornidio (2018, p. 15) that perceived desirability has the greatest impact on students' intentions to start a business. This study pointed out that perceived desirability is essential in business intention. Making entrepreneurship education appealing to the students will increase their desire to venture into business after their studies. Therefore, to increase the entrepreneurial intention of senior high school students in public secondary schools, their desire should be strong. To do this, entrepreneurship education should be more appealing.

4.3.3 Entrepreneurial Education

Fayolle and Gailly defined entrepreneurship education as a perception that has developed vital to both economic and social phenomena and as a field of study. It has also been acknowledged in academics and teaching (Hashim, 2017, p. 99). It is pretty important in society's social and economic progress to provide self-employment and job opportunities for the people. Entrepreneurship education can catalyze a business mindset through the emerging entrepreneurial intentions of graduates (Asghar et al., 2019, p. 383).

This study revealed that students' entrepreneurial intentions are influenced by entrepreneurship education. This was authenticated by Thoyib, Maskie, and Ashar (2016, p. 24). According to their study, students who appeared in an entrepreneurial education tended to keep entrepreneurial characteristics and build new businesses in the future. This means that their intention to start a business is significantly influenced by entrepreneurship education as affirmed by Alshebami, et al., (2020, p. 3605); Mei, Lee, & Xiang (2020 p. 257); Saraih (2019, p. 139); Deliana, Rahardjo, & Afriyanti (2019, p. 125). So, therefore, public secondary schools should enhance entrepreneurship education to elevate the business intention of senior high school students.

4.3.4 Need for Achievement

The need for achievement is the determination of a person to do well. People who have a high need for achievement have entrepreneurial intentions. They are keen on success. They want to express themselves as businessmen who can launch successful businesses in competitive markets (Karabulut, 2016, p. 14).

This study divulges that a sense of accomplishment is one of the most important predictors of students' ventures into business. It was revealed also by Primandaro (2017,

p. 68) that there is a link between students' desire to succeed and their business intentions. This suggests that senior high school students in public secondary schools should be involved in various activities that challenged their business skills and capabilities. This will develop their high need for achievement and will eventually increase their business intention as well.

4.3.5 Propensity to Risk

A person's risk-taking propensity can be described as their willingness to accept risks. Risk-taking propensity, which is a component of the character of businesspersons, is considered to be critical for the choice to go into the entrepreneurship profession (Antoncic, et al., 2016, p. 1).

The risk propensity is revealed as one of the important factors in the business intention of senior high school students in public secondary schools. This is following the result of the study conducted by Herdjiono et al., (2017, p. 13). The study proves that risk-taking propensity has an important and positive influence on business intention. This suggests that entrepreneurial propensity to risk should also be emphasized in business education to condition the minds of senior high school students who are planning to do business in the future that entrepreneurs are risk-takers.

4.3.6 Propensity to Act

Shapero defines "*the propensity to act*" as an individual's character to act upon their own decisions. Thus, the propensity to act imitates the much-deliberated element of intention. Theoretically speaking, this propensity to act depends on both the framework and how the individual sees their capability to control the penalties of their activities in the situation. (Badel, 2017).

This study shows another factor that increased the degree of the intention toward business venture of senior high school students, is the propensity to act. This affirms the study conducted by Bui, et al., (2020, p. 369) that proposes a positive relationship between undergraduates' propensity to act and their intention to start an enterprise. This indicates that senior high school students in public secondary schools should be motivated by the school to act based on their decision. In this way, their intention towards engaging in business will be influenced significantly.

The dimensions of the entrepreneurial intention of senior high school students in public secondary schools supported the anchored theory of the Economic-Psychological model of factors of individuals' intentions to go into business Davidsson (1995, p. 1) but focuses only on autonomy (propensity to act) and achievement (need for achievement). The result also supported the proposition that emphasizes two dimensions: the self-efficacy of Jumamil, Depositario, and Zapata (2017, p. 577) and the entrepreneurship education of Aliman and Jalal (2013, p. 363).

5. Recommendations

The following recommendations are made based on the study's results and conclusion: The dimensions of the entrepreneurial intention of senior high school learners recommend to the numerous educational institutions around the entire globe to consider the result of the study as a basis for making policies to improve entrepreneurship education in their respective institutions.

The dimensions of the entrepreneurial intention of senior high school students recommend to the Department of Education to consider the result of the study as their frame of reference in enhancing entrepreneurship education quality in senior high school and make strategies on how to make the business profession appealing to students.

