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Entrepreneurial characteristics and entrepreneurial intention: The mediating role of entrepreneurial mindset

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Abstract

The purpose of this study is to investigate how entrepreneurial traits and entrepreneurial intention are related, as well as how entrepreneurial mentality functions as a mediator among college students. To provide a thorough grasp of the influence among the constructs, a non-experimental quantitative research strategy using the descriptive correlational technique was employed. A total of 385 fourth-year students majoring in Financial Management (FM) and Human Resource Management (HRM) in their Bachelor of Science in Hospitality Management (BSHM) and Bachelor of Science in Business Administration (BSBA) programs who took entrepreneurial courses participated in this study. The outcome shows that entrepreneurial intention is significantly positively impacted by entrepreneurial traits. Furthermore, both direct and indirect models demonstrate that the association between entrepreneurial traits and entrepreneurial ambition is mediated by entrepreneurial mentality. According to this, entrepreneurial traits like locus of control, drive for success, risk-taking propensity, inventiveness, self-efficacy, and ambiguity tolerance are significant motivators of entrepreneurial intention, and an entrepreneurial mindset will serve as a catalyst to convert these traits into intentions. To gain a better understanding of this dynamic, future research is encouraged to examine more variables and carry out longitudinal studies.

Keywords: Entrepreneurial Characteristics, Entrepreneurial Intention, Entrepreneurial Mindset.

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1. Introduction

The economy of every nation depends heavily on entrepreneurship [1]. Many people are thinking about becoming entrepreneurs because it offers them the chance to build profitable firms [2]. Despite having to complete an entrepreneurship course as a requirement for their education to become future entrepreneurs, many students lack the bravery to launch their enterprises [3]. The importance of entrepreneurship has drawn the interest of numerous academics and researchers who are investigating the obstacles that can keep someone from starting their own business [4].

Due to fierce market competition and legal risks, students starting their own businesses must learn how customers react to their products, who the key players are, and what policies they must follow, which takes a lot of time to adapt and might cause hesitation in entrepreneurial intention [5]. Therefore, universities must support student entrepreneurs by hosting a number of product contests and providing resources for the launch of new ventures [6].

Entrepreneurial characteristics such as creativity, risk-taking, and opportunity recognition significantly influence students' interests in an entrepreneurial profession [7]. Innovative thinking, passion for starting a business, job satisfaction, and anticipated opportunity advocated entrepreneurial intention [8]. Thus, entrepreneurs must face high levels of uncertainty, and due to their risk-taking propensity [9], they often evaluate the pros and cons of their actions before making decisions [10]. The intricate connection between entrepreneurial traits and entrepreneurial intention highlights the necessity of specialized instruction to produce creative, business-minded leaders [11].

The relationship between university students' entrepreneurial intention and the mediated influence of an entrepreneurial mindset has been the subject of numerous studies [12]. For example, whether Filipinos liked it or not, the early 2020 pandemic altered the way that today's college students think, especially when it comes to entrepreneurial mentality traits like seeing opportunities, anticipating risks, accepting ambiguity, and being optimistic about business. These traits all play a part in the students' intention to launch their own company [13]. Students with a strong entrepreneurial mindset have high intentions because they can think based on their beliefs and talents, encourage positive behavior, and use their knowledge to launch their own business [14]. In this manner, the 'intentions towards entrepreneurship' of the students are influenced by their entrepreneurial way of thinking, and those students who are willing to pursue success are motivated by an energetic entrepreneurial environment of the school [15]. Their findings indicate that university students with a better entrepreneurial attitude are more likely to identify business opportunities and take actions to exploit them, thus enhancing their entrepreneurial competencies [16].

Particularly, all individuals' entrepreneurial traits determine his or her attitude towards entrepreneurship and set the stage for entrepreneurial goals and achievements [17]. Personality attributes like optimism, a tolerance for ambiguity, and a willingness to take risks assist college students in acquiring an entrepreneurial attitude, which in turn increases their likelihood of wanting to launch their own company [18]. Also, teaching entrepreneurship enhances students' entrepreneurial traits, particularly in areas like problem-solving, communication, teamwork, opportunity recognition, and critical thinking [19]. This shows how crucial educational programs are for developing a strong entrepreneurial mindset that results in entrepreneurial success.

