

## Impact of the Big Five Personality Traits on Entrepreneurial Intentions among Qatar University Students

Noora Ahmad S A Alyafei\*<sup>ID</sup>

Department of Management and Marketing, Qatar University, Doha, Qatar

Received: 22/7/2024  
Revised: 11/8/2024  
Accepted: 2/10/2024  
Published online: 1/9/2025

\* Corresponding author:  
[n\\_al yahri@windowslive.com](mailto:n_al yahri@windowslive.com)

Citation: ALyafei, N. A. S. A. (2025). Impact of the Big Five Personality Traits on Entrepreneurial Intentions among Qatar University Students. *Dirasat: Human and Social Sciences*, 53(2), 8378. <https://doi.org/10.35516/Hum.2025.8378>

### Abstract

**Objective:** This research aimed to assess the impact of the Big Five personality traits on entrepreneurial intentions among Qatar University students.

**Methods:** The researcher applied a descriptive-analytical approach, utilising a questionnaire that included validated scales. The questionnaire was emailed to Qatar University students, resulting in 502 responses from the university community of over 22,000 students. Secondary data were also collected from published research articles.

**Results:** The research confirmed the presence of entrepreneurial intentions among the students, supported by statistically significant relationships between these intentions and the Big Five personality traits. The analysis revealed significant positive correlations between extraversion, agreeableness, conscientiousness, and openness to experience with entrepreneurial intentions, while neuroticism did not exhibit a significant relationship. Additionally, significant positive relationships were found between openness to experience ( $r = 0.187$ ,  $P < .001$ ), conscientiousness ( $r = 0.180$ ,  $P < .001$ ), extraversion ( $r = 0.246$ ,  $P < .001$ ), and agreeableness ( $r = 0.116$ ,  $P = .010$ ) with entrepreneurial intentions. Neuroticism showed no significant negative relationship ( $r = -0.010$ ,  $P = .829$ ) with entrepreneurial intentions in this sample, reaffirming the robustness of the research findings.

**Conclusion:** The research recommends that the study of the Big Five personality traits and their effects on entrepreneurial intentions should be embedded in entrepreneurship education programs and courses. This information will help students understand the impact of their personality traits on their entrepreneurial capabilities and guide them toward enhancing their strengths.

**Keywords:** The Big Five Personality traits; entrepreneurial intentions; entrepreneurship; Qatar University.

### تأثير السمات الشخصية الخمس الكبرى على النوايا الريادية بين طلاب جامعة قطر

نوره أحمد اليافعي\*

جامعة قطر - كلية الإدارة والتسويق

#### ملخص

أهداف البحث: هدف البحث إلى استكشاف العلاقة بين العوامل الخمسة الكبرى للشخصية وهي: الانفتاح على التجربة، الوعي، الانبساط، الوفاق، العصابية، ودراسة علاقة كل منها بنوايا ريادة الأعمال عند طلبة جامعة قطر. المنهجية: طبق الباحث المنهج الوصفي التحليلي، مستخدماً استبياناً يتضمن مقاييس معتمدة. وقد تم إرسال الاستبيان عبر البريد الإلكتروني إلى طلاب جامعة قطر، مما أسفر عن 502 استجابة من مجتمع الجامعة الذي ضم أكثر من 22000 طالب. كما تم جمع البيانات الثانوية من مقالات بحثية منشورة.

النتائج: كشفت النتائج عن وجود نوايا ريادية لدى الطلاب، مدعومة بعلاقات ذات دلالة إحصائية بين هذه النوايا وسمات الشخصية الخمس الكبرى. وأظهر التحليل ارتباطات إيجابية مهمة بين الانبساط، الوفاق، والوعي، والانفتاح على التجربة مع النوايا الريادية، في حين لم تظهر العصابية علاقة مهمة. بالإضافة إلى ذلك، تبين وجود علاقات إيجابية كبيرة بين الانفتاح على التجربة ( $r = 0.187$ ,  $P < .001$ )، والوعي ( $r = 0.180$ ,  $P < .001$ )، الانبساط ( $r = 0.246$ ,  $P < .001$ )، والوفاق ( $r = 0.116$ ,  $P = .010$ ) مع النوايا الريادية. لم تظهر العصابية أي علاقة سلبية كبيرة ( $r = -0.010$ ,  $P = .829$ ) مع النوايا الريادية في هذه العينة.

الخلاصة: يوصي البحث بأن يتم تضمين دراسة السمات الشخصية الخمس الكبرى وتأثيراتها على النوايا الريادية في برامج ودورات تعليم ريادة الأعمال. ستساعد هذه المعلومات الطلاب على فهم تأثير سمات شخصيتهم على قدراتهم الريادية وتوجيههم نحو تعزيز نقاط قوتهم.

الكلمات المفتاحية: السمات الشخصية الخمس الكبرى، النوايا الريادية، ريادة الأعمال، جامعة قطر.



© 2026 DSR Publishers/ The University of Jordan.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY-NC) license <https://creativecommons.org/licenses/by-nc/4.0/>

## 1. Introduction

Amidst the volatile economic conditions faced by countries worldwide, entrepreneurship has emerged as a vital force driving economic growth and social development. Romer (1994) asserts that entrepreneurial activities serve as long-term drivers of economic growth, while researchers recognize their role in generating employment opportunities, goods, and services for the population (Reynolds et al., 2000). Entrepreneurship is also viewed as a solution to pressing economic and social challenges, such as unemployment and rapid inflation (Wennekers et al., 1997). Moreover, Wilson et al. (2009) emphasizes that entrepreneurship extends beyond business planning and company establishment, encompassing the fostering of creativity, innovation, and development. It represents a mindset that motivates individuals to provide value that serves society, the economy, and the surrounding ecosystem.

Entrepreneurs are thus recognized as crucial and impactful members of their societies. By employing entrepreneurial thinking, initiative, and innovation, they create projects and startups that address the needs of their communities, effectively contributing to resolving social problems associated with economic decline, unemployment, and poverty (Opoku Boabeng, 2018). Entrepreneurship, therefore, represents a significant pathway toward progress, advancement, and meeting the needs of individuals and communities.

Consequently, since the turn of the Century, there has been a global inclination towards promoting entrepreneurial thinking and focusing on entrepreneurship. Advanced and developing countries have formulated successive strategic plans and national visions to foster entrepreneurial thinking and support entrepreneurs within their communities. These endeavours extend to higher education institutions and general education, resulting in the global phenomenon of entrepreneurship reaching a high level of maturity and interest. The proliferation of business incubators, professional associations, and trade organizations dedicated to supporting and promoting entrepreneurship and attracting capital and investment further reflects this trend (Al-Shammari & Nasser, 2019).

With the surging interest in entrepreneurship, particularly among entrepreneurs who play a significant role in shaping the economy, many studies have examined the factors that set them apart from the rest of society. These studies seek to understand the personal differences that influence their career aspirations. Research findings consistently indicate that individual characteristics and traits have a discernible impact on their behaviors, aspirations, and performance. Certain traits and personal traits are closely associated with entrepreneurship, influencing individuals' career choices and inclination to establish entrepreneurial ventures. Entrepreneurs possess distinct personal characteristics that differentiate them from other members of society (Sayed & Hassan, 2022).

In this regard, the Big Five personality traits model has emerged as a comprehensive framework that describes an individual's cognitive patterns, emotions, behaviours, and interactions with the environment through five dimensions known as the "Big Five Personality traits": openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Udayanganie, Jusoh, and Chinna 2019). Since the 1980s, this model has been widely employed to study personality traits, as research has demonstrated the influence of these five traits on career choices, including entrepreneurship (Kerr and Kerr, 2018). Moreover, the model has proven effective in predicting and distinguishing entrepreneurs from others (Goldberg, 1990).

Considering that the university stage is a critical period for individuals to make career decisions and that "university students represent potential future candidates for entrepreneurial activities, with some embarking on entrepreneurial ventures during their educational journey" (Yurtkoru et al., 2014), statistics on entrepreneurial intentions and activities among students reveal that 25.7% of students engage in founding entrepreneurial projects during their university studies, while 11.1% own and manage businesses while still studying. Furthermore, 15.7% of students plan to initiate their ventures immediately after graduation, and 30% aspire to become entrepreneurs within five years of their studies (Sieger et al. 2023).

These statistics underscore the importance of exploring entrepreneurial intentions among university students and investigating the personal traits that influence or indicate these intentions during this stage of their lives. Consequently, the researcher aims to conduct this field study to examine the relationship between the Big Five Personality traits and entrepreneurial intentions among students at Qatar University.

The main objective of this research is to measure the impact of the Big Five personality traits on entrepreneurial intentions among Qatar University students. Specifically, the study aims to determine the relationships between these students' five personality traits—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—and entrepreneurial intentions.

This research has both scientific and practical significance. In scientific terms, the study enriches the theoretical literature by exploring the correlation between the Big Five personality factors and entrepreneurial intentions among Qatar University students, filling a critical void in the Arabic academic landscape. By validating and affirming the reliability of established tools like the Big Five personality factors model, this study underpins their efficacy for future research applications, bolstering the foundation for subsequent scholarly investigations.