Teachers should emphasize the dimensions of entrepreneurial intention in entrepreneurship learning to increase the level of students' entrepreneurial intention. The stakeholders, especially the immersion partners, to strengthen the partnership with the Department of Education and continue to provide skills training for senior high school students to develop their existing skills and acquire new ones.

Future researchers to conduct a similar study about the problem outside Davao city using the same multi-variate approach to explore more dimensions of the entrepreneurial intention of senior high school learners.

6. Conclusion

The following conclusions are taken based on the findings of the study.

There are six dimensions of the entrepreneurial intention of senior high school students in public secondary schools; these include self-efficacy, perceived desirability, entrepreneurship education, need for achievement, the propensity to risk, and propensity to act. This indicates that the aim of starting a business for senior high school students is affected by these dimensions. It was concluded further that the results of the study supported the anchored theory Economic-Psychological model of factors of individuals' intentions to go into business Davidsson (1995, p. 1) but focuses only on autonomy (propensity to act) and achievement (need for achievement). The result of the study also supported the proposition that emphasizes two of the dimensions: the self-efficacy of Jumamil, Depositario, and Zapata (2017, p. 577) and the entrepreneurship education of Aliman and Jalal (2013, p. 363).

Acknowledgements

First and foremost, I give special thanks and glory to the Almighty God for giving me the grace, wisdom, strength, and good health to complete this thesis. I am also indebted to my Thesis Adviser Dr. Gaudencio Abellanos of the University of the Southeastern Philippines, for his constructive intellectual advice and uncompromising academic discussions, making this thesis a worthwhile undertaking.

My special appreciation further goes to the office of the Schools Division Superintendent of Davao, Mr. Reynaldo M. Guillena, CESO V, school heads, research coordinators, grade 12 advisers, and students of various public secondary schools in Tugbok District, Davao City, for being so supportive of my goal to finish this research study. And also, to my truthful and honest friends Judamae B. Aguirre, MAED, and Marie Grace D. Beñales, Ph.D., for their considerable knowledge, experience, and creativity, as without their support, this thesis would not have been completed.

To the members of the panel for their insightful suggestions and opinions on how to enhance this research.

Finally, to my loving family for their prayers day and night and extended financial support, giving me the confidence to work very hard while studying at the University of Mindanao.

Conflict of Interest Statement

The authors declare no conflicts of interests.

About the Author(s)

Joelito T. Mante obtained his bachelor's degree in Accountancy last October 2000 in Holy Cross of Davao College, Davao City, Philippines. In 2022, He earned his master's degree in Business Administration at the University of Mindanao, Davao City. He is currently teaching senior high school in the Department of Education for 6 years. Previously, he worked in the industry handling various accounting positions for 15 years.

Gaudencio G. Abellanos obtained his Doctor of Education - Educational Management in Southwestern University, Cebu City, Philippines in 1998. He also took his Doctorate degree in public administration in the same university in 2007. Two years later, he graduated his Doctor of Business Administration in University of San Jose Recoletos, Cebu City, Philippines. Again, in same school, he got his Doctor of Philosophy in English and Doctor of Management in 2011 and 2012 respectively. Currently, he is working as Professor VI at the University of Southeastern Philippines-Mintal Campus, Mintal. Davao City, and he is also a part-time Professor at the University of Mindanao, Davao City.

References

- Ackoff, R., 1953. *The design of social research*. Chicago: Universidad de Chicago.
- Adelaja, A.A., Umar, M.A., Soomiyol, M.T., Ahmad, R., Najeemdeen, I.S. and Abidemi, B.T., 2018. Effectuation Approach in Accessing Significance of Entrepreneurial Education on Students' Entrepreneurial Intention. *Indian-Pacific Journal of Accounting and Finance*, 2(4), pp.35-43.
- Agu, A.G. and Nwachukwu, A.N., 2020. Exploring the relevance of Igbo traditional business school in the development of entrepreneurial potential and intention in Nigeria. *Small Enterprise Research*, 27(2), pp.223-239.