There is empirical support from a number of studies for the favorable relationship between entrepreneurial mentality, entrepreneurial intention, and entrepreneurial traits. However, little is known about how the entrepreneurial mindset shapes its interaction effect on the characteristics and intentions of the students in pursuing entrepreneurship after they graduate. This study evaluates the implications of entrepreneurial characteristics and entrepreneurial intention through the entrepreneurial mindset of the students taking up entrepreneurship course. By examining the entrepreneurial mindset of the students that may affect their individual characteristics in terms of entrepreneurial undertaking, this research aims to elucidate the mechanisms by which these characteristics improve the intention of students to engage in entrepreneurship. Along with determining the role of entrepreneurial mindset among students, the study also establishes an in depth relationship between entrepreneurial characteristics and intention with the following objectives: 1) ascertain how entrepreneurial characteristics influence the intention of students to engage in entrepreneurship; 2) determine the influence of entrepreneurial characteristics and entrepreneurial mindset of students pursuing entrepreneurship; 3) identify how the entrepreneurial mindset of students affect their entrepreneurial intention; and 4) explore the significance of the mediating effect of entrepreneurial mindset between entrepreneurial characteristics and entrepreneurial intention of the students taking up entrepreneurship course.

2. Literature Review and Hypothesis

This study is anchored in the Theory of Planned Behavior (TPB), which is an enhancement of the Theory of Reasoned Action [19]. This theory posits that an individual's behavior is influenced directly by behavioral intention and perceived behavioral control. For instance, college students nowadays are in a tight business situation because of the impact of society, government, and the university [20]. Therefore, when the Theory of Reasoned Action (TRA) was further developed. The stronger the intention to engage in the behavior (TPB), the more likely the behavior will be performed [21]. Theoretically, the Planned Behavior links the intention to start businesses and the formation of an entrepreneurial mindset, which are significantly influenced by certain entrepreneurial characteristics [22]. Therefore, this theory will provide entrepreneurial instructions in educational institutions to assist students in their entrepreneurial intentions, as it motivates individuals to take the initial steps toward starting a business as future leaders [23].

Shown in Figure 1 is the research framework of the study, which demonstrates the relationship between the constructs: entrepreneurial characteristics, entrepreneurial intention, entrepreneurial mindset, and their corresponding domains. The framework illustrated one independent variable, the entrepreneurial characteristics, which is assessed by six domains: risk-taking propensity, innovativeness, locus of control, need for achievement, general self-efficacy, and tolerance of ambiguity [24]. Another independent variable is the entrepreneurial mindset, which hypothetically demonstrates the mediating

relationship between entrepreneurial characteristics and the dependent variable, which is entrepreneurial intention, having three domains [25]: attitude towards the behavior, subjective norms, and behavioral control [26]. Locus of Control is an individual's desires, regardless of their ability to control their life conditions. Additionally, entrepreneurial intention relates to the behavioral factors that influence conduct and indicate an individual's implicit desire to engage in entrepreneurial activities [27].