Practically, the research's focus on university students is pivotal for comprehending the personal determinants influencing their entrepreneurial aspirations. Given that these students represent the future cohort of entrepreneurs, innovators, and leaders, understanding and nurturing their entrepreneurial potential is vital for fostering a vibrant and resilient economic landscape. By aiding entities like the Entrepreneurship Center at Qatar University and other business incubators, this research can facilitate the early identification of students with entrepreneurial inclinations, enabling timely support and guidance to translate intentions into actionable entrepreneurial ventures that benefit the community and local economy. Aligned with the fifth objective of Qatar University's strategic plan (2023-2027), the study enhances the university's role in advancing national economic development by fostering innovation, entrepreneurship, and knowledge transfer into local startups with tangible economic impact. The study catalyses promoting entrepreneurship, as early recognition of entrepreneurial tendencies can inspire students to consider entrepreneurship as a viable career path, contributing to economic diversification. By elucidating the nexus between personal factors and entrepreneurship, the study minimises startup failure rates by identifying projects likely to succeed or falter based on founders' traits. Insights from the study can inform the design of tailored educational and training programs, equipping students with the requisite skills and mindset to navigate the challenges inherent in entrepreneurship, informed by the impact of the Big Five personality factors. Contributing to Qatar Vision 2030's national objectives, the study expands knowledge that empowers Qatar's students and higher education institutions to unearth and nurture local entrepreneurial talent among university students, aligning with the nation's long-term vision for sustainable development.

The research aims to evaluate the influence of the Big Five personality factors on entrepreneurial intentions among Qatar University students. This study seeks to understand the impact of traits such as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism on university students' entrepreneurial aspirations. Specifically, the research intends to explore how these personality factors correlate with and shape students' entrepreneurial intentions, providing insights into the interplay between individual characteristics and entrepreneurial motivations in the context of Qatar University.

### **1.2 Statement of the Problem**

Despite the acknowledged significance of entrepreneurship in bolstering economic diversity and fortifying countries' economic resilience, a notable research gap exists regarding the influence of personal traits on entrepreneurial intentions among university students, particularly within the Arab context. This gap poses a substantial challenge to developing effective educational programs and formulating educational and economic policies to enhance university students' capabilities and skills. Universities play a pivotal role in nurturing human potential that contributes to economic and social progress, particularly in the knowledge-based economy era, which relies heavily on innovation and knowledge. Universities must equip students with advanced technical skills, impart necessary scientific knowledge, and serve as incubators for cultivating future leaders, innovators, and entrepreneurs.

This study explores the impact of the Big Five Personality traits on entrepreneurial intentions among Qatar University students. Investigating these relationships is crucial for understanding how universities can directly contribute to the development of entrepreneurs capable of actively advancing the knowledge economy and innovation, aligning with the significant economic changes and transformations witnessed by the Qatari economy. The National Vision 2030 of Qatar

emphasizes the pivotal role of innovation and entrepreneurship as drivers of growth, underscoring the crucial contribution of the education sector in attaining these objectives.

Moreover, existing studies tend to focus on non-Arab environments, thereby limiting the generalizability of their findings to students in Arab countries due to fundamental cultural differences encompassing social values, educational goals, and the presence of entrepreneurial support systems. Since students represent potential future candidates for entrepreneurial endeavours, some have been selected as the study and research sample even during their university journey. From this perspective, the research problem can be formulated as follows:

"What is the impact of the Big Five Personality traits on entrepreneurial intentions among students at Qatar University?"

Aligned with Qatar's strategic objectives and the importance of entrepreneurs' role in the knowledge-based economy, this study aims to provide new insights into the interaction between personal traits and entrepreneurial intentions. Thus, it supports Qatar's goals of economic diversity and building a strong knowledge economy. It also provides important recommendations for business incubators and policymakers to enhance the entrepreneurial mindset among students.

This study will be the first of its kind to investigate this topic within the context of Qatar University, as no similar studies have been conducted to the researcher's knowledge based on the extensive literature review conducted on the subject.

In short, this research aims to investigate the correlation between the Big Five personality factors and entrepreneurial intentions among students at Qatar University, focusing on specific sub-questions. These include understanding how the openness to experience factor is linked to entrepreneurial intentions, examining the relationship between the conscientiousness factor and entrepreneurial aspirations, exploring how the extraversion factor shapes entrepreneurial intentions, assessing the impact of the agreeableness factor on entrepreneurial aspirations, and analysing how the neuroticism factor influences entrepreneurial intentions among students at Qatar University.

## **2. Literature Review**

Academics have extensively explored the relationship between individual characteristics and aspirations for entrepreneurship in various settings, employing diverse models and theories. This emphasis on entrepreneurial endeavours arises from its pivotal role in fostering economic and societal advancement through job creation, wealth generation, and reduction of unemployment levels. Empirical investigations consistently illustrate the pivotal role of entrepreneurial aspirations in shaping entrepreneurial conduct and establishing fresh business ventures. Inquiries into entrepreneurial inclinations have scrutinized a multitude of factors influencing individuals' proclivity towards entrepreneurship, encompassing education, gender, age, personal attributes, feasibility, cultural influences, and the presence of ethical and institutional backing.

Amidst this field, the Big Five personality traits model emerges as the predominant framework for examining personality traits and their behavioural repercussions, having been widely utilized for numerous years. Studies have revealed the substantial impact of the Big Five traits on individuals' aspirations and decision-making processes, including their inclination towards entrepreneurship. This literature review aims to present precise definitions of the fundamental terms employed in the research.

### **2.1 Major Theories of Personality and Their Constituent Traits**

The exploration of personality serves as a foundational tool for comprehending human actions, recognized by scholars as one of the most intricate subjects investigated within psychology. Definitions aiming to encapsulate the essence of personality exhibit some diversity. Albert characterizes personality as "an individual's unique reactions to social stimuli and their methods of adjusting to social elements in their environment." In contrast, Watson defines it as "comprised of genetics, traditions, personal agreements, individual abilities, and life experiences" (Rabei, 2013). Petrovski delineates personality traits as "established aspects of an individual's conduct that consistently manifest across various scenarios, with traits varying in salience among individuals and contexts, and having the potential for quantification." Zahrani defines personality as "the inherent qualities, whether physical, mental, emotional, social, or acquired, that differentiate an individual, reflecting a relatively consistent readiness for specific behaviors" (Sayed & Hassan, 2022). Costa and McCrae (1992) assert that an individual's personality can be construed as constructs representing relatively steady patterns of

emotions, thoughts, and actions, facilitating the anticipation of recurring behavioral patterns (Pervin 1999).

## **2.2 Personality Assessments and Tests**

Over time, there has been an increasing interest in evaluating personality traits, resulting in various assessments and tests to measure different aspects of personality. These evaluations have practical applications in diverse fields such as management, leadership, personal development, career guidance, employment, and psychological assessment. The most prominent and widely used assessments, as highlighted by Patrik and Nordin (2021), include:

### **2.2.1 Myers-Briggs Type Indicator (MBTI)**

The MBTI, rooted in Carl Jung's psychological types theory, categorises individuals based on four dimensions: extraversion/introversion, sensing/intuition, thinking/feeling, and judging/perceiving. It delineates 16 personality types extensively utilised in managerial, organisational, leadership, and personal growth contexts.

### **2.2.2 DISC Model**

Derived from William Marston's theory, the DISC model assesses four core behavioural traits: Dominance, Influence, Steadiness, and Conscientiousness. Applied in various settings, this model enhances workplace dynamics, boosts productivity, fosters team building, and promotes self-awareness and personal growth.

### **2.2.3 Big Five Personality Traits Model**

Regarded as the most reliable and widely accepted model in contemporary psychology, the Big Five model has been refined by numerous psychologists over several decades. This model evaluates five major dimensions of personality: Extraversion, Agreeableness, Openness, Conscientiousness, and Neuroticism. It is a crucial tool for understanding individual differences across various life domains. Several questionnaires and scales have been developed based on this model, including Goldberg's model (Goldberg, 1990) and Costa and McCrae's (Costa & McCrae, 1992). Goldberg introduced a simplified version in the 1970s and 1980s with 100 easily understandable statements. At the same time, Costa and McCrae further enriched the model by creating the NEO PI-R scale, comprising 240 statements for in-depth personality trait analysis. The NEO PI-R scale has gained prominence in psychological and medical research. For this study, a modern and validated condensed version of Goldberg's questionnaire, consisting of 50 straightforward statements, was utilized to collect initial data from university students.

## **2.3 Personality Theories in Entrepreneurship Context**

Personality theories are crucial in entrepreneurship research, broadly categorised into trait and behavioral theories.

