

## Big Five Personality Traits and Entrepreneurial Attitudes of Nepalese Freshman Students: The Moderating Role of Family Background

Prakash Kumar Gautam<sup>1</sup>, Monika Maharjan<sup>1</sup>, Dhruva Prasad Subedi<sup>1</sup>, Gyan Bahadur Tamang<sup>2</sup>

<sup>1</sup>Faculty of Management, Tribhuvan University, Nepal

<sup>2</sup>Nepal Open University, Nepal

*prakash.gautam@sdc.tu.edu.np*

**Abstract.** This study investigates the influence of Big Five personality traits on the entrepreneurial attitudes of freshman-year students, aiming to understand how inherent characteristics shape early-stage entrepreneurial inclinations considering the moderation role of family background. Utilizing the Five-Factor Model (FFM) of personality (openness, conscientiousness, extraversion, agreeableness, and neuroticism), we surveyed a diverse cohort of 383 freshman-year university students with the moderating role of family background. The research used both descriptive and inferential analyses on the self-administered questionnaires with closed-ended statements using multiple regression and ANOVA. Agreeableness and neuroticism negatively influenced entrepreneurial attitudes, while conscientiousness and openness to experience had positive effects. Extraversion showed no significant impact. Family background moderated only the relationship between openness to experience and entrepreneurial attitudes. Cross-sectional design is the major limitation of the study. Besides, the research is limited to the Business Management students. No efforts have been made to compare the diverse backgrounds of the respondents except for the family profession. The findings contribute to a nuanced understanding of how personality traits shape early entrepreneurial inclinations in a developing economy context. This investigation followed both Personality Trait Theory and Social Learning Theory, with theoretical implications in a new framework of more homogeneous respondents. Moreover, the study's findings contribute to designing an entrepreneurial support curriculum so that the outcome supports the social and economic upliftment of the nation. This study is among the first to examine the personality-entrepreneurship relationship among Nepalese freshman students, offering insights into the early formation of entrepreneurial attitudes in this unique cultural context.

**Keywords:** Agreeableness, conscientiousness, extraversion, neuroticism, openness to experience, entrepreneurial attitude

## **1. Introduction**

Entrepreneurship has emerged as a crucial catalyst for economic growth and innovation (Al-Mamary et al., 2020; Gautam & Gautam, 2023; Gautam & Pandey, 2023) in the contemporary world. As societies increasingly recognize the value of entrepreneurial activities, there is a growing interest in understanding the factors influencing entrepreneurial attitudes, particularly among young adults. In this context, universities play a pivotal role in fostering entrepreneurial skills and mindsets (Cacija et al., 2023). Therefore, exploring how personality traits impact entrepreneurial attitudes among students at the onset of their academic journey becomes essential, a topic that this research addresses.

Entrepreneurship refers to identifying, creating, and pursuing opportunities to establish and grow a business venture, which involves risk-taking, innovating, and mobilizing resources to bring about economic and social value (Baron & Shane, 2007). It is an outcome of intentional behavior (Bird, 1988; Gautam & Pandey, 2023). Successful entrepreneurship benefits are not limited only to the entrepreneurs themselves but also have broader societal implications, such as economic growth, job creation, and innovation within a society (Riswanto, 2016). Entrepreneurship is characterized by various activities, including identifying market gaps or opportunities, developing innovative products or services, securing funding, managing resources, building a network of contacts, and navigating the challenges and uncertainties inherent in starting and running a business (Scaringella & Radziwon, 2018). Also, entrepreneurship has been recognized as the fourth factor of production, contributing to exploring uncharted territories and fostering overall economic expansion (Harper, 1991; Leff, 1979). Entrepreneurs possess unique personality traits such as high motivation, determination, creativity, problem-solving skills, resilience, and a willingness to take calculated risks (Baciu et al., 2020; Gautam & Khadka, 2022). Such features enable entrepreneurs to flourish in the dynamic and competitive business environment. These traits often include. A vision drives them, and they can turn ideas into actionable plans, leading to job creation, wealth generation, and the development of industries and sectors (Shane & Venkataraman, 2000).

Personality traits can significantly impact an entrepreneur's journey, influencing their choices, strategies, and outcomes (Fatma et al., 2021). Recognizing one's strengths and weaknesses can help entrepreneurs develop skills and succeed in their ventures. It is significant as entrepreneurs can create opportunities by establishing new businesses and sustaining existing ones (Evans, 1942; Leibenstein, 1968). Moreover, it is considered a valuable resource that developing countries should harness to compete in an increasingly globalized market economy (Kanungo, 1998). In recent years, there has been a growing interest in understanding the role of individual characteristics, particularly personality traits, in shaping entrepreneurial attitudes and behaviors. An individual's decision to engage in entrepreneurial activities is influenced by various factors, including personal characteristics, thoughts, and societal circumstances (Carter et al., 2003). Fiske (1949) has developed the Big Five model, which includes dimensions of agreeableness, conscientiousness, extraversion, neuroticism (emotional stability), and openness to experience, and has emerged as a widely accepted framework for studying personality traits. The Big-Five component model is widely used to describe the arrangement of human qualities (Roccas et al., 2002). Each dimension of personality encompasses a range of psychological attributes comprising various specialized and limited traits.

The Big Five component model, the Five-Factor Model (FFM), integrates over four decades of research on an individual's motivational, emotional, interpersonal, experiential, and affective patterns. Hill et al. (2005) have yielded one of the most comprehensive operationalizations of the Big Five Model for the entrepreneurial attitude.

Career choices, whether to be an entrepreneur or a professional, should be made early in life; however, there are no unanimous arguments regarding the best time to be an entrepreneur. Fresh-year students are the right persons to whom we can investigate whether they have brought entrepreneurial attitudes or whether the business management courses developed their attitudes. This study provides evidence of the effectiveness of existing university courses in developing entrepreneurship, formulating

government policies, and other support programs. Among the various factors (e.g., personal and environmental), personal factors such as values dominate personal choice (Karimi & Makreet, 2020). Thus, understanding the entrepreneurial attitude of freshman students is most important (Fitzsimmons & Douglas, 2011; Karimi & Makreet, 2020). This study aims to bridge the gap in the existing literature by examining the relationship between personality traits and entrepreneurial attitudes in freshman-year students. By focusing on this demographic, we seek to identify key personality characteristics that may predict an inclination toward entrepreneurship early in the educational experience. This research is particularly pertinent given the increasing emphasis on entrepreneurship education in universities, where fostering an entrepreneurial mindset can significantly enhance students' potential to innovate and create new ventures. Further, Nepalese family structures and dynamics may play a crucial role in shaping entrepreneurial attitudes, potentially amplifying or mitigating the influence of personality traits. Understanding these dynamics can offer nuanced insights into the interplay between individual traits and environmental factors.

We can better predict their inclination toward initiating entrepreneurial careers by comprehending young individuals' entrepreneurial aspirations. Investigating the impact of FFM on entrepreneurship attitude is relevant as it can provide valuable insights into the relationship between individual characteristics and entrepreneurial inclinations. Among various control variables, this study also examines the role of family structure in shaping an individual's attitude toward entrepreneurship (Aldrich & Jennings, 2003; Kuratko & Hodgetts, 2001), as the family shapes their values, beliefs, and aspirations navigating uncertainties and overcoming obstacles (Arenius & Minniti, 2005; Fayolle & Gailly, 2008; Kim et al., 2022; Paniagua et al., 2022). The primary objective of this research was to gain a detailed understanding of how the Big Five Model's personality traits and family background interact to influence the entrepreneurial attitudes of first-year undergraduate students, i.e., freshman-year students who are at the beginning of a transformative educational journey, and their experiences during this time can shape their future academic and career paths. By analyzing the relationship between specific personality traits and entrepreneurial attitudes, the study offers valuable insights into the determinants of the entrepreneurial mindset among these people. Thus, this study's findings and outcomes hold significant potential for informing strategies to nurture entrepreneurship among the youth and add to the broader literature on the universality of the Big Five model in relation to entrepreneurial attitudes and address research questions such as whether personality traits of freshman students influence entrepreneurial attitude. The findings of this study are expected to contribute to a deeper understanding of the psychological underpinnings of entrepreneurial behavior and provide practical implications for enhancing entrepreneurship education programs.