- Aliman, N.K. and Jalal, H.A., 2013. Entrepreneurial career intentions among Malay Ethnic University students in Malaysia. *Business & Applied Sciences*, 1(8), p.363.
- Alkhatib, K., Al-Aiad, A., Mustafa, M. and Alzubi, S., 2021. Impact factors affecting entrepreneurial intention of Jordanian private universities students: a mediation analysis of perception toward entrepreneurship. In *Sustainable and Energy Efficient Computing Paradigms for Society* (pp. 53-65). Springer, Cham.
- Alshebami, A., Al-Jubari, I., Alyoussef, I. and Raza, M., 2020. Entrepreneurial education as a predictor of community college of Abqaiq students' entrepreneurial intention. *Management Science Letters*, 10(15), pp.3605-3612.
- Al Mamun, A., Nawli, N.B.C. and Shamsudin, S.F.F.B., 2016. Examining the effects of entrepreneurial competencies on students' entrepreneurial intention. *Mediterranean Journal of Social Sciences*, 7(2), p.119.
- Al Mamun, A., Nawli, N.B.C. and Zainol, N.R.B., 2016. Entrepreneurial competencies and performance of informal micro-enterprises in Malaysia. *Mediterranean Journal of Social Sciences*, 7(3), pp.273-273.
- Antoncic, B., Auer Antoncic, J., Gantar, M., Hisrich, R.D., Marks, L.J., Bachkirov, A.A., Li, Z., Polzin, P., Borges, J.L., Coelho, A. and Kakkonen, M.L., 2016. Risk-taking propensity and entrepreneurship: The role of power distance in six countries. In *Academy of Management Proceedings* (Vol. 2016, No. 1, p. 13255). Briarcliff Manor, NY 10510: Academy of Management.
- Anwar, I., Thoudam, P. and Saleem, I., 2021. Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using mediation and moderation approach. *Journal of Education for Business*, pp.1-13.
- Anwar, G. and Abdullah, N.N., 2021. Inspiring future entrepreneurs: The effect of experiential learning on the entrepreneurial intention at higher education. *International Journal of English Literature and Social Sciences*, 6.
- Ashour, S., 2016. Social and business entrepreneurship as career options for university students in the United Arab Emirates: The drive-preparedness gap. *Cogent Education*, 3(1), p.1234425.
- Asimakopoulou, G., Hernández, V. and Peña Miguel, J., 2019. Entrepreneurial intention of engineering students: The role of social norms and entrepreneurial self-efficacy. *Sustainability*, 11(16), p.4314.
- Asghar, M.Z., Gul, F., Seitamaa-Hakkarainen, P. and Tasdemir, M.Z., 2019. Validating entrepreneurial intentions questionnaire to assess the impact of entrepreneurship education. *Eğitim ve bilim*.
- Atiya, T.M.S., Bilal, Z.O., Abulhamid, M. and Shoaib, S.A., 2019. The impact of entrepreneurial characteristics on entrepreneurial intention of Sudanese and Omani university students. *European Scientific Journal*, 15(4), pp.1857-7881.
- Badel, L. (2017). *Self-efficacy, desirability, and feasibility are key to the Entrepreneurial spirit*. Available at <https://knowledge.em-lyon.com/en/2017/03/01/self-efficacy->

- [desirability-and-feasibility-are-key-to-the-entrepreneurial-spirit/](#) (Accessed 10 October 2021)
- Barba-Sánchez, V. and Atienza-Sahuquillo, C., 2018. Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European research on management and business economics*, 24(1), pp.53-61.
- Bayero, S.A., 2020. Influence of Entrepreneurial Education and Attitude on Entrepreneurial Intention of Graduating Students in a Nigerian University. *Online Submission*, 1(2), pp.26-55.
- Bilgiseven, E.B., 2019. Analysis of factors leading to entrepreneurial intention. *Procedia Computer Science*, 158, pp.885-890.
- Boermans, M.A. and Willebrands, D., 2017. Entrepreneurship, risk perception and firm performance. *International Journal of Entrepreneurship and Small Business*, 31(4), pp.557-569.
- Boahemaah, L., Xin, L., Dogbe, C.S.K. and Pomegbe, W.W.K., 2020. The Impact of Entrepreneurship Education on the Entrepreneurial Intention of Students in Tertiary Institutions. *International Journal of Management, Accounting and Economics*, 7(4), pp.180-212.
- Bui, T.H.V., Nguyen, T.L.T., Tran, M.D. and Nguyen, T.A.T., 2020. Determinants influencing entrepreneurial intention among undergraduates in universities of Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(7), pp.369-378.
- Child, D., 2006. *The essentials of factor analysis*. A&C Black.
- Cho, Y.H. and Lee, J.H., 2018. Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Chornidio, F.A., 2018. *Analysis Of Factors Influencing Entrepreneurial Intention Among Students of International Programs* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Comrey, A. and Lee, H., 1992. A first course in factor analysis (2nd edn.) Lawrence Earlbaum associates. *Publishers: Hillsdale, New Jersey*.
- Costello, A.B. and Osborne, J., 2005. Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research, and evaluation*, 10(1), p.7.
- Çolakoglu, N. and Gözükarar, İ., 2016. A comparison study on personality traits based on the attitudes of university students toward entrepreneurship. *Procedia-Social and Behavioral Sciences*, 229, pp.133-140.
- Darmanto, S., 2016. Pengaruh Perceived Desirability, Perceived Feasibility, Propensity to Act Terhadap Intensi Berwirausaha. *Jurnal Ilmiah Dinamika Ekonomi dan Bisnis*, 1(2).
- Davidsson, P., 1995. Determinants of entrepreneurial intentions. In *RENT XI Workshop*.
- Deliana, M., Rahardjo, K. and Afriyanti, T.W., 2019. Influence of Business Education on Entrepreneurial Intention with Feasibility and Entrepreneurial Self-Efficacy as Intervening Variables. *Jurnal Bisnis dan Manajemen*, 20(2), pp.125-135.