The trait and personal traits theory is among the earliest approaches aimed at identifying common characteristics in entrepreneurs. This theory suggests that specific personal traits drive individuals towards entrepreneurship and differentiate them from others. It strives to pinpoint traits that distinguish entrepreneurs and relies on descriptive analyses of successful figures in the entrepreneurial realm. Research by Brandstatter (2010) indicates that traits like a strong need for achievement, independence, intuition, and innovation are associated with entrepreneurs and aid in their recognition. However, this theory has faced critique due to the rarity of these traits aligning in a single individual and their varying presence among different individuals, affecting their entrepreneurial inclinations (Sayed & Hassan, 2022).

The Behavioral Theory, stemming from Behavioral Leadership Theory, views entrepreneurship through the lens of effective managerial performance. It concentrates on the behaviours and skills entrepreneurs demonstrate in their entrepreneurial pursuits. In contrast to the trait-based perspective, this theory highlights that behaviours and skills can be nurtured and enhanced through effective training, suggesting that entrepreneurial abilities are not solely inherent (Sayed & Hassan, 2022).

## **2.4 Entrepreneurial aspirations and influential characteristics**

The concept of entrepreneurial intent refers to the initial cognitive and motivational state that precedes the decision to embark on a business venture. It encompasses the prior determination or resolve to initiate a business endeavor or undertake a new project (Krueger, 2017). Intentions are commonly seen as the most reliable indicator of an individual's intended future actions, including entrepreneurial actions. Many scholars argue that entrepreneurial behavior is a deliberate and intentional act that can be forecasted through entrepreneurial intentions (N. et al., 2000). Empirical research consistently

highlights the significant impact of entrepreneurial intentions on the actual establishment and launch of new enterprises. As a result, academics are increasingly exploring the development of entrepreneurial intentions and the factors that influence them, considering them as valuable and practical predictors of future entrepreneurial behaviors (Alshagawi & Ghaleb, 2022). The terms "entrepreneurial intention" and "entrepreneurial intentions" are used interchangeably and carry the same connotation.

### 2.5 The correlation between the Big Five personality traits and entrepreneurial aspirations

The Big Five Personality Traits Model defines an individual's attributes, thought patterns, emotions, and behaviors and how they interact with changes in their environment through five dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Udayanganie et al., 2019). The differentiation between entrepreneurs and non-entrepreneurs can be made based on their personality traits using the Big Five model (Goldberg, 1990). These five primary traits are summarized as follows:

**Openness to experience**, also known as openness to new experiences, this trait represents the degree of an individual's creativity, genuineness, and willingness to partake in novel activities (Goldberg, 1990). Open individuals seek innovation, possess imagination, and are always eager for unconventional experiences (Jarbouli & Chikha, 2018). They typically exhibit creativity, independence, non-conformity, and possess a distinct way of thinking compared to others (Costa & McCrae, 1992). Individuals scoring high in openness demonstrate broad intellectual curiosity and innovative thinking, while those scoring low tend to be conventional and focused on fewer interests (Laura, 2011).

**Conscientiousness**, also referred to as dedication, this trait reflects an individual's level of efficiency, organization, and discipline (Goldberg, 1990). Conscientious individuals focus on their objectives, meticulously plan their actions, and follow through on them (Jarbouli & Chikha, 2018). They are highly focused, disciplined, careful, reliable, and organized, whereas those with low conscientiousness are easily distracted, disorganized, lenient, and spontaneous (Laura, 2011). Conscientiousness mirrors individual motivations, diligence, perseverance, and aspirations for success (Goldberg, 1990).

**Extraversion**, individuals with high extraversion are sociable, friendly, talkative, and energetic (Goldberg, 1990). They maintain a positive outlook, motivate others to take initiative, and exhibit optimism and social engagement (Costa & McCrae, 1992). Conversely, those with lower extraversion prefer to remain in the background, are reserved in speech, and are less proactive in their approach to work. High extraversion is characterized by enjoying attention, engaging with groups, and possessing abundant energy (Laura, 2011).

**Agreeableness** reflects an individual's inclination to be tolerant, helpful, considerate of others, and to earn people's trust (Goldberg, 1990). Agreeableness propels individuals towards forgiveness, warmth, integrity, humility, and empathy (Ahmed et al., 2020). Highly agreeable individuals appear kind-hearted, compassionate, and tolerant, while those lower in agreeableness may come across as manipulative, selfish, and skeptical (Goldberg, 1990). Individuals high in agreeableness are friendly and adept at adapting to and interacting with others, whereas those lower in agreeableness tend to be skeptical, argumentative, and less sociable (Laura, 2011).

**Neuroticism** pertains to emotional stability and gauges an individual's tendency towards tension, mood swings, anxiety, and susceptibility to negative or unpleasant emotions (Goldberg, 1990). It describes an individual's inclination to be nervous, irritable, or lose composure (Costa & McCrae, 1992). Neurotic individuals are quick to react, prone to depression, unreliable, moody, unstable, and exhibit low self-efficacy (Ahmed et al., 2020). High neuroticism is associated with negative emotions such as anxiety, anger, or depression, while low neuroticism indicates emotional stability, adaptability, calmness, and the ability to manage personal impulses and stress (Laura, 2011).

### 2.6 Impact of the Big Five personality traits on entrepreneurial intentions

Prior research and literature have extensively explored the impact of the Big Five personality traits on entrepreneurial intentions. These studies have examined how characteristics such as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism can shape individuals' inclinations towards entrepreneurship.

While Seyyed and Hassan (2022) did not find a significant relationship between entrepreneurial orientation and the Big

Five traits, other research has highlighted a strong connection between these traits and entrepreneurial intentions. Bazkiaei et al. (2020), Şahin, Karadağ, and Tuncer (2019), Murugesan and Jayavelu (2017), and Al-Ghazali, Shah, and Sohail (2022) have underscored the influence of the Big Five traits on entrepreneurial intentions, although they did not delve into the specific impacts of each trait.

Studies by Al-Anaz (2021), Sahinidis et al. (2020), Awwad and Al-Aseer (2021), Ahmed, Khattak, and Anwar (2020), Biswas and Verma (2022), Butz et al. (2018), and Ettis and Kefi (2016) have indicated a positive relationship between conscientiousness and entrepreneurial intentions. However, Purwana, Suhud, and Wibowo (2018) found either no effect or a weak influence, while Luc (2022) reported a negative impact of conscientiousness on entrepreneurial intentions in their study group.

Regarding agreeableness, Al-Anaz (2021), Luc (2022), and Butz et al. (2018) have shown a positive association with entrepreneurial intentions. In contrast, Awwad & Al-Aseer (2021), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), and Biswas and Verma (2022) did not find a significant effect. Sahinidis et al. (2020) and Ettis and Kefi (2016) even identified a negative impact of agreeableness on entrepreneurial intentions.

Studies by Luc (2022), Sahinidis et al. (2020), Awwad and Al-Aseer (2021), and Ettis and Kefi (2016) have demonstrated a positive correlation between extraversion and entrepreneurial intentions. However, other researchers like Al-Anaz (2021), Murugesan & Jayavelu (2017), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), Biswas and Verma (2022), and Butz et al. (2018) did not observe a significant effect. None of the studies reported a negative impact of extraversion on entrepreneurial intentions.

Interestingly, Purwana, Suhud, and Wibowo (2018) and Ettis and Kefi (2016) discovered a positive relationship between neuroticism and entrepreneurial intentions, contrary to expectations. However, Awwad and Al-Aseer (2021) and Ahmed, Khattak, and Anwar (2022) found no substantial impact. In contrast, studies by Al-Anaz (2021), Udayanganie, Jusoh, and Chinna (2019), Luc (2022), Sahinidis et al. (2020), Biswas and Verma (2022), and Butz et al. (2018) revealed a negative influence of neuroticism on entrepreneurial intentions, suggesting that maintaining low neuroticism levels is vital for emotional stability and entrepreneurial success.

Udayanganie, Jusoh, and Chinna (2019), Luc (2022), Sahinidis et al. (2020), Awwad and Al-Aseer (2021), and Ettis and Kefi (2016) have all demonstrated a significantly positive impact of openness to experience on entrepreneurial intentions. Conversely, Al-Anaz (2021), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), Biswas and Verma (2022), and Butz et al. (2018) did not find a substantial effect. None of the studies reported a negative impact of openness to experience on entrepreneurial intentions.

In conclusion, while there is general consensus on the significance of the Big Five personality traits in influencing entrepreneurial intentions, variations and contradictions in findings suggest the presence of additional factors—such as personal, environmental, cultural, or economic influences—that may interact with these traits. Differences could also stem from using diverse measurement scales within the same model.