## **2. Literature survey**

### **2.1 Theoretical perspective**

The study is based on two theoretical perspectives regarding the influence of personality traits on entrepreneurial attitudes: Personality Traits Theory and Social Learning Theory. The personality traits theory explains the diverse patterns of human personality that shape behavior, thoughts, and emotions across different contexts. Allport (1937) pioneered personality analysis, suggesting that upbringing, experiences, and current surroundings influence personality. Helson (1980) describes personality traits as consistent characteristics individuals exhibit in most situations. People inherently possess attributes conducive to entrepreneurship, highlighting the role of innate qualities in entrepreneurial endeavors (Simpheh, 2011). Different scholars (e.g., Gautam & Gautam, 2023; Gautam & Pandey, 2023) report that entrepreneurs exhibit various personality traits, including a strong drive to pursue their vision, willingness to take risks, resilience in the face of failure, creativity, proactiveness, and leadership skills. Among personality theories, the Five-Factor Model (FFM) is a prominent one that categorizes personality traits into five dimensions: openness to experience, conscientiousness, extraversion,

agreeableness, and neuroticism (also known as emotional stability), associating various aspects of human personality and entrepreneurial characteristics.

Social Learning Theory (Bandura & Walters, 1963) offers insights into how family background influences children's career choices and career-related behaviors, including entrepreneurial pursuits. This theory suggests that individuals learn from observing and modeling the behavior of others, particularly within their social environment, such as family, peers, and role models (Khushk et al., 2022). Through social learning, individuals acquire knowledge, skills, attitudes, and beliefs that shape their approach to various endeavors, including entrepreneurship. This theoretical framework highlights the importance of socialization experiences in shaping individuals' attitudes and behaviors, underscoring the role of familial influences in fostering or inhibiting entrepreneurial orientations (Khushk et al., 2022). By investigating these two theoretical perspectives, the study aimed to comprehensively understand the complex interplay between personality traits influenced by intrinsic and extrinsic factors and entrepreneurial attitudes among Kathmandu's first-year bachelor's students.

## **2.2 Empirical findings and gap**

Adetayo (2006) studied youth attitudes toward entrepreneurship in southern Nigeria among 210 final-year university students and identified innovativeness and industriousness as the highest-rated entrepreneurial traits. The study found a linear relationship between entrepreneurial traits, learning, and overall attitude. Social factors moderately influenced attitudes. Goel et al. (2007) explored social support's impact on entrepreneurship in India and China, focusing on attitudes influenced by familial background. Data from over 5,000 students showed a significant influence of parental employment on attitudes in both countries. Indians generally exhibited more optimism, particularly in the East, while in China, youth from poorer regions showed more positive attitudes toward entrepreneurship. Likewise, Harris and Gibson (2008) reported that most of the students scored higher in personal control and innovation with family business involvement demonstrated stronger entrepreneurial attitudes. Chen and Lai (2010) examined the relationship between personality traits and attitudes toward entrepreneurship among Taiwanese business students. Using survey questionnaires from 792 legitimate respondents out of 881 returned, they found that personality traits influenced students' attitudes toward entrepreneurship.

Adebayo and Kavoos (2016) investigated African youths' perceptions of entrepreneurship, engaging 204 participants explored attitudes toward entrepreneurship through quantitative and qualitative methods. Despite recruitment challenges, the research revealed optimistic attitudes among African youths, with a strong motivation for entrepreneurship and a willingness to take risks for self-sufficiency. Varalakshmi et al. (2019) examined young people's perceptions of entrepreneurship, surveying 100 respondents from diverse backgrounds through stratified random sampling. The study reported that personality traits have a positive influence on entrepreneurial attitude. Similarly, Soomro et al. (2020) conducted a study in Thailand using the Entrepreneurial Attitude Orientation (EAO) model to predict students' attitudes toward entrepreneurship, reporting that productivity, personal control, and creativity significantly influenced attitudes toward entrepreneurship, while self-esteem had a lesser effect. Wardana et al. (2020) explored factors influencing young people's readiness for entrepreneurship in Indonesia. They investigated variables like the need for achievement, risk perception, and locus of control that significantly affect attitudes and intentions toward entrepreneurship. Likewise, Hintikka et al. (2022) investigated Finnish adolescents' attitudes toward entrepreneurship, surveying 1,497 students aged 15 to 24 in Northern Ostrobothnia. They found a generally positive outlook on entrepreneurship. Sharma (2022) examined the relationship between Entrepreneurial Attitude Orientation and Big Five Personality traits among college students and found a positive correlation between entrepreneurial attitude orientation and extraversion, openness to experience, and conscientiousness. These findings offer insights into how personality traits may influence entrepreneurial attitudes and individual performance outcomes, with implications for organizational behavior research. Previous researchers, e.g., Adetayo (2006), Pathirana and Liyanage (2022), and Sharma (2022) emphasized the need for studies focusing on students with similar factors influencing their entrepreneurial interests and mindset.

The disparities between the current study's results and previous research on personality traits, as highlighted by Chen and Lai (2010), might be clarified through Bandura's social learning theory (Bandura & Walters, 1963). This theory proposes that personality development and the influence of family backgrounds are shaped through continuous reciprocal interactions among cognitive, behavioral, and environmental determinants.

The Big Five Factor model claims to contain all key components defining human qualities (Goldberg, 2008). Table 1 lists relevant studies on the Big Five personality traits where the proposed variables were introduced and observed.

Table 1. Sources of variables

| Variable  | Studies   |
|---|---|
| Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness to experience | Adetayo (2006); Chen and Lai (2010); Sharma (2022)        |
| Family background   | Chen and Lai (2010); Goel, Vohra, Zhang, and Arora (2007) |

### 2.3 Conceptual framework and hypotheses formulation

Based on the review, we developed a research framework (Figure 1) to explain the effects of personality traits on young people's attitudes toward entrepreneurship across different family backgrounds.

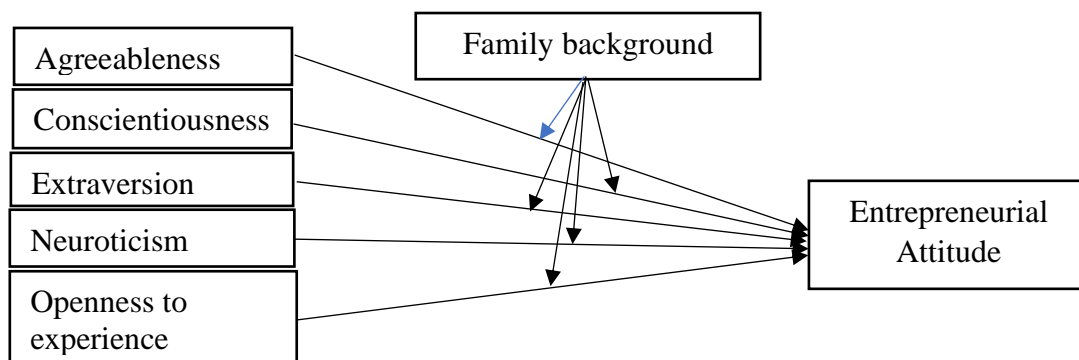


Fig. 1: Conceptual framework

### 2.4 Entrepreneurial attitude

In entrepreneurship, attitude refers to one's overall evaluation and feelings toward engaging in entrepreneurial activities. Robinson et al. (1991) introduced the Entrepreneurial Attitude Orientation (EAO) dimension, which assesses attitudes based on achievement, innovation, personal control, and self-esteem. The study utilized five items from Linan and Chen (2009) and Tuan et al. (2019) to measure entrepreneurial attitude.