- De Silva, L. and Koggalage, R., 2020. Factors affecting for the entrepreneurship intention of undergraduates. *training*, 7(5).
- Dinis, A., do Paco, A., Ferreira, J., Raposo, M. and Rodrigues, R.G., 2013. Psychological characteristics and entrepreneurial intentions among secondary students. *Education+ Training*.
- Doan, X. and Phan, T., 2020. The impact of entrepreneurial education on entrepreneurial intention: The case of Vietnamese. *Management Science Letters*, 10(8), pp.1787-1796.
- Elali, W. and Al-Yacoub, B., 2016. Factors affecting entrepreneurial intentions among Kuwaitis. *World Journal of Entrepreneurship, Management and Sustainable Development*.
- Ermawati, N., Soesilowati, E. and Prasetyo, P.E., 2017. Pengaruh Need for Achivement Dan Locus of Control Terhadap Intensi Berwirausaha Melalui Sikap Siswa Kelas Xii Smk Negeri Se Kota Semarang. *Journal of Economic Education*, 6(1), pp.66-74.
- Farrukh, M., Khan, A.A., Khan, M.S., Ramzani, S.R. and Soladoye, B.S.A., 2017. Entrepreneurial intentions: the role of family factors, personality traits and self-efficacy. *World Journal of Entrepreneurship, Management and Sustainable Development*.
- Fems, K.M., Poazi, F.D. and Opigo, H., 2017. Entrepreneurship Education as a Pre Requisite for Graduate Entrepreneurship: A Study of Graduate Entrepreneurs in Yenagoa City. *International Journal of Mechanical and Industrial Engineering*, 11(3), pp.744-750.
- Ferreira, J.J., Fernandes, C.I. and Ratten, V., 2017. The influence of entrepreneurship education on entrepreneurial intentions. In *Entrepreneurial universities* (pp. 19-34). Springer, Cham.
- Fragoso, R., Rocha-Junior, W. and Xavier, A., 2020. Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*, 32(1), pp.33-57.
- Fuchs, M., 2005. Children and adolescents as respondents. Experiments on question order, response order, scale effects and the effect of numeric values associated with response options. *Journal of Official Statistics*, 21(4), p.701.
- Garaika, G., Margahana, H.M. and Negara, S.T., 2019. Self efficacy, self personality and self confidence on entrepreneurial intention: study on young enterprises. *Journal of Entrepreneurship Education*, 22(1), pp.1-12.
- Ghauri, P., Grønhaug, K. and Strange, R., 2020. *Research methods in business studies*. Cambridge University Press.
- Gorsuch, R.L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hadi, N.U., Abdullah, N. and Sentosa, I., 2016. An easy approach to exploratory factor analysis: Marketing perspective. *Journal of Educational and Social Research*, 6(1), pp.215-215.
- Hadjimanolis, A., 2016. Perceptions of the institutional environment and entrepreneurial intentions in a small peripheral country. *International Journal of Entrepreneurship and Small Business*, 28(1), pp.20-35.