### **3. Methodology**

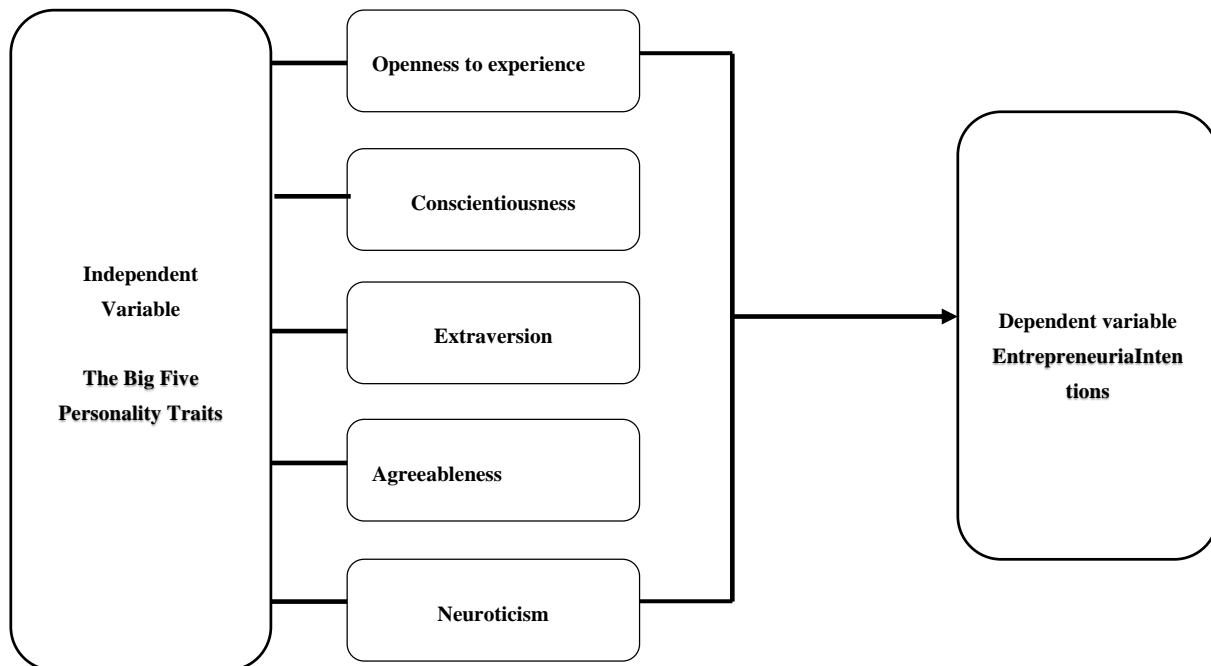
#### **3.3 Research Methodology**

The researcher applied a descriptive-analytical approach, utilizing a questionnaire that includes validated scales to measure the Big Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) and entrepreneurial intentions and explore their potential relationship. The questionnaire was emailed to Qatar University students, resulting in 502 responses from the university community. Secondary data were also collected from published research articles.

This methodology was chosen to obtain comparable primary data, enabling the identification of similarities and differences between the selected sample and other studies conducted in similar contexts. Surveys are relatively effective for data collection and are commonly used in studies that use individuals as units of measurement and analysis.

### 3.1 Research Model

Based on the review of theories and literature on the Big Five personality traits and entrepreneurial intentions, as well as the examination of previous studies and the discussion of data collection tools used, it can be assumed that there is a statistically significant positive relationship between the Big Five personality traits (independent variable) and entrepreneurial intentions (dependent variable). To measure this relationship, the questionnaire will assess the impact of the Big Five personality traits—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—on entrepreneurial intentions. This approach, illustrated in Figure 1, will allow for an evaluation of the impact of each trait on entrepreneurial intentions and the identification of the most influential traits.



**Figure 1. Research Model - Big Five Personality traits and their Relationship with Entrepreneurial Intentions**

### 3.2 Study Hypotheses

H1/ There are entrepreneurial intentions among students at Qatar University.

H2/ Each of the Big Five personality traits influences entrepreneurial intentions among students at Qatar University.

H3/ There is a statistically significant positive relationship between the Big Five personality traits and entrepreneurial intentions among students at Qatar University.

### 3.3 Study Population and Sample

The research population includes all the 22000 students at Qatar University. To select a representative sample of this population, simple random sampling was used according to the well-known formula by Krejcie and Morgan, which is followed by all information and survey collection platforms worldwide (SurveyMonkey, 2024) to determine the sample size as follows:

Where  $n$  represents the sample size,  $z$  represents the confidence level of 95% (1.96),  $p$  represents the proportion of the characteristic in the population (0.5), and  $d$  represents the margin of error (0.05). The population size of Qatar University is approximately 22,000 students, while the study audience is 502. For a population of about 22,000 students, the sample size should be 100. After distribution for four weeks in March and June 2024, 502 complete surveys were obtained and used for analysis. However, a larger sample size of 502 students generally leads to increased precision and reduces the margin of error in estimates.



This method was chosen as it is one of the most suitable probabilistic sampling methods for quantitative studies. It relies on the principle of providing equal opportunities for selecting sample elements from the original population, ensuring a simple random sample that is highly representative of the study population's characteristics. Thus, this method provides a statistically significant sample that can be relied upon to generalise results, with the accuracy and objectivity of the collected data ensured by the random selection of respondents representing all community segments in comparable proportions.

The survey targeted registered students at Qatar University who were chosen for their potential as future candidates for entrepreneurial activities at Qatar's leading national university. The survey was distributed to this population in close collaboration with the Institutional Survey Research Department to ensure broad participation. The Institutional Review Board Committee at Qatar University obtained ethical approval for the study (QU-IRB 051/2024-EM). Before answering the survey questions, all participating students provided explicit consent online.

Female students constitute 73% of the sample, and males make up 27% of it. Qataris comprise 60% of the sample, with non-Qataris accounting for 40%. The sample is distributed across various colleges, with the College of Administration and Economics ranking highest at 26%, followed by the College of Arts and Sciences at 23%, and the College of Engineering at 21%. Bachelor's degree holders represent 82% of the sample, while postgraduate students make up 18%.

502 completed questionnaires were received, constituting a robust, simple random sample with a strong response rate. These responses offer diverse and comprehensive data for analyzing the relationship between the Big Five personality traits and entrepreneurial intentions. This data is a solid foundation for accurately assessing the study's hypotheses and gaining valuable insights into how these traits influence students' entrepreneurial behaviours.

### **3.4 Questionnaire development**

The components of the independent variable (Big Five personality traits) were identified using an updated questionnaire based on Goldberg's (1992) adopted scale, widely recognized in previous studies as the primary model for identifying and measuring personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The dependent variable (entrepreneurial intentions) items were selected from a study conducted by Ben Hamed and Ben Habirsh (2021) on the impact of education quality on entrepreneurship among university graduates.

The questionnaire is divided into three main sections: Demographic Questions, Personality Traits, and Entrepreneurial Intention. Each section aims to gather specific types of information from respondents.

The **Demographic Questions** section collects essential background information from participants. It includes queries about gender, with options for "Male" and "Female," and nationality, where respondents can choose between "Diagonal" and "Non-Qatari." Additionally, it asks about the participant's college affiliation, providing choices from various academic fields such as Management and Economics, Engineering, and Medicine. Lastly, respondents indicate their educational level from options including Undergraduate, Master's Degree, PhD Degree, or Diploma. This information helps in understanding the respondent's context and background, which is crucial for analyzing the data within specific demographic categories.

The **Personality Traits** section comprises 50 items designed to assess various aspects of an individual's personality. Each statement is evaluated on a scale from 1 to 5, where 1 represents strong disagreement and 5 represents strong agreement. The statements cover a broad range of personality traits, including sociability, conscientiousness, emotional stability, and openness to new experiences. This section aims to provide a nuanced profile of the respondent's personality by capturing their tendencies and responses to different scenarios.

The **Entrepreneurial Intention** section contains 5 items that focus on the respondent's motivation and likelihood to pursue entrepreneurial activities. Respondents rate their agreement with statements such as "I have a strong determination to create my own business project" and "The possibility that I will start and run my own business is very high" on a scale from 1 to 5. This section is intended to gauge the respondent's inclination towards entrepreneurship and their perceived feasibility of starting their own business.

### **3.5 The Five-Factor Personality Inventory**

The Five-Factor Personality Inventory was developed by Costa and McCrae (1992) and translated into Arabic and adapted to the Qatari context by the author of this study (2024) for her master study. This inventory aims to measure the

five major personality factors using 50 items, encompassing five subscales:

- **Neuroticism:** Consists of 10 items that address psychological traits such as anxiety, hostility, depression, self-awareness, impulsivity, and irritability. Measured by items (6, 11, 21, 26, 36, 41, 51, 56), with reverse items being (1, 31, 16, 46).
- **Extraversion:** Comprises 10 items that cover social traits, optimism, assertiveness, activity, sensation-seeking, and positive emotions. Measured by items (2, 7, 22, 32, 37, 47, 52), with reverse items being (12, 27, 42).
- **Openness to Experience:** Consists of 10 items related to traits such as imagination, aesthetic appreciation, curiosity, intelligence, ideas, and values. Measured by items (13, 28, 43), with reverse items being (3, 8, 18, 23, 33, 38, 48).
- **Agreeableness:** Contains 10 items addressing traits such as trust, altruism, compliance, modesty, forgiveness, and affection. Measured by items (4, 19, 34, 49), with reverse items being (9, 14, 24, 29, 39, 44).
- **Conscientiousness:** Consists of 10 items focusing on traits like competence, orderliness, responsibility, achievement motivation, self-discipline, prudence, and independence. Measured by items (5, 10, 20, 25, 35, 40, 50), with reverse items being (15, 30, 45).