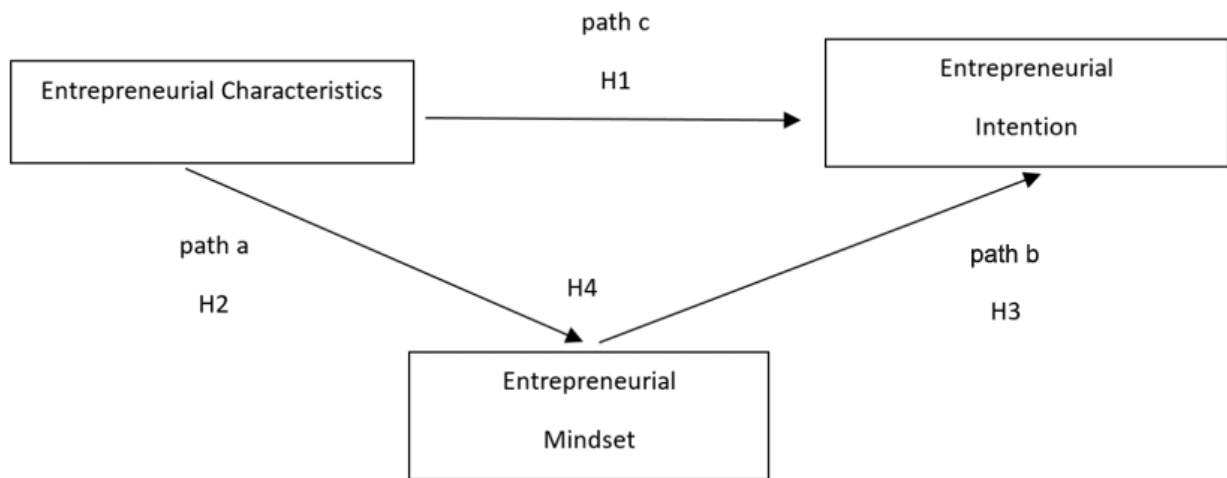


Figure 1.
Research Framework

From the framework proposed, the following hypotheses are formulated: i) entrepreneurial characteristics positively influence the entrepreneurial intention of the students (H1); ii) entrepreneurial characteristics are significantly associated with the entrepreneurial mindset of the students (H2); iii) the entrepreneurial mindset and entrepreneurial intention of the students have positive relationships with each other (H3); and iv) the entrepreneurial mindset significantly mediates the relationship between entrepreneurial characteristics and entrepreneurial intention (H4). The main goal of this study is to establish the foundation for significant advancements in entrepreneurship education and research. This study supports the fourth and eighth Sustainable Development Goals (SDGs) adopted from the United Nations, which call for economic growth, adequate employment, and high-quality education. Presently, these constructs are closely examined in terms of their bivariate relationships. Little is known, however, about the ways in which an entrepreneurial mindset influences the traits and goals of students who intend to pursue entrepreneurship once they complete their degrees. Bridging the gap in this study, these findings will provide a helpful understanding of how interventions and training programs might be tailored to encourage entrepreneurial behavior and thinking in aspiring student entrepreneurs.

3. Research Methodology

This study employed a non-experimental quantitative research design using the descriptive correlational technique and mediation analysis. The association between entrepreneurial traits, entrepreneurial intention, and entrepreneurial mentality was examined using a descriptive correlational approach. The degree of entrepreneurial traits and intention, as well as the mediating role of the entrepreneurial mindset, were assessed among college students taking the Entrepreneurship course, a 3-unit subject designed for students enrolled in the Business Administration and Hospitality Management programs. Using the purposive sampling method, a total of 385 fourth-year students participated in this study, who completed the Entrepreneurship course for one semester. These respondents were enrolled in the Bachelor of Science in Business Administration program with two specialized disciplines: Human Resource Management and Financial Management. The other respondents were from the Bachelor of Science in Hospitality Management program. The study's primary method of gathering data was a modified, English-language, closed-ended survey questionnaire, which was adapted from various research studies. Each of the three sets of questions on the questionnaire focuses on a different variable. The first scale of questions asked about the students' level of entrepreneurial traits, having 6 domains for a total of 31 items [24]. These include a tendency for taking risks, innovativeness, locus of control, need for achievement, general self-efficacy, and ambiguity tolerance. The next scale of questions focused on measuring entrepreneurial intention levels (attitude towards the behavior, subjective norms, behavioral control) taken for a total of 13 item statements [26]. Finally, students were asked about their entrepreneurial mindset scale [25] in the final sequences of survey questions. The series of survey questions exists to provide additional knowledge about the research subject. Each question in the questionnaire received assessment through a 5-point Likert scale where a rating of 1 indicates "strongly disagree" and 5 indicates "strongly agree." These instruments were subjected to validation procedures through local entrepreneurs, department chairs, and other experts in the discipline. All three instruments generated a result of 0.99 using Lawshe's Content Validity Index (CVI). Following the validity procedures, a pilot test with thirty respondents was undertaken to measure the consistency and reliability of the instruments. These respondents formed part of the exclusion criteria as they did not represent the actual respondents of the study. Items for entrepreneurial characteristics generated a Cronbach's α of 0.973, indicating high acceptability and reliability. The scale for the entrepreneurial mindset obtained a Cronbach's α of 0.922, also indicating high acceptability and reliability coefficients.

A Cronbach's α of 0.958 was also achieved in the items under entrepreneurial intention, signifying acceptable and reliable results. The degree of entrepreneurial traits, entrepreneurial intention, and entrepreneurial mentality were interpreted using descriptive statistics (mean and standard deviation). To ascertain the association among the students' entrepreneurial characteristics, entrepreneurial intention, and entrepreneurial mindset, the Pearson Product-Moment Correlation (Pearson r) was utilized. In the final stage of the statistical process, mediation analysis was employed to ascertain how the entrepreneurial mindset mediated the relationship between entrepreneurial characteristics and entrepreneurial intention.