- Hair Jr, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C., 1998. Multivariate data analysis. 5th Intl. ed Prentice Hall Upper Saddle River.
- Halim, F.A., Malim, M.R., Hamdan, S.I., Salehan, A. and Kamaruzzaman, F.S., 2019. Factors affecting entrepreneurial intention among IKN students. In *Proceedings of the Third International Conference on Computing, Mathematics and Statistics (iCMS2017)* (pp. 545-554). Springer, Singapore.
- Hashim, N., 2017. The role of entrepreneurial opportunity recognition on relationship among entrepreneurship education and entrepreneurial career option. *European journal of Business and Management*, 9(30).
- Hassan, H., Sade, A.B. and Rahman, M.S., 2020. Shaping entrepreneurial intention among youngsters in Malaysia. *Journal of Humanities and Applied Social Sciences*.
- Hassan, R.A. and Bakri, M.Z., 2016. Self-efficacy and self-independence in promoting self-employment intention among university students. *Journal of Research in Business, Economics and Management*, 6(2), pp.888-893.
- Hasan, S.M., Khan, E.A. and Nabi, M.N.U., 2017. Entrepreneurial education at university level and entrepreneurship development. *Education+ Training*.
- Herdjiono, I., Puspa, Y.H., Maulany, G. and ALDY, E., 2017. The factors affecting entrepreneurship intention.
- Hutasuhut, S., 2018. The roles of entrepreneurship knowledge, self efficacy, family, education, and gender on entrepreneurial intention. *Dinamika Pendidikan*, 13(1), pp.90-105.
- Ingabo, O.R., 2017. Effect of university support, societal values and propensity to act on entrepreneurial intentions among students from two Kenyan universities. *Researchers World*, 8(1), p.108.
- Jauhar Masrury, M., 2016. The impact of perceived feasibility and perceived desirability on entrepreneurial intention among undergraduate students in Universitas Muhammadiyah Surakarta (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Jiang, H., Xiong, W. and Cao, Y., 2017. Research on the mechanism of entrepreneurial education quality, entrepreneurial self-efficacy and entrepreneurial intention in social sciences, engineering and science education. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7), pp.3709-3721.
- Jumamil, A.J., Depositario, D.P.T. and Zapata Jr, N.R., 2017. Factors influencing the entrepreneurial intentions of UPLB Agri-based graduates. In *DLSU Research Congress*.
- Kabir, S.M., Haque, A. and Sarwar, A., 2017. Factors affecting the intention to become an entrepreneur: a study from Bangladeshi business graduates perspective. *International Journal of Engineering and Information Systems*, 1(6), pp.10-19.
- Karabulut, A.T., 2016. Personality traits on entrepreneurial intention. *Procedia Social and Behavioral Sciences*, 229, pp.12-21.

- Kaushik, R., Kumar, R., Datta, M., Kumar, R.K. and Kumar, P., 2020. How Does Perceived Desirability and Perceived Feasibility Effects the Entrepreneurial Intention. In *Electronic Systems and Intelligent Computing* (pp. 607-616). Springer, Singapore.
- Khuong, M.N. and An, N.H., 2016. The factors affecting entrepreneurial intention of the students of Vietnam national university—a mediation analysis of perception toward entrepreneurship. *Journal of Economics, Business and Management*, 4(2), pp.104-111.
- Kim-Soon, N., Ahmad, A.R. and Ibrahim, N.N., 2018. Understanding the motivation that shapes entrepreneurship career intention. *Entrepreneurship: Development Tendencies and Empirical Approach*, 291.
- Koenig, L.S., 2016. Integrating entrepreneurial self-efficacy into education at universities. *Ekonomski vjesnik/Econviews-Review of Contemporary Business, Entrepreneurship and Economic Issues*, 29(2), pp.311-321.
- Lim, J.Y., Kim, G.M. and Kim, E.J., 2021. Predictors of entrepreneurial intention of nursing students based on theory of planned behavior. *Journal of multidisciplinary healthcare*, 14, p.533.
- Lopez-Garrido, G. (2020). *Self-Efficacy Theory*. Available at <https://www.simplypsychology.org/self-efficacy.html> (Accessed 18 October 2021)
- Machmud, S. and Sidharta, I., 2016. Entrepreneurial motivation and business performance of SMEs in the SUCI clothing center, Bandung, Indonesia. *DLSU Business & Economics Review*, 25(2), pp.63-78.
- Maharani, D.F., Indrawati, A. and Saraswati, T.T., 2020. The Influence of Adversity Quotient, Need for Achievement, and Entrepreneurial Attitude on Entrepreneurial Intentions. *Jurnal Entrepreneur dan Entrepreneurship*, 9(1), pp.9-16.
- Martínez, R.G., Ríos-Manríquez, M. and Cervantes, A.L.A., 2019. The Entrepreneurial Intention in University Level Students: The Case of Mexico. In *Global Considerations in Entrepreneurship Education and Training* (pp. 128-150). IGI Global.
- McDonald, R.P., 1985. *Factor analysis and related methods*. Psychology Press.
- Mei, H., Lee, C.H. and Xiang, Y., 2020. Entrepreneurship Education and Students' Entrepreneurial Intention in Higher Education. *Education Sciences*, 10(9), p.257.
- Melinda, R. and Usman, O., 2021. The Influence of Entrepreneurial Education, Need for Achievement and Self-Effication Towards Intention of Entrepreneurs. *Need for Achievement and Self-Effication Towards Intention of Entrepreneurs* (January 16, 2021).
- Miralles, F., Giones, F. and Riverola, C., 2016. Evaluating the impact of prior experience in entrepreneurial intention. *International Entrepreneurship and Management Journal*, 12(3), pp.791-813.
- Moa-Liberty, A.W., Tunde, A.O. and Tinuola, O.L., 2016. The influence of self efficacy and socio-demographic factors on the entrepreneurial intentions of selected Youth Corp members in Lagos, Nigeria. *Bulletin of Geography. Socio-economic Series*, (34), pp.63-71.