Each item is rated on a scale from 1 to 5, except for reverse items which are scored in the opposite direction (5 to 1).

Each student was asked to respond to each item by selecting the appropriate rating on a scale ranging from (1) to (5). The ratings are as follows: (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly Agree.

### 3.6 Psychometric Conditions for the Five-Factor Personality Inventory (NEO-FFI-S):

#### 1. Scale Validity:

##### a. Internal Consistency Validity:

To assess internal consistency, the researcher administered the scale to a pilot sample and calculated it by determining the correlation coefficients between the scores on each item and the total score for the factor to which the item belongs. The following table shows the correlation coefficients for each item with the total score of the factor it belongs to in the Five-Factor Personality Inventory.

**Table 1: Correlation coefficients of each item with the total score of the factor it belongs to in the five-factor personality inventory**

Conscientiousness	Item	Agreeableness	Item	Openness to Experience	Item	Extraversion	Item	Neuroticism	Item
0.677**	5	0.442**	4	0.558**	3	0.606**	2	0.531**	1
0.718**	10	0.712**	9	0.21*	8	0.690**	7	0.562**	6
0.478**	15	0.629**	14	0.553**	13	0.275**	12	0.514**	11
0.327**	20	0.751**	19	0.784**	18	0.556**	17	0.654**	16
0.541**	25	0.643**	24	0.651**	23	0.473**	22	0.658**	21
0.229*	30	0.638**	29	0.682**	28	0.677**	27	0.790**	26
0.581**	35	0.579**	34	0.29*	33	0.604**	32	0.663**	31
0.717**	40	0.574**	39	0.589**	38	0.766**	37	0.698**	36
0.637**	45	0.556**	44	0.345*	43	0.635**	42	0.437**	41
0.581**	50	0.486**	49	0.643**	48	0.475**	47	0.554**	46

From the previous Table [number], it is evident that the correlation coefficients are high and statistically significant at the levels of (0.01) \*\* and (0.05) \* for all factors, indicating the consistency of the scale and the coherence of its items, thus demonstrating its validity.

#### 2. Scale Reliability:

The reliability of the inventory was assessed using several methods, including:

**a. Test-Retest Reliability:**

The researcher re-administered the scale to the pilot sample two weeks after the initial administration. The reliability coefficients for each dimension between the two administrations were calculated and are presented in the following table:

**Table 2: Reliability Coefficients Using the Test-Retest Method**

Trait	Stability Coefficient
Neuroticism	.0828
Extraversion	0.886
Openness to Experience	0.836
Agreeableness	0.916
Conscientiousness	0.966

From the previous Table, it is evident that the reliability coefficients are statistically significant at the (0.01) level.

**b. Cronbach's Alpha Reliability:**

Cronbach's alpha coefficients were calculated for each dimension of the Five-Factor Personality Inventory as well as for the overall score of the scale. The researcher found that the alpha values were (0.74) for Neuroticism, (0.71) for Extraversion, (0.73) for Openness to Experience, (0.76) for Agreeableness, and (0.84) for Conscientiousness. The overall alpha coefficient for the scale was (0.76). All these values are high, indicating that the inventory has strong psychometric efficiency with the provided reliability indicators and validity evidence, allowing for its use and confidence in the results for the current study.

**3.7 Data Analysis**

After estimating the questionnaire scores, descriptive statistics were employed to summarize the demographic characteristics of the participants. This initial analysis offered a comprehensive overview of the study sample and its fundamental characteristics. Subsequently, the preliminary data underwent statistical analysis using SPSS software. This analysis included computing the Pearson correlation coefficient to assess the strength and significance of relationships between study variables and testing correlations among them. Additionally, simple linear regression was employed to quantify the impact of independent variables on the dependent variable.

**4. Presentation and Analysis of Study Results**

The following lines present a detailed analysis of the collected questionnaire data to explore the relationship between the Big Five personality traits and entrepreneurial intentions among Qatar University students. We then discuss these results to address the main and sub-questions posed to achieve the study objectives.

Table 1 provides demographic data of the sample, indicating that females constitute 73% and males 27% of the sample. Qataris comprise 60% of the sample, with non-Qataris accounting for 40%. The sample is distributed across various colleges, with the College of Administration and Economics ranking highest at 26%, followed by the College of Arts and Sciences at 23%, and the College of Engineering at 21%. Bachelor's degree holders represent 82% of the sample, while postgraduate students make up 18%. This diversity in the sample provides a comprehensive representation of the study population and its characteristics.

**Table 1. Demographic data for the study sample**

	Category	No.	Percent
Type	Male	135	27%

	Category	No.	Percent
	Feminine	367	73%
Nationality	Qatari	302	60%
	Non-Qatari	200	40%
College	Arts and Sciences	116	23%
	Administration and Economics	132	26%
	Medicine and health sciences	45	9%
	Education	64	13%
	Engineering	104	21 %
	Law and Sharia	41	8%
Educational level	Bachelor's	410	82%
	Postgraduate	92	18%

Table 2 below presents the distribution of the Big Five personality traits and entrepreneurial intentions among Qatar University students, highlighting the different dimensions of each trait and their impact on the students.

**Table 2. Descriptive Statistics for the Big Five Personality Traits and Entrepreneurial Intentions**

Trait	No	Average	Standard Deviation
Extroversion	502	3.29	0.43
Agreeableness	502	3.29	0.37
Consciousness	502	3.25	0.41
Neuroticism	502	3.30	0.67
Openness To Experience	502	3.12	0.41
Entrepreneurial Intentions	502	3.17	1.12

Regarding extraversion, students exhibit an average score of 3.29 with a standard deviation of 0.43, indicating considerable variability in their levels of extraversion. This diversity reflects individual differences in social interaction and comfort in social settings, directly impacting their ability to establish robust social networks—an essential aspect of entrepreneurship.

Regarding agreeableness, which signifies cooperative behaviour, students average 3.29 with a lower standard deviation of 0.37. This consistency suggests high cooperation and mutual understanding among students, which benefits environments requiring collaboration and positive interactions.

Consciousness, with an average score of 3.25 and a standard deviation of 0.41, indicates varying levels of diligence and self-discipline among students. This variation underscores differences in how students manage responsibilities and commit to achieving their goals, which is crucial for success in entrepreneurial ventures.

Neuroticism, averaging 3.30 with a standard deviation of 0.67, reflects significant diversity in stress tolerance levels among students. Higher neuroticism levels may challenge handling entrepreneurial pressures that demand emotional stability and effective stress management.

Openness to experience, scoring an average of 3.12 with a standard deviation of 0.41, indicates a moderate inclination among students to explore new ideas and experiences. This trait is foundational for fostering innovation and creativity within entrepreneurship.

Entrepreneurial intentions among students exhibit substantial variation, averaging 3.17 with a standard deviation of 1.12. This variability highlights significant differences in students' aspirations toward entrepreneurship and venture creation, offering valuable insights for designing educational programs and support initiatives to motivate and enhance these intentions.

Table (3) presents the relationship between entrepreneurial intentions and the Big Five personality traits among Qatar University students. The correlation coefficients indicate positive and negative associations between entrepreneurial intentions and various personality traits, emphasising the statistical significance of these relationships. All statistical analyses maintained a significance level of  $p < 0.05$ .

**Table 3. Correlation coefficients between entrepreneurial intentions and the five personality traits**

Trait	Extroversion	Agreeableness	Consciousness	Neuroticism	Openness To Experience
Entrepreneurial intentions	<b>.246**</b>	<b>.116**</b>	<b>.180**</b>	<b>-.010</b>	<b>.187**</b>
P-value	<b>.000</b>	<b>.010</b>	<b>.000</b>	<b>.829</b>	<b>.000</b>

A positive and statistically significant correlation ( $r = .246$ ,  $P < .001$ ) between extraversion and entrepreneurial intentions suggests that students with higher extraversion levels are more inclined towards entrepreneurship. Similarly, a positive and statistically significant correlation ( $r = .116$ ,  $P = .010$ ) exists between agreeableness and entrepreneurial intentions, indicating that students demonstrating cooperative and kind traits also show some interest in entrepreneurship.

Furthermore, a positive and statistically significant correlation ( $r = .180$ ,  $P < .001$ ) is observed between consciousness and entrepreneurial intentions, highlighting that students with strong conscientious traits like responsibility and organisation are likelier to pursue entrepreneurial endeavours.

In contrast, the negative and non-significant correlation ( $r = -.010$ ,  $P = .829$ ) between neuroticism and entrepreneurial intentions suggests that levels of anxiety or neuroticism do not significantly influence students' entrepreneurial aspirations.

Lastly, a positive and statistically significant correlation ( $r = .187$ ,  $P < .001$ ) between openness to experience and entrepreneurial intentions indicates that students who are curious and inclined to explore new ideas and experiences are more likely to engage in entrepreneurial activities.

#### **4.1 Summary of Correlation Analysis**

The results indicate that certain personality traits (extraversion, agreeableness, consciousness, and openness to experience) are positively and statistically significantly associated with entrepreneurial intentions among Qatar University students.