### 2.5 Agreeableness and entrepreneurial attitude

Agreeableness encompasses traits like trustworthiness, benevolence, and friendliness. Individuals high in agreeableness tend to be cooperative and empathetic, valuing harmonious relationships. Conversely, those low in agreeableness may be more aggressive and competitive. Research suggests that agreeableness is linked to reliance on others and conformity, which can challenge entrepreneurs who need to make independent decisions and embrace innovation (Costa & McCrae, 1992; Zhao & Seibert, 2006; Sharma, 2022). Based on the empirical evidence, the study proposes the following hypotheses:

H<sub>1</sub>: Agreeableness significantly positively influence entrepreneurial attitudes among young people.

H<sub>2</sub>: The impact of agreeableness on entrepreneurial attitudes varies across different family backgrounds.

## **2.6 Conscientiousness and entrepreneurial attitude**

Conscientiousness is marked by solid organization, impulse control, and goal-oriented behavior. Individuals high in conscientiousness are disciplined, reliable, and detail-oriented, while those lower in this trait may be more spontaneous and less focused on planning. Research by Barrick and Mount (1991), Barrick et al. (2001), Zhao and Seibert (2006), Damoah (2020), and Sharma (2022) consistently links conscientiousness to job performance and competence across various professions. Moreover, conscientiousness is positively associated with entrepreneurial success, emphasizing its importance in entrepreneurial endeavors. Based on this evidence, the study proposes the following hypotheses:

H<sub>3</sub>: Conscientiousness has a positive impact on entrepreneurial attitudes among young people.

H<sub>4</sub>: The impact of conscientiousness on entrepreneurial attitudes varies across different family backgrounds.

## **2.7 Extraversion and entrepreneurial attitude**

Extraversion is marked by enthusiasm, assertiveness, and sociability, with extroverts thriving in social settings. Introverts, on the other hand, are more reserved and may find social interactions draining. Costa et al. (1984) and Costa and McCrae (1992) identify extraversion traits like affability and enthusiasm. Given the reliance on social support in entrepreneurial endeavors, these traits benefit entrepreneurs, as highlighted by Sharma (2022) and Chandler and Jansen (1992). Hence, the study proposes the following hypotheses:

H<sub>5</sub>: Extraversion has a positive impact on entrepreneurial attitudes among young people.

H<sub>6</sub>: The impact of extraversion on entrepreneurship attitudes varies across different family backgrounds.

## **2.8 Neuroticism and entrepreneurial attitude**

Neuroticism encompasses traits like sadness, moodiness, and emotional instability, with high neuroticism individuals experiencing mood fluctuations and anxiety. This trait also relates to locus of control, where internal locus individuals believe in personal control, while external locus individuals attribute events to external factors. Research indicates that neurotic individuals may resist societal improvement efforts and struggle with independent decision-making (Cable & Judge, 1997; Wiggins, 1996). Traits opposite to neuroticism, such as optimism, decisiveness, and determination, are associated with entrepreneurial success (Zhao & Seibert, 2006; Al-Ghazali et al. 2022; Sharma, 2022). Successful entrepreneurs typically lack neurotic tendencies and possess positive traits. Based on the empirical evidence, the study proposes the following hypotheses:

H<sub>7</sub>: Neuroticism significantly negatively impacts entrepreneurial attitudes among young people.

H<sub>8</sub>: The impact of neuroticism on entrepreneurial attitudes varies across family backgrounds.

## **2.9 Openness to experience and entrepreneurial attitude**

Openness reflects a person's receptivity to new ideas and experiences, and highly open individuals are imaginative and daring. Conversely, low-openness individuals tend to be more traditional and skeptical of unconventional ideas. Openness influences cognitive flexibility, adaptability, and the willingness to explore new possibilities, which are crucial for entrepreneurs (Zhao & Seibert, 2006; Sharma, 2022). Hence, the study proposes the following hypotheses:

H<sub>9</sub>: Openness to experience positively significant impacts on entrepreneurial attitudes among young people.

H<sub>10</sub>: The impact of openness to experience on entrepreneurial attitudes varies across family backgrounds.

## **3. Methodology**

This study is based on a causal-comparative research design and a quantitative approach using descriptive statistics, inferential statistics, and advanced modelling techniques. During the study period, the total number of students who have completed higher school education was 174,598 (Edu Sanjal,

2022). Considering the 40% migration rate of students studying abroad and quitting higher education, the estimated current population of students is approximately 104,759 who joined the graduate program in Nepal. As suggested by Qualtrics (2023), a sample size of 383 was estimated and requested to participate in the survey, adhering to the 95 per cent confidence level guidelines and a 5 per cent margin of error (Cochran, 1977). The sampling approach included a judgmental method to achieve the desired sample size. Respondents were taken proportionally from the colleges based on the admission number. The survey used a self-administered questionnaire. To ensure theoretical validity, we developed a questionnaire with items created by Goldberg (1993), John and Srivastava (1999), Linan and Chen (2009), and Tuan et al. (2019)). Then, we contextualised the items so the concepts and understanding became more accessible for the respondents.

#### 4. Results and Analysis

Table 2 presents survey data encompassing various aspects of entrepreneurship and respondents' perspectives across different attributes. The data is categorized based on several factors. Regarding gender, 208 respondents identified as female, 171 as male, and four as belonging to other gender identities. Regarding family background, 137 participants were associated with the business sector, 118 with agriculture, and 128 with services. Family types were represented by 121 respondents in joint families and 262 in nuclear families. Faculty distribution showed 97 respondents from Science and Technology, 246 from Business Management, and 40 from the Humanities and Social Sciences.

A majority, comprising 383 respondents, believed that being an entrepreneur fosters various skills, while a smaller group of 9 disagreed. Concerning financial risk, 348 respondents acknowledged the high level associated with entrepreneurship, with 35 opposing views. Opinions varied on whether flexible schedules in entrepreneurship lead to good family lives, with 181 in agreement and 202 in disagreement. Additionally, 347 respondents favored starting one's business over working for others, while 36 disagreed. A minority of 48 respondents believed an enterprise could succeed without personal networking and support, contrasting with 335 who disagreed. Finally, 358 participants affirmed that entrepreneurs can build careers aligning with their beliefs, whereas 25 disagreed.

Table 2. Demographic profile of the respondents

|  |             | N   | CF  |
|--|-------------|-----|-----|
| Gender   | Female      | 208 | 208 |
|  | Male        | 171 | 379 |
|  | Others      | 4   | 383 |
| Family background                                    | Business    | 137 | 137 |
|  | Agriculture | 118 | 255 |
|  | Services    | 128 | 383 |
| Family Type  | Joint       | 121 | 121 |
|  | Nuclear     | 262 | 383 |
| Faculty  | Science     | 97  | 97  |
|  | Management  | 246 | 343 |
|  | Humanities  | 40  | 383 |
| Skill development through entrepreneurship           | Yes         | 374 | 374 |
|  | No          | 9   | 383 |
| Financial risk associated with being an entrepreneur | Yes         | 348 | 348 |
|  | No          | 35  | 383 |
| Flexible schedules of business people                | Yes         | 181 | 181 |
|  | No          | 202 | 383 |
| Advantageous of own business than working for others | Yes         | 347 | 347 |
|  | No          | 36  | 383 |
| Success without personal networking and support      | Yes         | 48  | 48  |

|   |     |     |     |
|---|-----|-----|-----|
|   | No  | 335 | 383 |
| Alignment of entrepreneurial career with personal beliefs | Yes | 358 | 358 |
|   | No  | 25  | 383 |

The study calculated Cronbach's alpha coefficients for various constructs, with agreeableness ( $\alpha=0.739$ ), conscientiousness ( $\alpha=0.765$ ), extraversion ( $\alpha=0.708$ ), neuroticism ( $\alpha=0.704$ ), openness to experience ( $\alpha=0.745$ ), and entrepreneurial attitude ( $\alpha=0.865$ ) exceeding the conventional threshold of ( $\alpha=0.7$ ).