- Moghavvemi, S., Salleh, N.A.M. and Standing, C., 2016. Entrepreneurs adoption of information system innovation: The impact of individual perception and exogenous factors on entrepreneurs behavior. *Internet Research*.
- Nasip, S., Amirul, S.R., Sondoh Jr, S.L. and Tanakinjal, G.H., 2017. Psychological characteristics and entrepreneurial intention: A study among university students in North Borneo, Malaysia. *Education+ Training*.
- Nasution, M.D.T.P., Siahaan, A.P.U., Rossanty, Y. and Aryza, S., 2018. Entrepreneurship Intention Prediction using Decision Tree and Support Vector Machine. In *Proceedings of the Joint Workshop KO2PI and The 1st International Conference on Advance & Scientific Innovation*.
- Ndofirepi, T.M., Rambe, P. and Dzansi, D.Y., 2018. The relationship among technological creativity, self-efficacy and entrepreneurial intentions of selected South African university of technology students. *Acta Commercii*, 18(1), pp.1-14.
- Nguyen, A.T., Do, T.H.H., Vu, T.B.T., Dang, K.A. and Nguyen, H.L., 2019. Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review*, 99, pp.186-193.
- Neill, J., 2008. Writing up a factor analysis. Retrieved September, 7, p.2008.
- Nurhayati, M., 2018. The Effect of Several Demographic Factors on Entrepreneurial Intention. *Journal of Resources Development and Management*.
- Nur'arifah, M.R., 2017. *Entrepreneurial intention and its influencing factors: a study among UUM undergraduate business students* (Doctoral dissertation, Universiti Utara Malaysia).
- Osiri, J.K., Kungu, K. and Dilbeck, M., 2019. Predictors of entrepreneurial intentions and social entrepreneurial intentions: a look at proactive personality, self-efficacy and creativity. *Journal of Business Diversity*, 19(1), pp.42-52.
- Ozaralli, N. and Rivenburgh, N.K., 2016. Entrepreneurial intention: antecedents to entrepreneurial behavior in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), pp.1-32.
- Park, J.W. and Choi, M.J., 2016. The impact of entrepreneurial self-efficacy on the entrepreneurial intention of university students: The moderating effect of regulatory focus. *Asia-Pacific Journal of Business Venturing and Entrepreneurship*, 11(2), pp.9-19.
- Parveen, M., Kassim, N.M. and Zain, M., 2018. Inclinations of Saudi Arabian and Malaysian students towards entrepreneurship. *Prabandhan: Indian Journal of Management*, 11(11), pp.21-36.
- Patricia, P. and Silangen, C., 2016. The effect of entrepreneurship education on entrepreneurial intention in Indonesia. *DeReMa (Development Research of Management): Jurnal Manajemen*, 11(1), pp.67-86.
- Patuelli, R., Santarelli, E. and Tubadji, A., 2020. Entrepreneurial intention among high school students: the importance of parents, peers and neighbors. *Eurasian Business Review*, 10, pp.225-251.