The results show no statistically significant correlation between neuroticism and entrepreneurial intentions among Qatar University students.

These findings emphasise the importance of personality traits in shaping entrepreneurial intentions and provide valuable evidence that can be used to develop educational and training programs that enhance these intentions among entrepreneurial students.

Table (4) presents the results of linear regression analysis investigating the influence of the Big Five personality traits on entrepreneurial intentions among Qatar University students. The model indicates a moderate correlation coefficient ( $R = 0.330$ ), suggesting a meaningful relationship between the independent variables (Big Five traits) and the dependent variable (entrepreneurial intentions). The adjusted R-squared value of 0.10 indicates that the Big Five personality traits can explain approximately 10% of the variance in entrepreneurial intentions.

**Table 4. Results of Entrepreneurial Intentions Regression Analysis**

Variables	$\beta$ value	T	Sig.
Constant	6.169	1.972	<b>.049</b>
Extroversion	.324	5.324	<b>.000</b>
Agreeableness	-.011	-.132	<b>.895</b>
Consciousness	.216	2.991	<b>.003</b>
Neuroticism	-.155	-2.425	<b>.016</b>
Openness To Experience	.249	2.940	<b>.003</b>

The analysis of variance (ANOVA) shows a significant F-value of 12.089 ( $P < .001$ ), indicating that the overall model is statistically significant in predicting entrepreneurial intentions. Examining the individual effects of the Big Five traits on entrepreneurial intentions, extraversion demonstrates a strong and statistically significant positive effect ( $\beta = .324$ ,  $P < .001$ ). This finding suggests that students with extraverted characteristics, emphasising networking and social interaction, tend to have stronger entrepreneurial intentions. In contrast, agreeableness does not show a significant effect ( $\beta = -.011$ ,  $P = .895$ ), indicating that traits related to cooperation and kindness do not directly influence entrepreneurial aspirations in this sample. Consciousness exhibits a significant positive effect ( $\beta = .216$ ,  $P = .003$ ), suggesting that traits such as discipline and perseverance positively impact entrepreneurial intentions among students. Neuroticism shows a significant negative effect ( $\beta = -.155$ ,  $P = .016$ ), indicating that higher levels of anxiety and emotional instability associated with neuroticism may hinder entrepreneurial aspirations. Lastly, openness to experience demonstrates a significant positive effect ( $\beta = .249$ ,  $P = .003$ ), underscoring the importance of curiosity and a willingness to explore new ideas as motivators for entrepreneurial pursuits.

When comparing correlation analysis with regression analysis, it is important to recognise their distinct purposes and methodologies. Correlation analysis assesses the strength and direction of the relationship between two variables, such as personality traits and entrepreneurial intentions. It indicates whether a relationship exists but does not explain causation or the influence of other variables. In contrast, regression analysis extends this by examining how a group of variables collectively influences a dependent variable, like students' entrepreneurial intentions. This approach helps to understand the combined impact of personality traits, considering their individual effects and interactions.

Regression analysis provides a more nuanced understanding of how specific factors—like personality traits—affect outcomes, such as entrepreneurial intentions. It can uncover which traits, such as extraversion or consciousness, have significant impacts and to what extent. However, discrepancies between correlation and regression results may arise due to issues like multicollinearity, where relationships between independent variables complicate the interpretation and accuracy of estimates.

Overall, regression analysis offers deeper insights into the complex interplay of traits influencing entrepreneurial intentions, thereby supporting the design of targeted educational and training initiatives tailored to enhance students' entrepreneurial skills and motivations.

## 5. Discussion of Results

Based on the analysis results, it can be concluded that Qatar University students have entrepreneurial intentions. This conclusion is drawn from the statistically significant relationships between entrepreneurial intentions and the Big Five personality traits, indicating that students expressed their intentions to become entrepreneurs through their questionnaire responses.

The correlation analysis table (Table 3) shows statistically significant positive relationships between four Big Five personality traits (extraversion, agreeableness, consciousness, and openness to experience) and entrepreneurial intentions. Neuroticism was the only trait that did not show a statistically significant relationship with entrepreneurial intentions.

The study found statistically significant positive relationships between several Big Five personality traits and entrepreneurial intentions among students at Qatar University. Specifically, there is a significant positive relationship

between openness to experience and entrepreneurial intentions ( $r = 0.187$ ,  $P < .001$ ), conscientiousness and entrepreneurial intentions ( $r = 0.180$ ,  $P < .001$ ), extraversion and entrepreneurial intentions ( $r = 0.246$ ,  $P < .001$ ), and agreeableness and entrepreneurial intentions ( $r = 0.116$ ,  $P = .010$ ), although the latter is relatively weak. However, there is no statistically significant negative relationship between neuroticism and entrepreneurial intentions ( $r = -0.010$ ,  $P = .829$ ), indicating that neuroticism is not significantly associated with entrepreneurial intentions in this sample.

### **5.1 Comparison with Previous Studies**

The study reveals a statistically significant positive relationship between conscientiousness and entrepreneurial intentions, aligning with numerous prior studies (Al-Anaz, 2021; Sahinidis et al., 2020; Awwad & Al-Aseer, 2021; Ahmed et al. (2020); Biswas & Verma, 2022; Butz et al., 2018; Ettis & Kefi, 2016) that also identified conscientiousness as a catalyst for entrepreneurial success. This finding suggests that conscientious individuals exhibit enhanced organisational skills, responsibility, and commitment—essential traits in entrepreneurship. The researcher posits that high conscientiousness may stem from personal drives for diligence, perseverance, and self-achievement, which motivate entrepreneurial pursuits. Conscientiousness underscores efficiency, discipline, and adeptness in planning and organising, pivotal qualities for realising entrepreneurial intentions. In contrast, this study diverges from research such as Purwana, Suhud, and Wibowo (2018) in Indonesia, which found no impact of conscientiousness, and Luc (2022) in Vietnam, where conscientiousness showed a negative influence on entrepreneurial intentions. These disparities could arise from cultural nuances, economic contexts, or variations in sample characteristics, influencing how conscientiousness shapes entrepreneurial motivations.

The study showed a statistically significant positive relationship between agreeableness and entrepreneurial intentions, although this correlation is relatively weak. This finding aligns with the studies of Al-Inaz (2021), Luc (2022), and Butz et al. (2018), which found a positive impact of agreeableness on entrepreneurial intentions. This suggests that agreeableness may enhance cooperation and teamwork, useful skills in entrepreneurship. However, the result is somewhat similar to the studies by Awwad and Al-Aseer (2021), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), and Biswas and Verma (2022), which found a weak impact of this trait on entrepreneurial intentions. It contrasts with the studies by Sahinidis et al. (2020) and Ettis and Kefi (2016), which found a negative impact of agreeableness on entrepreneurial intentions. The researcher believes that individuals with high agreeableness tend to be cooperative and supportive, with a strong sense of empathy and consideration for others. These positive traits help individuals build strong and sustainable relationships and, under the right circumstances, may drive them to start their projects to support others socially and economically, igniting entrepreneurial spirit. On the other hand, excessive agreeableness might lead to avoiding necessary confrontations, hesitating to make tough decisions, and avoiding conflicts, which are essential in entrepreneurship. This could affect their entrepreneurial intentions and ability to start or succeed in their ventures.

The study establishes a statistically significant positive relationship between extraversion and entrepreneurial intentions, consistent with research by Luc (2022), Sahinidis et al. (2020), Awwad and Al-Aseer (2021), and Ettis and Kefi (2016), which found a favourable impact of extraversion on entrepreneurial intentions. This indicates that extraversion bolsters communication skills and self-assurance, pivotal in entrepreneurship. However, the findings diverge from studies by Al-Anaz (2021), Murugesan and Jayavelu (2017), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), Biswas and Verma (2022), and Butz et al. (2018), which reported either a weak effect or no impact of extraversion on entrepreneurial intentions. This disparity may stem from differences in sample demographics or cultural contexts across studies. Individuals with high extroversion typically excel in building relationships, effective communication, and inspiring others. They thrive on attention, which boosts their entrepreneurial ambitions and drives them to create successful ventures. However, excessive extraversion may lead them to prioritise social interactions over crucial tasks, potentially undermining productivity, focus, and entrepreneurial intentions.

The study reveals a statistically significant positive relationship between openness to experience and entrepreneurial intentions, consistent with findings from Udayanganie, Jusoh, and Chinna (2019), Luc (2022), Sahinidis et al. (2020), Awwad and Al-Aseer (2021), and Ettis and Kefi (2016). This suggests that openness to experience enhances creativity and

intellectual flexibility, critical traits in entrepreneurship. In contrast, this study diverges from research by Al-Anaz (2021), Purwana, Suhud, and Wibowo (2018), Ahmed, Khattak, and Anwar (2020), Biswas and Verma (2022), and Butz et al. (2018), which reported either a weak or negligible effect of openness to experience on entrepreneurial intentions. These differences may stem from cultural variations or the characteristics of individuals sampled in these studies. According to the researcher's perspective, entrepreneurial ventures are not exclusively driven by novel ideas. Many successful projects are rooted in traditional or previously implemented concepts. This suggests that individuals motivated by openness to experience may be inclined to explore diverse avenues in entrepreneurship, even if they do not necessarily introduce groundbreaking innovations. This view is supported by numerous real-world examples of successful entrepreneurs who have leveraged existing ideas or adapted them creatively to achieve success.