Table 3. Test of internal consistency for all variables

| Variables                | Cronbach's Alpha | <i>One-Sample Kolmogorov-Smirnov test</i> |                                     |
|--------------------------|------------------|---|-------------------------------------|
|                          |                  | Test Statistic                            | Asymp. Sig. (2-tailed) <sup>c</sup> |
| Agreeableness            | 0.739            | 0.063                                     | <0.001                              |
| Conscientiousness        | 0.765            | 0.058                                     | 0.004                               |
| Extraversion             | 0.708            | 0.141                                     | <0.001                              |
| Neuroticism              | 0.704            | 0.066                                     | <0.001                              |
| Openness to experience   | 0.745            | 0.064                                     | <0.001                              |
| Entrepreneurial attitude | 0.865            | 0.143                                     | <0.001                              |

These values indicate a significant level of internal consistency among the items assessing each construct. The higher alpha values, ranging from 0.739 to 0.865, suggest strong consistency among the items measuring these constructs. This consistency ensures that the set of items designed to evaluate each construct consistently measures the intended aspects among the study participants.

Latent variables are inferred from observed variables since they cannot be directly observed. The study utilized six latent variables, measured using the Likert scale, and treated as interval scale variables during evaluation. The normality of these variables was assessed using the Kolmogorov-Smirnov (K-S) test, chosen over the Shapiro-Wilk test due to the sample size exceeding 50. The K-S test results indicated a normal distribution for the variables, with detailed values provided in Table 3.

Table 4. Summary statistics for all the latent variables

| Variables/Statistics     | Mean  | Median | Variance | SD    | Skewness | Kurtosis |
|--------------------------|-------|--------|----------|-------|----------|----------|
| Agreeableness            | 4.051 | 4.111  | 0.31     | 0.556 | -0.147   | -0.54    |
| Conscientiousness        | 3.915 | 3.888  | 0.368    | 0.607 | -0.242   | -0.282   |
| Extraversion             | 4.110 | 4.25   | 0.326    | 0.570 | -0.53    | -0.518   |
| Neuroticism              | 2.794 | 2.714  | 0.513    | 0.716 | 0.212    | 0.325    |
| Openness to experience   | 3.894 | 3.9    | 0.257    | 0.506 | -0.172   | 0.007    |
| Entrepreneurial attitude | 4.255 | 4.4    | 0.473    | 0.687 | -1.022   | 0.804    |

Table 4 presents summary statistics for several latent variables, each variable represents a different aspect of personality or attitude, as measured by mean, median, variance, standard deviation (SD), skewness, and kurtosis. Agreeableness demonstrates a moderate mean of 4.051, with a median close to the mean of 4.111, indicating a relatively balanced distribution. The variance and standard deviation of 0.310 and 0.556 suggest moderate variability around the mean. The slight negative skewness (-0.147) indicates a minor tendency toward lower agreeableness scores, while the negative kurtosis (-0.540) signifies a slightly flatter distribution.

Conscientiousness exhibits a mean of 3.915 and a median of 3.888, indicating a relatively consistent central tendency. The variance and standard deviation of 0.368 and 0.607 reflect moderate variability around the mean. The negative skewness (-0.242) implies a slight shift toward lower scores, while the negative kurtosis (-0.282) suggests a relatively less peaked distribution. On the other hand, extraversion reveals a mean of 4.110 and a median of 4.250, with a moderate variance and standard deviation of 0.326 and 0.570, respectively. The negative skewness (-0.530) indicates a slight tendency toward lower scores, and the negative kurtosis (-0.518) signifies a flatter distribution with fewer extreme values.

Similarly, neuroticism displays a mean of 2.794 and a median of 2.714, indicating a moderate level, with a variance and standard deviation of 0.513 and 0.716, suggesting considerable variability. The positive skewness (0.212) indicates a slight tendency toward higher scores, while the positive kurtosis (0.325) suggests a slightly peaked distribution.

Openness to experience showcases a mean of 3.894 and a median of 3.9, indicating a moderate level with variance and standard deviation of 0.257 and 0.506, respectively. The negative skewness (-0.172) suggests a minor tendency toward lower scores, while the near-zero kurtosis (0.007) indicates a distribution close to normal. Additionally, attitude toward entrepreneurship presents a relatively higher mean of 4.255 and a median of 4.4, signifying a favorable attitude overall, with a higher variance and standard deviation of 0.473 and 0.687, respectively. The negative skewness (-1.022) suggests an inclination toward lower scores, while the positive Kurtosis (0.804) indicates a distribution with a more pronounced peak.

Table 5. Correlation analysis

| Variables | AGR     | CON     | EXT     | NEU     | OPE    | EA |
|-----------|---------|---------|---------|---------|--------|----|
| AGR       | 1       |         |         |         |        |    |
| CON       | .568**  | 1       |         |         |        |    |
| EXT       | .277**  | .288**  | 1       |         |        |    |
| NEU       | -.188** | -.235** | -.185** | 1       |        |    |
| OPE       | .420**  | .400**  | .244**  | -.109*  | 1      |    |
| EA        | .413**  | .393**  | .245**  | -.207** | .363** | 1  |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed). Here, AGR- Agreeableness, CON- Conscientiousness, EXT- Extraversion, NEU- Neuroticism, OPE- Openness to Experience and EA- Entrepreneurial Attitude

The study showcases the correlation coefficients between different variables, explicitly focusing on the relationship between entrepreneurial attitude and the Big Five personality traits (*Table 5*). There is a moderate positive correlation between entrepreneurial attitude and agreeableness ( $r = 0.413^{**}$ ), conscientiousness ( $r = 0.393^{**}$ ), and openness to experience ( $r = 0.363^{**}$ ), suggesting that individuals exhibiting higher levels of entrepreneurial attitude might also tend to have greater openness to experience. On the other hand, extraversion shows a weaker positive correlation ( $r = 0.245^{**}$ ), and neuroticism exhibits a negative correlation ( $r = -0.207^{**}$ ), demonstrating a negative association.

Table 6. Regression model summary

| R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------------------|----------|-------------------|----------------------------|---------------|
| .503 <sup>a</sup> | 0.253    | 0.243             | 0.598                      | 1.709         |

a. Predictors: (Constant), Agreeableness, Conscientiousness, Extraversion, Neuroticism, Openness to experience

b. Dependent Variable: Entrepreneurial Attitude

Table 6 revealed a moderate positive relationship between the combination of these personality traits and the entrepreneurial attitude. The R Square value (0.253) represents the proportion of variance in the entrepreneurial attitude that can be explained by the predictors included in the model. Here, approximately 25.3% of the variability in the entrepreneurial attitude is accounted for by the combined effects of agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience.

Furthermore, the Adjusted R Square (0.243) adjusts the R Square value for the number of predictors in the model, providing a more accurate estimate of the variance explained. This adjusted value suggests that the included predictors specifically explain around 24.3% of the variability in the entrepreneurial attitude after considering the model's complexity. The Standard Error of the Estimate (0.598) indicates the average deviation or error of the predicted entrepreneurial attitude values from the actual observed values. It represents the degree of accuracy of the model's predictions. A lower standard error value

signifies that the model's predictions are closer to the actual values. Additionally, the Durbin-Watson statistic value of 1.709 is used to detect the presence of autocorrelation in the residuals (errors). This statistic ranges from 0 to 4, with a value around 2 indicating no significant autocorrelation.

Table 7. ANOVA model

|            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|------------|----------------|-----|-------------|--------|-------------------|
| Regression | 45.728         | 5   | 9.146       | 25.533 | .000 <sup>b</sup> |
| Residual   | 135.036        | 377 | 0.358       |        |                   |
| Total      | 180.764        | 382 |             |        |                   |

a. Predictors: (Constant), Agreeableness, Conscientiousness, Extraversion, Neuroticism, Openness to experience

b. Dependent Variable: Entrepreneurial Attitude

The ANOVA (Analysis of Variance) model in *Table 7* summarizes variance distribution among different components within a regression analysis. In this instance, the Regression component stands at 45.728, with 5 degrees of freedom (df) and a Mean Square of 9.146. This indicates that the predictors collectively account for a significant portion of the variability in entrepreneurial attitude, as evidenced by the high F-value of 25.533, which is associated with a very low p-value of 0.000 (beyond the typical threshold of .05). The low p-value implies that the regression model is statistically significant.