4. Research Findings

This empirical research utilized Stata/MP 17.0 software to test how these constructs are interrelated in one way or another. In the initial stage of the mediation process, the means, standard deviations, and correlation coefficients of each construct were demonstrated as depicted in Table 1. Entrepreneurial intention ($\bar{x}=3.912$, $SD=1.053$) was statistically significant with entrepreneurial characteristics ($\bar{x}=3.848$, $SD=1.013$); ($r=0.859$, $p<0.01$) and entrepreneurial mindset ($\bar{x}=3.795$, $SD=0.984$) ($r=0.820$, $p<0.01$). These findings manifest that students who possess higher levels of intention to engage in entrepreneurship may exhibit strong individual characteristics and the right mindset to express their engage in business. This significant relationship implies that the desires of the students to engage in business by learning entrepreneurship largely depend on how their mindsets shape them in facing these challenges. Further entrepreneurial characteristics also revealed a statistically significant relationship with the entrepreneurial mindset of students ($r=0.841$, $p<0.01$). As a result, the findings of the correlation coefficients offer preliminary support for the validation of the hypothesis. This implies that students are more likely to establish a business after completing their degree or as their entrepreneurial dispositions mature. These findings provide significant support for the theory that entrepreneurial qualities and entrepreneurial intention have reciprocal underpinning factors in relation to the correct mindset of the students who are enrolled in the Entrepreneurship course.

Table 1.

Means, Standard Deviations, Correlations, and Reliability Coefficients of Constructs.

Note: * $p<0.00$; box bracket figures represent Cronbach's α coefficient values; EC=entrepreneurial characteristics; EM=entrepreneurial mindset; EI=entrepreneurial intention

Variables	<i>M</i>	<i>SD</i>	EC	EM	EI
EC	3.848	1.013	[0.973]		
EM	3.795	0.984	0.841*	[0.922]	
EI	3.912	1.053	0.859*	0.820*	[0.958]

The regression analysis is displayed in Table 2. The mediation analysis developed by Preacher and Hayes [28] approach was used as the initial analysis for mediation. As shown, the study seeks to ascertain how the entrepreneurial mindset mediates the association between entrepreneurial characteristics and entrepreneurial ambition. According to the total effect model, entrepreneurial characteristics significantly and favorably influence entrepreneurial intention ($\beta = .949$, $z = 32.97$, $p < 0.01$). When the mediator is included, the direct effect model likewise shows a substantial and positive effect ($\beta = .640$, $z = 12.86$, $p < 0.01$). Furthermore, the indirect effect model as presented in Figure 2 depicts a significant and positive effect of entrepreneurial characteristics to entrepreneurial intention as mediated by entrepreneurial mindset ($\beta = .330$, $z = 7.20$, $p < 0.01$). Thus, hypothesis H4 was deemed accepted.

Table 2.

Mediating Effect of Entrepreneurial Mindset between Entrepreneurial Characteristics and Entrepreneurial Intention.

Effect	Path	β	SE	z	95% CI		p
					Lower	Upper	
Total	EC \rightarrow EI	0.95	0.03	32.97	0.89	1.01	0.00
Indirect	EC \rightarrow EM \rightarrow EI	0.33	0.04	7.20	0.23	0.39	0.00
Direct	EC \rightarrow EI	0.64	0.05	12.86	0.54	0.74	0.00

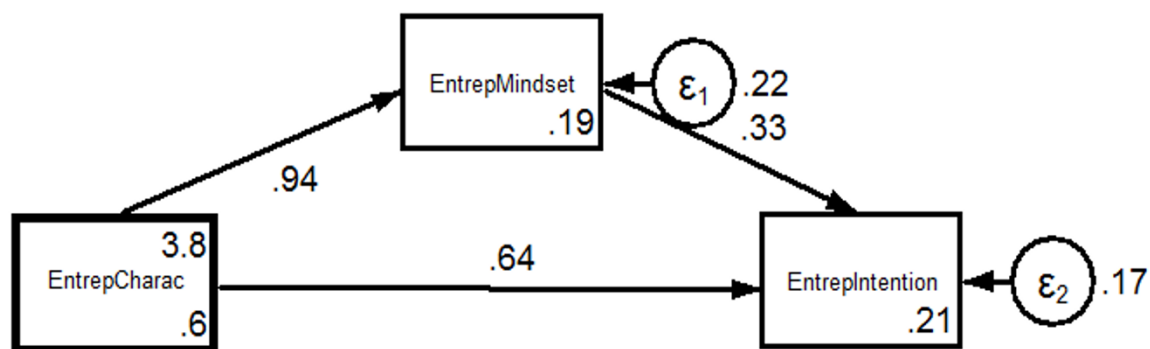


Figure 2.

Graph Showing Regression Paths of the Constructs.

5. Discussion and Conclusion

The findings revealed a positive association between the entrepreneurial characteristics and the entrepreneurial intention of the students. The data suggested that students who exhibited entrepreneurial characteristics were more likely to harbor entrepreneurial intentions, emphasizing the importance of these characteristics in driving their entrepreneurial aspirations and potentially impacting their future entrepreneurial actions or decisions. In addition, similarities are found between this study and a related study, which stated that those who intend to develop their own business shortly are those people who are more focused towards the risks, considering that the business often requires good risk management [29]. Their study assumed that young people with higher capacity are more attracted to the environment of entrepreneurship.