- Pérez-López, M.C., González-López, M.J. and Rodríguez-Ariza, L., 2016. Competencies for entrepreneurship as a career option in a challenging employment environment. *Career Development International*.
- Passoni, D. and Glavam, R.B., 2018. Entrepreneurial intention and the effects of entrepreneurial education: Differences among management, engineering, and accounting students. *International Journal of Innovation Science*.
- Popescu, C.C., Bostan, I., Robu, I.B. and Maxim, A., 2016. An analysis of the determinants of entrepreneurial intentions among students: a Romanian case study. *Sustainability*, 8(8), p.771.
- Primandaru, N., 2017. *Analisis faktor-faktor yang berpengaruh pada minat berwirausaha mahasiswa*. Yogyakarta State University.
- Reddy, D.A. and Podile, V., 2021. Determinants of Entrepreneurial Intention analysis Among College Students In Covid 19 Time Using Deep Learning Technology. *International Journal of Aquatic Science*, pp.2134-2141.
- Riyanti, B.P.D., Sandroto, C.W. and DW, M.T.W., 2017. Soft Skill Competencies, Hard Skill Competencies, and Intention to Become Entrepreneur of Vocational Graduates. *International Research Journal of Business Studies*, 9(2).
- Rudhumbu, N., Svotwa, D., Munyanyiwa, T. and Mutsau, M., 2016. Attitudes of students towards entrepreneurship education at two selected higher education institutions in Botswana: A critical analysis and reflection. *Academic Journal of Interdisciplinary Studies*, 5(2), pp.83-83.
- Sandi, A. and Nurhayati, M., 2020, February. Effect of Entrepreneurship Education, Family Environment and Self-Efficacy on Students Entrepreneurship Intention. In *4th International Conference on Management, Economics and Business (ICMEB 2019)* (pp. 9-12). Atlantis Press.
- Saraih, U.N., 2019. Understanding the Relationships between Entrepreneurial Education, Entrepreneurial Implementation and Entrepreneurial Intention: An Empirical Investigation. *Asia Proceedings of Social Sciences*, 4(2), pp.139-142.
- Saraih, U.N., 2019. Understanding the Relationships between Entrepreneurial Education, Entrepreneurial Implementation and Entrepreneurial Intention: An Empirical Investigation. *Asia Proceedings of Social Sciences*, 4(2), pp.139-142.
- Santoso, S., 2018. Influence of motivation and self-efficacy on entrepreneurial intention to run a business. Retrieved from <https://marketing.expertjournals.com/23446773-603/#:~:text=Table%207%20above%20shows%20that,business%20venture%2C%20and%20other%20factors.>
- Saptono, A., Purwana, D., Wibowo, A., Wibowo, S.F., Mukhtar, S., Yanto, H., Utomo, S.H. and Kusumajanto, D.D., 2019. Assessing The University Students' entrepreneurial Intention: Entrepreneurial Education and Creativity. *Humanities & Social Sciences Reviews*, 7(1), pp.505-514.
- Saptono, A., Wibowo, A., Narmaditya, B.S., Karyaningsih, R.P.D. and Yanto, H., 2020. Does entrepreneurial education matter for Indonesian students' entrepreneurial