The Residual component, representing unexplained variability or error, stands at 135.036 with 377 degrees of freedom. It depicts the variability not accounted for by the predictors in the model. The Total sum of squares (180.764) represents the overall variability in the dependent variable without considering any predictors. In this case, the statistically significant F-value suggests that the combined influence of agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience significantly impacts entrepreneurial attitude. This model's effectiveness is underscored by the significant predictive power attributed to these predictors, thereby instilling confidence in the research's conclusions and contributing to a better understanding of how these personality traits relate to entrepreneurial attitude within the scope of this analysis.

Table 8. Structural evaluation model

|          | Unstandardized |            | Standardized | t      | Sig.   | Collinearity Statistics |       |
|----------|----------------|------------|--------------|--------|--------|-------------------------|-------|
|          | B              | Std. Error | Beta         |        |        | Tolerance               | VIF   |
| Constant | 1.421          | 0.369      |              | 3.854  | <0.001 |                         |       |
| AGR      | 0.255          | 0.07       | 0.207        | 3.665  | <0.001 | 0.623                   | 1.604 |
| CON      | 0.177          | 0.064      | 0.156        | 2.767  | 0.006  | 0.621                   | 1.610 |
| EXT      | 0.097          | 0.057      | 0.08         | 1.683  | 0.093  | 0.874                   | 1.145 |
| NEU      | -0.093         | 0.044      | -0.097       | -2.089 | 0.037  | 0.927                   | 1.078 |
| OPE      | 0.249          | 0.069      | 0.183        | 3.627  | <0.001 | 0.774                   | 1.291 |

a. Dependent Variable: Entrepreneurial Attitude. Here, AGR- Agreeableness, CON- Conscientiousness, EXT- Extraversion, NEU- Neuroticism, OPE- Openness to experience

The structural model of the study illustrates how variables influence each other, with unstandardized beta coefficients representing the change in the dependent variable for a one-unit change in the independent variable, holding other variables constant. Here, agreeableness positively impacts entrepreneurial attitude, with each unit increase in agreeableness associated with an average 0.255 increase in entrepreneurial attitude. Similarly, conscientiousness positively influences entrepreneurial attitude, though to a lesser extent, with each unit increase associated with a 0.177 increase. Extraversion has a smaller positive effect on entrepreneurial attitude than agreeableness and conscientiousness.

Neuroticism negatively impacts entrepreneurial attitude, with each unit increase associated with a 0.093 decrease.

Openness to experience also positively influences entrepreneurial attitude. The analysis reveals distinct associations between personality traits and entrepreneurial attitude. Agreeableness and openness to experience display strong relationships, while Conscientiousness shows a moderate yet significant association. Extraversion lacks statistical significance, and neuroticism demonstrates a moderate association, affecting entrepreneurial attitude. Furthermore, the structural model of this study was also evaluated by assessing the collinearity issues of a model that were observed based on the VIF (Variation Inflation Factor). The VIF values indicate the amount of inflation in the variances of the estimated regression coefficients due to multicollinearity.

Generally, a VIF value below three typically suggests no significant collinearity, while values between 3 and 5 are considered satisfactory in less stringent analyses, as Hair et al. (2022) indicated. Looking at Table 8, the assessment of collinearity issues via VIF values indicates no significant multicollinearity among predictor variables. VIF values ranging from 1.078 to 1.61 suggest relatively low intercorrelation among agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience. Therefore, the regression model for predicting attitudes towards entrepreneurship is deemed reliable, with variables reasonably independent in their contributions to the dependent variable.

Table 9. ANOVA test for equality of means across family backgrounds

| Variables              |                | Sum of Squares | df  | Mean Square | F     | Sig.  |
|------------------------|----------------|----------------|-----|-------------|-------|-------|
| Agreeableness          | Between Groups | 0.075          | 2   | 0.037       | 0.12  | 0.887 |
|                        | Within Groups  | 118.409        | 380 | 0.312       |       |       |
|                        | Total          | 118.484        | 382 |             |       |       |
| Conscientiousness      | Between Groups | 1.409          | 2   | 0.705       | 1.922 | 0.148 |
|                        | Within Groups  | 139.355        | 380 | 0.367       |       |       |
|                        | Total          | 140.764        | 382 |             |       |       |
| Extraversion           | Between Groups | 0.651          | 2   | 0.326       | 0.999 | 0.369 |
|                        | Within Groups  | 123.844        | 380 | 0.326       |       |       |
|                        | Total          | 124.496        | 382 |             |       |       |
| Neuroticism            | Between Groups | 0.292          | 2   | 0.146       | 0.283 | 0.754 |
|                        | Within Groups  | 195.715        | 380 | 0.515       |       |       |
|                        | Total          | 196.006        | 382 |             |       |       |
| Openness to experience | Between Groups | 3.202          | 2   | 1.601       | 6.407 | 0.002 |
|                        | Within Groups  | 94.954         | 380 | 0.25        |       |       |
|                        | Total          | 98.156         | 382 |             |       |       |

Family background was introduced as a moderator between personality traits and entrepreneurial attitude. Table 9 illustrates the results of an Analysis of Variance (ANOVA) test to assess the equality of means across various family backgrounds concerning different personality traits. For agreeableness, the ANOVA indicates no statistically significant difference among the means across the different family backgrounds ( $F = 0.12$ ,  $p = 0.887$ ). Similar findings were observed for Conscientiousness, extraversion, and neuroticism. In these cases, the F-values (1.922, 0.999, and 0.283, respectively) were relatively low, and the associated p-values (0.148, 0.369, and 0.754, respectively) exceeded the conventional significance threshold of 0.05. Consequently, these results suggest no significant difference in mean scores across family backgrounds for these personality traits.

However, the ANOVA test revealed a significant difference in mean scores across family backgrounds ( $F = 6.407$ ,  $p = 0.002$ ). The higher F-value and the statistically significant p-value indicate that the differences observed in openness to experience scores among the family backgrounds represent actual distinctions in this personality trait based on family backgrounds. This suggests that family background has a meaningful influence on openness to experience in individuals.

Table 10. Multiple comparison LSD for all variables

| Variables              | Family Background I | Family Background J | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|------------------------|---------------------|---------------------|-----------------------|------------|-------|-------------------------|-------------|
|                        |                     |                     |                       |            |       | Lower Bound             | Upper Bound |
| Agreeableness          | Business            | Agriculture         | 0.034                 | 0.070      | 0.624 | -0.103                  | 0.172       |
|                        |                     | Services            | 0.016                 | 0.068      | 0.815 | -0.118                  | 0.151       |
|                        | Agriculture         | Business            | -0.034                | 0.070      | 0.624 | -0.172                  | 0.103       |
|                        |                     | Services            | -0.018                | 0.071      | 0.798 | -0.158                  | 0.121       |
|                        | Services            | Business            | -0.016                | 0.068      | 0.815 | -0.151                  | 0.118       |
|                        |                     | Agriculture         | 0.018                 | 0.071      | 0.798 | -0.121                  | 0.158       |
| Conscientiousness      | Business            | Agriculture         | 0.101                 | 0.076      | 0.183 | -0.048                  | 0.251       |
|                        |                     | Services            | -0.047                | 0.074      | 0.526 | -0.193                  | 0.099       |
|                        | Agriculture         | Business            | -0.101                | 0.076      | 0.183 | -0.251                  | 0.048       |
|                        |                     | Services            | -0.148                | 0.077      | 0.055 | -0.300                  | 0.003       |
|                        | Services            | Business            | 0.047                 | 0.074      | 0.526 | -0.099                  | 0.193       |
|                        |                     | Agriculture         | 0.148                 | 0.077      | 0.055 | -0.003                  | 0.300       |
| Extraversion           | Business            | Agriculture         | 0.097                 | 0.071      | 0.176 | -0.043                  | 0.238       |
|                        |                     | Services            | 0.019                 | 0.070      | 0.776 | -0.118                  | 0.157       |
|                        | Agriculture         | Business            | -0.097                | 0.071      | 0.176 | -0.238                  | 0.043       |
|                        |                     | Services            | -0.077                | 0.072      | 0.290 | -0.220                  | 0.066       |
|                        | Services            | Business            | -0.019                | 0.070      | 0.776 | -0.157                  | 0.118       |
|                        |                     | Agriculture         | 0.077                 | 0.072      | 0.290 | -0.066                  | 0.220       |
| Neuroticism            | Business            | Agriculture         | -0.040                | 0.090      | 0.657 | -0.217                  | 0.137       |
|                        |                     | Services            | -0.065                | 0.088      | 0.457 | -0.239                  | 0.107       |
|                        | Agriculture         | Business            | 0.040                 | 0.090      | 0.657 | -0.137                  | 0.217       |
|                        |                     | Services            | -0.025                | 0.091      | 0.780 | -0.205                  | 0.154       |
|                        | Services            | Business            | 0.065                 | 0.088      | 0.457 | -0.107                  | 0.239       |
|                        |                     | Agriculture         | 0.025                 | 0.091      | 0.780 | -0.154                  | 0.205       |
| Openness to experience | Business            | Agriculture         | .217*                 | 0.062      | 0.001 | 0.094                   | 0.341       |
|                        |                     | Services            | 0.053                 | 0.061      | 0.389 | -0.067                  | 0.173       |
|                        | Agriculture         | Business            | -.217*                | 0.062      | 0.001 | -0.341                  | -0.094      |
|                        |                     | Services            | -.164*                | 0.063      | 0.010 | -0.290                  | -0.039      |
|                        | Services            | Business            | -0.053                | 0.061      | 0.389 | -0.173                  | 0.067       |
|                        |                     | Agriculture         | .164*                 | 0.063      | 0.010 | 0.039                   | 0.290       |