There is considerable importance of the relationship between entrepreneurial characteristics and the entrepreneurial mindset. This study has demonstrated a statistically significant relationship with each other. The critical role that the entrepreneurial mindset played in nurturing and fostering entrepreneurial characteristics emphasized the potential for educational institutions to inspire and cultivate an entrepreneurial spirit among their students. These entrepreneurs exhibit excellent ability to identify market gaps and come up with new ideas, quickly adjusting to the ever-changing conditions. In general, they introduced a problem-solving attitude by accepting failures as chances to grow rather than impossible difficulties. The findings were also arguing that the entrepreneurial mindset is composed of characteristics which are relative to risk-taking propensity, innovative thinking, proactiveness, and opportunity perception [30]. Such traits separate entrepreneurs from non-entrepreneurs and have a tremendous impact on those who want to work in business administration. The findings also corroborate to a study of which these entrepreneurs are characterized by more risk-taking abilities and innovativeness as compared to those who are not [31].

The test examining the relationship between entrepreneurial mindset and the entrepreneurial intentions of the students underscores the significant association with each other. These findings also correspond to the study of Mukhtar et al. [17]. According to these authors, university students have an appropriate understanding of certain characteristics of an entrepreneurial mindset, such as risk-taking tendencies, opportunity awareness, ambiguity tolerance, and positive outlook in business, which leads to intention [17]. The conclusions gathered in this study also aligned with those of those who claimed that an entrepreneurial mentality gives students a better understanding of a variety of outcomes and scenarios that are essential to studying entrepreneurship.

This research highlighted significant relationships of the entrepreneurial characteristics, mindset, and the entrepreneurial intentions of the students who are enrolled in the Entrepreneurship course. The results manifest that the entrepreneurial mindset significantly mediates the relationship between entrepreneurial characteristics and entrepreneurial intention. While having an entrepreneurial mindset served as essential for encouraging entrepreneurial behavior, its effect on entrepreneurial characteristics directly affects entrepreneurial intention. The inclusion of the mediation may be attributed to several causes such as the abstract nature of entrepreneurial mindset constructs, the limited real-world entrepreneurial experience of the students, or the existence of other relevant factors, including perceived opportunities, social support, and personal values. The findings of this study are aligned with the Theory of Planned Behavior, highlighting the applicability of TPB in understanding the relationship between the entrepreneurial mindset, entrepreneurial characteristics, and entrepreneurial intentions of the students [19]. In addition, the supporting theory of Bandura [32] highlighted that a person's behavior is influenced by how they observe other people and how their behavior and cognitive processes interact. This theoretical framework sheds light on the college students' intentions to pursue entrepreneurial activities, which are influenced by their perceptions of their strengths and weaknesses, the social support they believe to be available to them, and the perceived effectiveness of beginning their own business.

6. Recommendations

The research outcomes provide useful implications in practice for students in the realm of business operations in the future. The study confirms that entrepreneurial characteristics play a crucial role in enhancing entrepreneurial intentions. With these considerations, the university may integrate learning with hands-on education, internships, and tasks such as business plan exhibits, which will enable the students to utilize substantial knowledge by understanding some real-life situations, thereby improving their entrepreneurial and risk management skills. Allowing students to listen to the experiences of the entrepreneurs in the community may increase their self-efficacy and provide real-world insights, fostering a supportive environment in their entrepreneurial pursuits. Certainly, while the research provides valuable implications for the students, acknowledging limitations is important. The findings of the study are based on the responses of the students in the university, limiting this applicability to other sectors. There may be other unknown antecedents that impact the relationship between these constructs being studied, which were not considered in this research. Due to the above limitations, only three constructs were possible for consideration by the researchers. Hence, the researchers suggested that future researchers to continue the present study with more elements in different setups. To get a more complete understanding of the variables, it would be helpful to look at entrepreneurial purpose in different societal and economic environments.

7. Implications of the Study

The implication of this study in relation to the anchored theories is that the Theory of Planned Behavior emphasizes how attitudes, subjective norms, and perceived behavioral control influence the intention of students to become entrepreneurs. This suggests that social support could enhance entrepreneurial intention. In addition, the Social Cognitive Theory, which highlights the importance of self-efficacy and observational learning in shaping entrepreneurial intention, implies that providing role models and mentorship can significantly impact students' confidence in their entrepreneurial abilities.

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