- preparation: The mediating role of entrepreneurial mindset and knowledge. *Cogent Education*, 7(1), p.1836728.
- Senior High School in the Philippines (n.d.) Available at <https://courses.com.ph/senior-high-school-in-the-philippines-curriculum-breakdown/> (Accessed 20 October 2021)
- Shah, I.A., Amjed, S. and Jaboob, S., 2020. The moderating role of entrepreneurship education in shaping entrepreneurial intentions. *Journal of Economic Structures*, 9(1), pp.1-15.
- Shaheen, N. and AL-Haddad, S., 2018. Entrepreneurial self-efficacy and entrepreneurial behavior. *International Journal of Development and Sustainability*, 7(10), pp.2385-2402.
- Sherkat, A. and Chenari, A., 2020. Assessing the effectiveness of entrepreneurship education in the universities of Tehran province based on an entrepreneurial intention model. *Studies in Higher Education*, pp.1-19.
- Sultan, M.F., Maqsood, A. and Sharif, H.M., 2016. Impact of entrepreneurial education on students' entrepreneurial intentions. *KASBIT Business Journal*, 9(1), pp.131-153.
- Taha, K.A.S., Ramlan, S.N. and Noor, I.M., 2017. The factors affecting entrepreneurial intentions of university students in Malaysia. *International Journal of Business and Technopreneurship*, 7(2), pp.189-202.
- Taherdoost, H., 2016. Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research* (April 10, 2016).
- Tarapuez, E., 2016. Factors affecting the entrepreneurial intention in college students of Quindío (Colombia). *Visión de Futuro*, 20(13), pp.137-152.
- Thoyib, A., Maskie, G. and Ashar, K., 2016. Entrepreneurial characteristics as a mediation of entrepreneurial education influence on entrepreneurial intention. *Editorial Review Board*, 19(1), p.24.
- Toft-Kehler, R.V., 2018. *Entrepreneurship as a Career?: An Investigation of the Relationship Between Entrepreneurial Experience and Entrepreneurial Outcome*. Frederiksberg: Copenhagen Business School (CBS).
- Tomy, Sarath, and Eric Pardede. "An entrepreneurial intention model focussing on higher education." *International Journal of Entrepreneurial Behavior & Research* (2020).
- Torres, F.C., Méndez, J.C.E., Barreto, K.S., Chavarría, A.P., Machuca, K.J. and Guerrero, J.A.O., 2017. Exploring entrepreneurial intentions in Latin American university students. *International Journal of Psychological Research*, 10(2), pp.46-59.
- Turkina, E. and Thai, M.T.T., 2013. Social capital, networks, trust and immigrant entrepreneurship: a cross-country analysis. *Journal of Enterprising Communities: People and Places in the Global Economy*.
- Voda, A.I., Covatariu, D. and Ghiuta, O.A., 2019. Student's entrepreneurial intentions: role of entrepreneurial education and risk taken ability. *Environ. Eng. Manag. J*, 18, pp.1527-1534.

- Vodă, A.I. and Florea, N., 2019. Impact of personality traits and entrepreneurship education on entrepreneurial intentions of business and engineering students. *Sustainability*, 11(4), p.1192.
- Vuorio, A.M., Puumalainen, K. and Fellnhofer, K., 2018. Drivers of entrepreneurial intentions in sustainable entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*.
- Wah, L.F., Yusuf, B.N.M. and Suanda, J., 2017. A study on factors affecting entrepreneurial intentions among students in higher education institutions in Northern Regions of Malaysia. *International Journal of Information Technology and Business Management*, 58(1), pp.80-87.
- Wang, L.Y. and Huang, J.H., 2019. Effect of entrepreneurial self-efficacy on the entrepreneurial intentions of students at a university in Hainan province in China: Taking social support as a moderator. *Teaching and Education Research*, 18(9), pp.183-200.
- Wardana, L.W., Handayati, P., Narmaditya, B.S., Wibowo, A., Patma, T.S. and Suprajan, S.E., 2020. Determinant factors of young people in preparing for entrepreneurship: Lesson from Indonesia. *The Journal of Asian Finance, Economics, and Business*, 7(8), pp.555-565.
- Williams, B., Onsmann, A. and Brown, T., 2010. Exploratory factor analysis: A five step guide for novices. *Australasian journal of paramedicine*, 8(3).
- Weda, G.K., 2017. *Factors Affecting Entrepreneurial Intention among Entrepreneurship Students in USIU-Africa* (Doctoral dissertation).
- Yaacob, M.R., Shaupi, N.S.A. and Shuaib, A.S.M., 2016. Perception towards factors that affect the effectiveness of an entrepreneurship training program. *Journal of Entrepreneurship and Business (JEB)*, 4(1), pp.50-58.
- Yohana, C., 2021. Determinants of Students' Entrepreneurial Intention: A Perspective of Tertiary Education in Indonesia. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, 9(1), pp.54-63.
- Yukongdi, V. and Lopa, N.Z., 2017. Entrepreneurial intention: a study of individual, situational and gender differences. *Journal of Small Business and Enterprise Development*.
- Yusoff, A., Ahmad, N.H. and Halim, H.A., 2016. Tailoring future agropreneurs: The impact of academic institutional variables on entrepreneurial drive and intentions. *Journal of Entrepreneurship Education*, 19(2), p.156.
- Zhang, P., Wang, D.D. and Owen, C.L., 2015. A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*, 5(1), pp.61-82.
- Zieba, K. and Golik, J., 2018. Testing students' entrepreneurial self-efficacy as an early predictor of entrepreneurial activities: Evidence from the SEAS project.
- Zovko, L., Bilić, I. and Dulčić, Ž., 2020. Determinants of students' entrepreneurial intention: An empirical research. *Management: Journal of Contemporary Management Issues*, 25(1), pp.25-44.

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).