\* The mean difference is significant at the 0.05 level.

Table 10 summarizes the results of multiple comparisons using the LSD (Least Significant Difference) method across different levels of family backgrounds and their association with personality traits. The p-values for these comparisons ranged from 0.624 to 0.815, indicating no statistically significant differences in agreeableness between the different family backgrounds. Similarly, comparisons between family backgrounds did not show statistically significant differences in conscientiousness and extraversion in most cases, as evidenced by the p-values ranging from 0.055 to

0.776. Neuroticism also exhibited non-significant differences across the various family backgrounds, with p-values ranging between 0.457 and 0.78. However, the analysis of openness to experience showed a distinct pattern. Significant differences were observed between individuals from business and agricultural backgrounds ( $p = 0.001$ ).

The comparisons between business and services and agriculture and services also displayed significant differences ( $p = 0.389$  and  $p = 0.01$ , respectively). In summary, the majority of comparisons across different family backgrounds for agreeableness, conscientiousness, extraversion, and neuroticism did not show statistically significant differences. However, there were distinguished exceptions in openness to experience, where individuals from business backgrounds showed significantly different scores than those from agriculture or services backgrounds. These findings suggest that in the context of openness to experience, family background plays a role in influencing this particular personality trait.

Table 11. Summary of hypothesis

| S.N. | Hypothesis   | P value | Results            |
|------|--|---------|--------------------|
| H1   | Agreeableness significantly positively influences entrepreneurial attitudes among young people           | <0.001  | Significant        |
| H2   | The impact of agreeableness on entrepreneurial attitudes varies across different family backgrounds.     | 0.887   | Insignificant      |
| H3:  | Conscientiousness has a positive impact on entrepreneurial attitudes among young people.                 | 0.006   | Significant        |
| H4:  | The impact of conscientiousness on entrepreneurial attitudes varies across different family backgrounds. | 0.148   | Insignificant      |
| H5:  | Extraversion has a positive impact on entrepreneurial attitudes among young people.                      | 0.093   | Significant at 10% |
| H6:  | The impact of extraversion on entrepreneurship attitudes varies across different family backgrounds      | 0.369   | Insignificant      |
| H7   | Neuroticism significantly negatively impacts entrepreneurial attitudes among young people.               | 0.037   | Significant        |
| H8   | The impact of neuroticism on entrepreneurship attitudes varies across different family backgrounds.      | 0.754   | Insignificant      |
| H9   | Openness to experience positively significant impacts on entrepreneurial attitudes among young people.   | <0.001  | Significant        |
| H10  | The impact of openness to experience on entrepreneurship attitudes varies across family backgrounds.     | 0.002   | Significant        |

Table 11 summarizes the hypotheses and their respective outcomes regarding their impact on entrepreneurship attitudes among young individuals, focusing on personality traits across different family backgrounds. Starting with Agreeableness (H1), it was hypothesized to have a negative impact on entrepreneurship attitudes. The p-value of less than 0.001 indicates a significant impact, suggesting that higher agreeableness tends to affect entrepreneurial attitudes in young people negatively. H2 suggested that the impact of agreeableness on entrepreneurship attitudes varies across different family backgrounds. However, the p-value of 0.887 results in this hypothesis being insignificant, indicating that the influence of agreeableness on entrepreneurial attitudes does not significantly differ based on various family backgrounds. Moving to Conscientiousness (H3), it was hypothesized to impact entrepreneurship attitudes positively. The p-value of 0.006 is statistically significant, supporting the hypothesis that higher conscientiousness positively affects attitudes toward entrepreneurship among young individuals.

Contrarily, the impact of conscientiousness on entrepreneurship attitudes across different family backgrounds (H4) was observed as insignificant, with a p-value of 0.148, suggesting no substantial variation in the effect of conscientiousness on entrepreneurial attitudes concerning different family backgrounds. Regarding extraversion (H5), the hypothesis suggested a positive impact on entrepreneurship attitudes. However, the p-value of 0.093 proved this relationship statistically

significant at 10%, implying that higher extraversion might positively affect attitudes toward entrepreneurship in young individuals. Similarly, the variation in the impact of extraversion on entrepreneurship attitudes across different family backgrounds (H6) was also statistically insignificant, with a p-value of 0.369, indicating no significant differences in this impact across diverse family backgrounds. Regarding neuroticism (H7), the hypothesis anticipated a negative impact on entrepreneurship attitudes, supported by the statistically significant p-value of 0.037. This indicates that higher neuroticism levels tend to affect young individuals' attitudes toward entrepreneurship negatively.

However, the impact of neuroticism on entrepreneurship attitudes across various family backgrounds (H8) was statistically insignificant, with a p-value of 0.754, suggesting no significant variation in this impact concerning different family backgrounds. Finally, openness to experience (H9) was hypothesized to positively impact entrepreneurship attitudes, which was supported by a highly significant p-value of less than 0.001, signifying that higher openness to experience is associated with positive attitudes toward entrepreneurship in young individuals. Moreover, the impact of openness to experience on entrepreneurship attitudes across different family backgrounds (H10) was also statistically significant, with a p-value of 0.002, suggesting significant variations in the impact of openness to experience on entrepreneurial attitudes based on different family backgrounds.

## **5. Discussion**

Entrepreneurship, as defined by the Global Entrepreneurship Monitor (1999), encompasses initiating a new business, efforts to do so, expanding an existing venture, establishing new business structures, or further developing established businesses. The study's main aim was to analyze how the Big Five Model of personality traits influences the entrepreneurial attitudes of first-year university students. The findings revealed that five personality factors, i.e., extraversion, neuroticism, conscientiousness, agreeableness, and openness, play a significant role in influencing entrepreneurial attitudes.

Elaborately, it was found that agreeableness, characterized by traits such as trust, empathy, and cooperativeness, significantly positively impacted entrepreneurial attitudes, meaning that the more agreeable person tends to have a positive attitude towards entrepreneurship. Others (e.g., family members, friends, and social influencers) can easily convince an amiable person and tend to be more flexible in their goals, which may be diverted for less risky means of living. They tend to rely on others and conformity to make independent decisions and embrace innovation, as suggested by (Costa & McCrae, 1992; Zhao & Seibert, 2006; Sharma, 2022). This result suggests that social leaders like university professors, business personalities, and family members can boost the entrepreneurial attitude of early university students towards entrepreneurship. This trend remained consistent regardless of varying family backgrounds. Conversely, conscientiousness, followed by discipline, reliability, and goal-oriented behavior, positively affected entrepreneurial attitudes, with no substantial differences detected across diverse family backgrounds, arguing that we can enhance the entrepreneurial attitude of agreeable students irrespective of family background. Further, the findings of the study support the arguments of Barrick and Mount (1991), Barrick et al. (2001), Zhao and Seibert (2006), Damoah (2020), and Sharma (2022) that the person who shows higher conscientiousness tends to have their enterprise. This result stresses the generalization that people who are goal-oriented, reliable, and self-disciplined in achieving their meaning in life tend to be more positive towards entrepreneurship because of their detail-oriented personality. Early-year university students should get assistance in setting business goals, personality development, and career development training to enhance their conscientiousness and become favorable toward establishing enterprises.