The study found no statistically significant relationship between extraversion and entrepreneurial intentions, aligning with findings from Awwad and Al-Aseer (2021) and Ahmed, Khattak, and Anwar (2020), which also reported either no effect or a weak effect of extraversion on entrepreneurial intentions. This lack of significant correlation may be attributed to the absence of high stress or anxiety levels among the study samples. In contrast, this study contrasts with the findings of Purwana et al. (2018) and Ettis & Kefi (2016), which unexpectedly showed a positive effect of extraversion on entrepreneurial intentions. Furthermore, studies by Al-Anaz (2021), Udayanganie, Jusoh, and Chinna (2019), Luc (2022), Sahinidis et al. (2020), Biswas and Verma (2022), and Butz et al. (2018) indicated a negative effect of extraversion on entrepreneurial intentions, suggesting that lower levels of extraversion contribute to emotional stability and success in entrepreneurship. These discrepancies highlight how cultural or social influences shape the relationship between extraversion and individual entrepreneurial intentions. In the researcher's view, while extraversion is often viewed as a trait with potential drawbacks, moderate levels of extraversion can cultivate awareness and caution regarding potential risks. This cautious approach can be advantageous as it motivates individuals to plan meticulously, thereby mitigating risks and bolstering their entrepreneurial intentions in pursuit of emotional and psychological equilibrium.

In conclusion, there is substantial congruence between this study and prior research regarding the influence of the Big Five personality traits on entrepreneurial intentions. However, some divergences underscore the diversity in study samples and the cultural contexts in which they were conducted. These parallels and distinctions can be attributed to cultural, environmental, educational, and economic differences among the samples and variations in methodologies and measurement tools employed across different studies.

The study conducted on students at Qatar University highlighted the presence of entrepreneurial intentions among them, revealing statistically significant associations between these intentions and the Big Five personality traits. Results indicated notable positive correlations between extraversion, agreeableness, conscientiousness, and openness to experience with entrepreneurial intentions, whereas neuroticism did not demonstrate a significant relationship. Notably, the study identified significant positive relationships with entrepreneurial intentions for openness to experience ( $r = 0.187$ ,  $P < .001$ ), conscientiousness ( $r = 0.180$ ,  $P < .001$ ), extraversion ( $r = 0.246$ ,  $P < .001$ ), and agreeableness ( $r = 0.116$ ,  $P = .010$ ). Conversely, neuroticism exhibited no significant negative relationship ( $r = -0.010$ ,  $P = .829$ ) with entrepreneurial intentions within this sample.

## 6. Conclusion and Recommendations

Based on the analysis results, it can be concluded that entrepreneurial intentions are present among university students in Qatar and that each of the Big Five personality traits influences these intentions. Specifically, a statistically significant positive relationship was found between the openness to experience trait and entrepreneurial intentions among university students in Qatar. Similarly, extraversion and agreeableness were also shown to have a statistically significant positive relationship with entrepreneurial intentions. However, a statistically significant negative relationship was found between the neuroticism trait and entrepreneurial intentions among university students in Qatar.

In light of the study's results regarding the impact of the Big Five personality traits on entrepreneurial intentions among university students in Qatar, several recommendations are offered for universities, business incubators, leaders, and



policymakers to leverage the findings and enhance entrepreneurial intentions among students. The study's findings indicating the presence of entrepreneurial intentions among students at Qatar University should be utilized by leaders and policymakers in institutions dedicated to developing entrepreneurs, such as business incubators and universities like Qatar University. The predictive ability of the model and measurement tools used to identify early-stage entrepreneurial intentions among students in different universities in Qatar should also be utilized. Encouragement and training of students in the necessary skills for successful entrepreneurial projects should be provided, aiming to create an entrepreneurial-friendly environment, reduce startup failure rates, and achieve the objectives of Qatar Vision 2030, which focuses on building a knowledge-based economy.

The study of the Big Five personality traits and their effects on entrepreneurial intentions should be embedded in entrepreneurship education programs and courses. This information will help students understand the impact of their personality traits on their entrepreneurial capabilities and guide them toward enhancing their strengths. The results indicate that certain personality traits (extraversion, agreeableness, conscientiousness, and openness to experience) positively relate to entrepreneurial intentions among Qatar University students.

Additionally, students with entrepreneurial intentions should be empowered to apply and leverage their skills in real work environments. Collaboration between universities and the private sector should be enhanced to provide support, training opportunities, and joint projects that enhance their practical experiences and skill development. This aligns with the fifth objective of Qatar University's new strategy (2023-2027) related to "developing the innovation and entrepreneurship ecosystem and knowledge transfer," where Qatar University aims to increase its role in supporting national economic development by developing the innovation and entrepreneurship ecosystem and transferring knowledge to startups and outputs with economic impact.

Proposals for future research studies include several key areas for exploration. First, it is recommended that the sample size be expanded. Future studies should include larger and more diverse samples of students from different universities in Qatar and other Arab countries to understand better the traits influencing entrepreneurial intentions. Additionally, analysing other influencing traits is crucial. Future research should study the impact of social environment, family support, and educational curricula on entrepreneurial intentions.

Longitudinal studies are also essential. Conducting longitudinal studies to track the development of entrepreneurial intentions among students over a longer period will help understand the influence of changes in personality traits over time. Furthermore, international comparisons should be made. Comparing the impact of the Big Five personality traits on entrepreneurial intentions in Qatar and other countries will help understand cultural differences and their impact on entrepreneurship.

Finally, developing standardised models is necessary. New standardised models should be developed to measure the impact of personality traits on entrepreneurial intentions, taking into account cultural and social factors.

#### **Data availability statement**

The data supporting this study's findings are available from the corresponding author, ALYAFEI, N., upon reasonable request.

#### **Declaration of interest statement**

The authors report there are no competing interests to declare

## **REFERENCES**

- Ahmed, M. A., Khattak, M. S., & Anwar, M. (2020). Personality traits and entrepreneurial intention: The mediating role of risk aversion. *Journal of Public Affairs*, 22(1). <https://doi.org/10.1002/pa.2275>
- Al-Anaz, H. M. (2021). Distinctive personal traits of entrepreneurial talent in light of the five major personality traits among entrepreneurs in the Kingdom of Saudi Arabia. *Arab Journal of Disability and Giftedness Sciences*, 17, 301–340. <http://search.mandumah.com/Record/1158633>
- 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. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.964875>
- Alshagawi, M., & Ghaleb, M. M. (2022). Entrepreneurial intentions of university students in the Kingdom of Saudi Arabia. *International Journal of Innovation Science*, 15(4), 581–597. <https://doi.org/10.1108/ijis-05-2021-0083>
- Al-Shamimari, A., & Nasser, W. (2019). *Entrepreneurship*. Obeikan Publishing and Distribution.
- Al-Shaqawi, M. (2019). Entrepreneurial intention among Saudi university students: The role of personal personality traits, demographic characteristics, and government support. *Alexandria University Journal of Administrative Sciences*, 56(1), 1–22.
- Arqub, K. (2023). The role of university business incubators in supporting digital entrepreneurship. *Arsad Journal for Economic and Administrative Studies*, 6(1), 69–78. <http://search.mandumah.com/Record/1399582>
- Awwad, M. S., & Al-Aseer, R. M. N. (2021). Big five personality traits impact on entrepreneurial intention: The mediating role of entrepreneurial alertness. *Asia Pacific Journal of Innovation and Entrepreneurship*, 15(1), 87–100. <https://doi.org/10.1108/apjie-09-2020-0136>
- Bazkiaei, H. A., Heng, L. H., Khan, N. U., Ahmad Saufi, R. B., & Raja Kasim, R. S. (2020). Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among university students? *Cogent Business & Management*, 7(1), 1801217. <https://doi.org/10.1080/23311975.2020.1801217>
- Bin Hamed, A., & Bin Habirish, A. (2021). The quality of training and its impact on entrepreneurship among university graduates: An empirical study that included graduates of the Elysee University Center during the period 2018-2019. *Algerian Journal of Economic Development*, 8(1), 133–148. <http://search.mandumah.com/Record/1166293>
- Biswas, A., & Verma, R. K. (2021). Engine of entrepreneurial intentions: Revisiting personality traits with entrepreneurial education. *Benchmarking*, 29(6), 2019–2044. <https://doi.org/10.1108/bij-11-2020-0607>
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51(3), 222–230. <https://doi.org/10.1016/j.paid.2010.07.007>
- Brown, W., Galloway, L., & Levie, J. (2002). *Global Entrepreneurship Monitor*. Report, January. <https://www.hse.ru/data/2011/09/27/1270181689/GEM%202007%20Global%20Report.pdf>
- Butz, N. T., Hanson, S., Schultz, P. L., & Warzynski, M. M. (2018). Beyond the big five: Does grit influence the entrepreneurial intent of university students in the US? *Journal of Global Entrepreneurship Research*, 8(1). <https://doi.org/10.1186/s40497-018-0100-z>
- Costa, P. T., & McCrae, R. R. (1992). The five-factor model of personality and its relevance to personality disorders. *Journal of Personality Disorders*, 6(4), 343–359. <https://doi.org/10.1521/pedi.1992.6.4.343>
- Ettis, S. A., & Kefi, M. K. (2016). Entrepreneurial intentions amongst Tunisian students: An empirical investigation applying the Big-Five personality traits theory. *The International Journal of Higher Education*, 03(1). <https://ijhem.com/details&cid=41>
- Fareed, Z., Ul Abidan, Z., Hussain, S., Shahzad, F., & Nayab, H. H. (2014). An empirical investigation of entrepreneurial intentions among business students of Pakistan. *Studia Universitatis Babes-Bolyai Oeconomica*, 59(2), 68–80.
- Gangi, Y. A. (2017). The role of entrepreneurship education and training on creation of the knowledge economy. *World Journal of Entrepreneurship, Management and Sustainable Development*, 13(4), 375–388. <https://doi.org/10.1108/wjemsd-06-2017-0032>
- Goldberg, L. R. (1990). An alternative ‘description of personality’: The big-five factor structure. *Journal of Personality and Social*