Extraversion, characterized by sociability and assertiveness, did not significantly influence entrepreneurial attitude, and this lack of impact was consistent across various family backgrounds. As the extroverts focus on the gratification from others and excitement seeking and they seek strong network which results in confidence in business success. Findings of the study are similar to the findings

of previous studies (e.g., Costa et al., 1984; Costa & McCrae, 1992; Sharma, 2022; Chandler & Jansen, 1992).

Neuroticism represents emotional instability and mood swings, displaying a consistently negative impact on entrepreneurial attitudes across different family backgrounds, showing no considerable variation. High neuroticism indicates one's negative emotional state comprising anxiety, fear, frustration, guilt, pessimism, and depressed mood, which can be detrimental to entrepreneurial attitude, supporting the findings of Al-Ghazali et al. (2022) and Sharma (2022). However, the role of professors and academic leaders can improve neuroticism, which may improve positivity and entrepreneurial attitude.

Finally, openness to experience reflects curiosity, creativity, and receptiveness to new ideas and positively affects entrepreneurial attitudes. Interestingly, this impact varied significantly across diverse family backgrounds. Overall, while certain personality traits showed consistent effects on entrepreneurial attitudes irrespective of family backgrounds, openness to experience appeared to be particularly sensitive to variations in these backgrounds among the fresh-year students. This study proposed multiple personality traits of future entrepreneurs, as suggested by Rauch and Frese (2007), Obschonka et al. (2013), Saleh et al. (2021), and Zhao and Seibert (2006) as successful business owners, have more than one personality trait, like being responsible, open to new experiences, and willing to take risks. This study explicitly states that family background does not influence entrepreneurial personality traits except the student's openness to experience. Family background, especially their professional and economic background, helps shape their child's personality. Family culture and professional values and norms influence exposure to opportunity. Cultures that value exploration, curiosity, and intellectual pursuits are likely to foster higher levels of openness, which leads to higher tendencies for entrepreneurial careers. Results revealed that students from business family backgrounds tend to have openness to experience and a higher level of entrepreneurial attitude compared to the agriculture and service sector family background.

## **6. Conclusion and Contributions**

This study highlights the significant influence of specific personality traits (agreeableness, conscientiousness, neuroticism, and openness to experience) on the entrepreneurial attitudes of first-year undergraduate students; extraversion was an exception. Furthermore, the study revealed that family background only moderates the relationship between openness to experience and entrepreneurial attitudes, with no significant moderating effects observed for other personality traits. These findings suggest a more nuanced understanding of the role of personality traits in shaping entrepreneurial attitudes with the most important social factor, i.e., family background, particularly in the context of emerging economies.

These efforts are crucial for generalizing the findings and thoroughly comprehending the diverse factors influencing entrepreneurial attitudes in social contexts. Ultimately, this research establishes a foundational theoretical link between students' personality traits and entrepreneurial inclinations, offering valuable insights for educators, policymakers, and future researchers in entrepreneurship. These findings may be a guideline for improving entrepreneurial support programs by enhancing the entrepreneurial attitude of freshman students.

## **7. Limitations and Recommendations**

The study acknowledges its contributions but suggests several areas for future research. It highlights the limitation of focusing only on first-year undergraduate students in Kathmandu Valley, recommending broader sampling across Nepal for better generalizability. The reliance on self-reported questionnaires may introduce social desirability and common method biases, suggesting the use of multiple data collection methods or longitudinal studies for more accurate insights. The study also notes the complexity of human behavior, which may involve unmeasured variables influencing the

relationship between personality traits and entrepreneurial attitudes. A cross-sectional design limits the ability to establish causality, so longitudinal studies are recommended. Additionally, the research did not account for cultural factors affecting personality traits and entrepreneurial attitudes, which should be explored in future studies. Despite these limitations, the study provides a foundation for understanding the psychological aspects of entrepreneurship in Nepal. It emphasizes the need to consider individual and contextual factors in promoting entrepreneurial success.

## Acknowledgments

We acknowledge the respondents and anonymous reviewers for contributing to this study and extend our sincere gratitude to the Faculty of Management, Tribhuvan University.

## References

- Adebayo, G., & Kavos, M. (2016). The present attitude of African youth towards entrepreneurship. *International Journal of Small Business and Entrepreneurship Research*, 4(1), 21-38.
- Adetayo, D. (2006). Factors Influencing attitude of youth towards entrepreneurship. *International Journal of Adolescence and Youth*, 13, 127-145. doi:10.1080/02673843.2006.9747970
- Aldrich, H. E., & Jennings, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573-596. doi:10.1016/S0883-9026(03)00011-9
- Allport, G. W. (1937). The functional autonomy of motives. *The American Journal of Psychology*, 141–156. doi:10.2307/1416626
- Al-Ghazali, B.M., Shah, S.H.A., & Sohail, M.S. (2022). The role of five big personality traits and entrepreneurial mindset on entrepreneurial intentions among university students in Saudi Arabia. *Frontier in Psychology*. 13:964875. doi: 10.3389/fpsyg.2022.964875
- Al-Mamary, Y., Abdulrab, M., Alwaheeb, M., & Alshammari, N. (2020). Factors impacting entrepreneurial intentions among university students in Saudi Arabia: testing an integrated model of TPB and EO. *Education + Training*, 62(7/8), 779-803. doi:10.1108/ET-04-2020-0096
- Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics*, 24(3), 233-247.
- Baciu, E.-L., Virgă, D., & Lazăr, T.-A. (2020). What characteristics help entrepreneurs ‘make it’ early on in their entrepreneurial careers? Findings of a regional study from Romania. *Sustainability*, 12, 5028. doi:10.3390/su12125028
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. New York: Holt, Rinehart and Winston.
- Baron, R. A., & Shane, S. (2007). Entrepreneurship: A process perspective. In *The Psychology of Entrepreneurship* (pp. 19-39). Lawrence Erlbaum Associates Publishers.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1–26.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9–30.

- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *The Academy of Management Review*, 13(3), 442–453. doi:10.2307/258091
- Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4), 546–561. doi:10.1037/0021-9010.82.4.546
- Cacija, L.N., Lovrinevic, M., & Bilic, I. (2023). The role of demographic factors and prior entrepreneurial exposure in shaping the entrepreneurial intentions of young adults: the case of Croatia. *Sustainability*, 15, 5151. <https://doi.org/10.3390/su15065151>
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13-39.
- Chandler, G. N., & Jansen, E. (1992). The founder's self assessed competence and venture performance. *Journal of Business Venturing*, 7, 223-236.
- Chen, Y. F., & Lai, M. C. (2010). Factors Influencing the entrepreneurial attitude of Taiwanese tertiary-level business students. *Social Behavior and Personality: An International Journal*, 38(1), 1-12. doi:10.2224/sbp.2010.38.1.1
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). New York: John Wiley & Sons.
- Costa, P., & McCrae, R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653-665. doi:10.1016/0191-8869(92)90236-I
- Costa, P., McCrae, R. R., & Holland, J. L. (1984). Personality and vocational interests in adulthood. *Journal of Applied Psychology*, 69(3), 390-400. doi:10.1037/0021-9010.69.3.390
- Damoah, O. B. (2020). Strategic factors predicting the likelihood of youth entrepreneurship in Ghana: A logistic regression analysis. *World Journal of Entrepreneurship, Management and Sustainable Development*, 16(4), 389-401. doi:10.1108/WJEMSD-06-2018-0057
- Edu Sanjal (2022). *Edu Sanjal*: <https://edusanjal.com/news/grade-12-examinations-2019-results-published-neb/>
- Evans, G. H. (1942). A theory of entrepreneurship. *The Journal of Economic History*, 2, 142-146.
- Fatma, E.B., Mohamed, E.B., Dana, L.P., & Boudabbous, S. (2021). Does entrepreneurs' psychology affect their business venture success? Empirical findings from North Africa. *International Entrepreneurship & Management Journal*, 17, 921–962. <https://doi.org/10.1007/s11365-020-00644-3>
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569-593.
- Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *The Journal of Abnormal and Social Psychology*, 44(3), 329–344. doi:10.1037/h0057198
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26, 431–440. doi:10.1016/j.jbusvent.2010.01.001
- Gautam, D.K., & Gautam, P.K. (2023). Stress and resilience to migrant entrepreneur-managers of small and medium enterprises during COVID-19 pandemic. *Benchmarking: An International Journal*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BIJ-06-2022-0400>

- Gautam, P. K., & Khadka, R. B. (2022). Explaining entrepreneurial success of SMEs entrepreneurs: The role of entrepreneurial characteristics. *Pravaha*, 28(1), 133-146. Doi: [10.3126/pravaha.v28i1.57980](https://doi.org/10.3126/pravaha.v28i1.57980)
- Gautam, P. K., & Pandey, S. (2023). Predicting entrepreneurial intentions of business students: test of integrated moderated model. *THE BATUK : A Peer Reviewed Journal of Interdisciplinary Studies*, 9(1), 24-43. doi:10.3126/batuk.v9i1.51898
- Global Entrepreneurship Monitor (1999). Retrieved July 18, 2023, from *Global Entrepreneurship Monitor*, <http://www.gemconsortium.org>
- Goel, A., Vohra, N., Zhang, L., & Arora, B. (2007). Attitudes of the youth towards entrepreneurs and entrepreneurship: A cross-cultural comparison of India and China. *Indian Institute of Management*, 1-33.
- Goldberg. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48(1), 26-34. doi:10.1037/0003-066X.48.1.26
- Goldberg. (2008). The Eugene-Springfield community sample: Information available from the research participants, *ORI Technical Report*, 48(1).
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles: Sage Publishing. doi:10.1007/978-3-030-80519-7
- Harper, M. (1991). The role of enterprise in poor countries. *Entrepreneurship Theory & Practice*, 15(4), 7-11. doi:10.1177/104225879101500404
- Harris, M. L., & Gibson, S. G. (2008). Examining the entrepreneurial attitudes of US business students. *Education + Training*, 50(7), 568-581. doi:10.1108/00400910810909036
- Helson, R. (1980). Review of Personality: Theory, assessment, and research. *PsycCritiques*, 25(10), 852-852. doi:10.1037/019334
- Hill, F., Henry, C., & Leitch, C. (2005). Entrepreneurship education and training: Can entrepreneurship is taught. *Journal of Education and Training*, 47(2), 98-111.
- Hintikka, J., Eravala, K. T., Lehtinen, U., & Eskola, L. (2022). Let's be entrepreneurs – Finnish youth's attitudes toward entrepreneurship. *Journal of Enterprising Communities*. doi:10.1108/JEC-07-2021-0099
- John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. (L. A. Pervin, & O. P. John, Eds.) *Handbook of Personality: Theory and Research*, 2, 102-138.
- Kanungo, R. N. (1998). *Entrepreneurship and innovation: Models for development*. New Delhi: Sage Publications. doi:10.1177/097135579900800210
- Karimi, S., & Makreet, A. S. (2020). The role of personal values in forming students' entrepreneurial intentions in developing countries. *Frontiers in Psychology*, 11. doi:10.3389/fpsyg.2020.525844
- Khushk, A., Dacholfany, M. I., Abdurohim, D., & Aman, N. (2022). Social learning theory in clinical setting: connectivism, constructivism, and role modeling approach. *Health Economics and Management Review*, 3, 40-50. doi:10.21272/hem.2022.3-04
- Kim, M. S., & Huruta, A. D. (2022). The factors affecting entrepreneurial intention: Why do perceived entrepreneurial capacity, perceived social norm, and attitude towards entrepreneurship matter? *Review of Integrative Business and Economics Research*, 11(3), 99-106.

Kuratko, & Hodgetts. (2001). *Entrepreneurship theory process & practice* (6th ed.). South-Western Australia.

Leff, N. H. (1979). Entrepreneurship and economic development: The problem revisited. *Journal of Economic Literature*, 17(1), 46-64.

Leibenstein, H. (1968). Entrepreneurship and development. *The American Economic Review*, 58(2), 72-83.

Linan, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. doi:10.1111/j.1540-6520.2009.00318.x

Obschonka, M., Rodermund, E. S., Silbereisen, R. K., & Gosling, S. D. (2013). The regional distribution and correlates of an entrepreneurship-prone personality profile in the United States, Germany, and the United Kingdom: A socioecological perspective. *Journal of Personality and Social Psychology*, 105(1), 104–122. doi:10.1037/a0032275

Paniagua, A. G., Leiva, J. C., & Esquivel, R. M. (2022). Entrepreneurial attitude in female Latin American university students: internal and external influences. *Management Research*, 21(3), 284-304. doi:10.1108/MRJIAM-10-2021-1237

Pathirana, L., & Liyanage, P. (2022). Factors affecting entrepreneurial intention among advanced level students in Gampaha district, Sri Lanka. *Conference Paper*, 42-54.

Qualtrics. (2023). *Determining sample size: how to make sure you get the correct sample size*. Retrieved July 13, 2023, from Qualtrics: <https://www.qualtrics.com/au/experience-management/research/determine-sample-size/?rid=ip&prevsite=en&newsite=au&geo=NP&geomatch=au>

Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16(4), 353-385. doi:10.1080/13594320701595438

Riswanto, A. (2016). The role of the entrepreneur in innovation and in economic development. *Advances in Economics, Business and Management Research*, 15. doi:10.2991/gcbme-16.2016.137

Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice*, 15(4), 13-31.

Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28(6), 789–801. doi:10.1177/0146167202289008

Saleh, M., R. M. K., & Qaied, M. M. (2021). Exploring entrepreneurial attitudes among youth in least developed countries: Empirical evidence from Yemen. *Journal of International Business*, 8(1), 71-99. doi:10.17492/jpi.focus.v8i1.812104

Scaringella, L., & Radziwon, A. (2018). Innovation, entrepreneurial, knowledge, and business ecosystems: Old wine in new bottles? *Technological Forecasting and Social Change*, 136, 59-87. Doi: 10.1016/j.techfore.2017.09.023.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217-226.

Sharma, S. (2022). Relationship between entrepreneurial attitude orientation and personality among college students. *International Journal of Science and Research*, 11(6), 573-580. doi:10.21275/SR22605161920

- Simpeh, K. N. (2011). Entrepreneurship theories and empirical research: A summary review of the literature. *European Journal of Business and Management*, 3(6), 1-9.
- Soomro, B., Memon, M., & Shah, N. (2020). Attitudes towards entrepreneurship among the students of Thailand: An entrepreneurial attitude orientation approach. *Education + Training*, 63(2), 239-255. doi:10.1108/ET-01-2020-0014
- Tuan, N., Ha, D., Thao, V., Anh, D., & Hoang, L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review*, 99, 186-193. doi:10.1016/j.childyouth.2019.01.039
- Varalakshmi, C., Srivani, N., & Rao, P. S. (2019). An empirical study on youth perception towards entrepreneurship with reference to Vijayawada city. *International Journal of Advanced Research*, 7(1), 12-22. doi:10.21474/IJAR01/8291
- Wardana, L. W., Handayati, P., Narmaditya, B., Wibowo, A., Patma, T., & Suprajan, S. (2020). Determinant factors of young people in preparing for entrepreneurship: Lesson from Indonesia. *Journal of Asian Finance, Economics and Business*, 7(8), 555–565.
- Wiggins, J. S. (1996). *The five-factor model of personality: Theoretical perspectives*. Guilford Press.
- Zhao, H., & Seibert, S. (2006). The big five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259-271. doi:10.1037/0021-9010.91.2.259.