- Psychology*, 59(6), 1216–1229. <https://doi.org/10.1037/0022-3514.59.6.1216>
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4(1), 26–42. <https://doi.org/10.1037/1040-3590.4.1.26>
- IPIP. (n.d.). Administering IPIP measures, with a 50-item sample questionnaire. Data set. [https://ipip.ori.org/new\\_ipip-50-item-scale.htm](https://ipip.ori.org/new_ipip-50-item-scale.htm)
- IPIP. (n.d.). The big five personality test and scoring details. Retrieved April 2024, from <https://openpsychometrics.org/printable/big-five-personality-test.pdf>
- Jarboui, A., & Ben Chikha, I. (2018). Influence of personal traits on social entrepreneurship intention: An empirical study related to Tunisia. *International Journal of Social Entrepreneurship and Innovation*, 5(2), 148. <https://doi.org/10.1504/ijsei.2018.10018957>
- Kerr, S. P., & Kerr, W. R. (2018). Personality traits of entrepreneurs: A review of recent literature. *Foundations and Trends® in Entrepreneurship*, 14(3), 279–356.
- Krueger, N. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In *International Studies in Entrepreneurship*, 51–72. [https://doi.org/10.1007/978-1-4419-0443-0\\_4](https://doi.org/10.1007/978-1-4419-0443-0_4)
- Krueger, N. F. (2017). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In *International Studies in Entrepreneurship*, 13–34. [https://doi.org/10.1007/978-3-319-45544-0\\_2](https://doi.org/10.1007/978-3-319-45544-0_2)
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/s0883-9026\(98\)00033-0](https://doi.org/10.1016/s0883-9026(98)00033-0)
- Laura Ann Migliore, L. (2011). Relation between big five personality traits and Hofstede's cultural dimensions. *Cross Cultural Management: An International Journal*, 18(1), 38–54.
- Luc, P. T. (2022). The relationships between big-five personality traits and social entrepreneurship intention. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2137950>
- Malebana, J. (2014). Entrepreneurial intentions of South African rural university students: A test of the theory of planned behaviour. *Journal of Economics and Behavioral Studies*, 6(2), 130–143. <https://doi.org/10.22610/jebs.v6i2.476>
- Murugesan, R., & Jayavelu, R. (2017). The influence of big five personality traits and self-efficacy on entrepreneurial intention: The role of gender. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 3(1), 41–61. <https://doi.org/10.1177/2393957516684569>
- Nasser, J., & Al-Omari, I. (2011). Measuring the characteristics of entrepreneurship among postgraduate students in business administration and their impact on entrepreneurial actions: A comparative study. *Damascus University Journal of Economic and Legal Sciences*, 27(4), 139–168. <http://search.mandumah.com/Record/450563>
- Opoku Boabeng, F. (2018). Entrepreneurial innovation and risk taking on firm performance: Empirical evidence from entrepreneurial enterprises in Ghana. *International Journal of Business and Management Innovation*, 7(12), 65–77.
- Pandey, D. L., Uprety, S. K., & Risal, N. (2023). Personality traits and their impact on the social entrepreneurial intentions of management students: A test of big five personality approach. *Journal of Innovation and Entrepreneurship*, 12(1). <https://doi.org/10.1186/s13731-023-00342-8>
- Peng, Z., Lu, G., & Kang, H. (2012). Entrepreneurial intentions and its influencing factors: A survey of the university students in Xi'an China. *Creative Education*, 3(08), 95–100. <https://doi.org/10.4236/ce.2012.38b021>
- Pervin, L. A. (2019). *Personality*.
- Purwana, D., Suhud, U., & Wibowo, A. (2018). Big-five personality of tertiary students and entrepreneurial intention. *Advanced Science Letters*, 24(10), 7180–7183. <https://doi.org/10.1166/asl.2018.12436>
- Rabie, M. S. (2013). *Personality psychology*. Jordan: Dar Al Masirah for Publishing and Distribution.
- Reman, P., & Nordin, A. (2021). Personality tests in recruitment. Ed. project, 2–15.
- Reynolds, P. D., Hay, M., Bygrave, W. D., Camp, S. M., & Autio, E. (2000). *Global entrepreneurship monitor 2000*.
- Romer, P. M. (1994). The origins of endogenous growth. *Journal of Economic Perspectives*, 8(1), 3
- Şahin, F., Karadağ, H., & Tuncer, B. (2019). Big five personality traits, entrepreneurial self-efficacy, and entrepreneurial intention.

- International Journal of Entrepreneurial Behavior & Research*, 25(6), 1188–1211. <https://doi.org/10.1108/ijebr-07-2018-0466>
- Sahinidis, A. G., Tsaknis, P. A., Gkika, E., & Stavroulakis, D. (2020). The influence of the big five personality traits and risk aversion on entrepreneurial intention. In *Springer Proceedings in Business and Economics*. 215–224 [https://doi.org/10.1007/978-3-030-36126-6\\_24](https://doi.org/10.1007/978-3-030-36126-6_24)
- Samuel, Y., Ernest, K., & Awuah, J. (2013). An assessment of entrepreneurship intention among Sunyani Polytechnic marketing students. *International Review of Management and Marketing*, 3(1), 37–49. <https://www.econjournals.com/index.php/irmm/article/view/391>
- Sayed, K., & Hassan, A. (2022). Orientation towards entrepreneurship and its relationship to some psychological variables among a sample of university students in light of some demographic variables: A psychometric-clinical study. *Journal of Psychological Counseling*, 70, 218–298. <http://search.mandumah.com/Record/1327330>
- Sieger, P., Raemy, L., Zellweger, T., Fueglistaller, U., & Hatak, I. (2023). *Student entrepreneurship 2023: Insights from 57 countries*. Guesssurvey.Org. Swiss Institute of Small Business and Entrepreneurship. [https://www.guesssurvey.org/resources/PDF\\_InterReports/GUESSS\\_2023\\_Global\\_Report.pdf](https://www.guesssurvey.org/resources/PDF_InterReports/GUESSS_2023_Global_Report.pdf)
- Suratno, E., & Kusmana, A. (2019). The analysis of the effect of entrepreneurship education, perceived desirability, and entrepreneurial self-efficacy on university students' entrepreneurial intention. *Universal Journal of Educational Research*, 7(11), 2507–2518. <https://doi.org/10.13189/ujer.2019.071131>
- Udayanganie, W. M. I., Jusoh, M., & Chinna, K. (2019). Impact of big five personality traits on entrepreneurial intention of engineering undergraduates. *Research in Business and Management*, 6(2), 35. <https://doi.org/10.5296/rbm.v6i2.15147>
- Varghese, S. (2022). An empirical study on entrepreneurial intentions and its antecedents among business students. *AMC Indian Journal of Entrepreneurship*, 5(4), 45–51. <https://www.indianjournalofentrepreneurship.com/index.php/IJOE/article/view/172629>
- Wennekers, S., & Thurik, A. R. (1999). Linking entrepreneurship and economic growth. *EIM Small Business Research and Consultancy*, 13(1), 27–56.
- Wilson, K. E., Vyakarnam, S., Volkmann, C., Mariotti, S., & Rabuzzi, D. (2009). *Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century*. Social Science Research Network. <https://doi.org/10.2139/ssrn.1396704>
- Yurtkoru, E. S., Kabadayı Kuşcu, Z., & Doğanay, A. (2014). Exploring the antecedents of entrepreneurial intention on Turkish university students. *Procedia: Social and Behavioral Sciences*, 150, 841–850. <https://doi.org/10.1016/j.sbspro.2014.09.093>