# RESEARCHARTICLE



# Meta-Analyses of Individual's Success Model: Entrepreneurs and Managers

Zubair Javed <sup>1</sup>, Muhammad Shayan <sup>2</sup> and Sara Al-Khayar <sup>3</sup>

 Master of Sciences, Lyallpur Business School, Government College University Faisalabad, Pakistan
 Master of Sciences, Department of Economics, Government College University Faisalabad, Pakistan
 Master of Business Administration, School of Management, Jiangsu University, China

Correspondence sheikhshayan25@gmail.com

## **Abstract**

Entrepreneurship has been recognized as much more critical due to socio-economic prosperity. This meta-analysis focuses on entrepreneurial personality with the Big Five intensified in the last five decades (the 1970s – 2020). Meta-analysis findings show that the concept and description of entrepreneurship with Big Five personalities consist of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness to compare managers and entrepreneurs. This study explored the entrepreneur's and manager's personality traits regarding performance and intention. The scales from the existing scientific research have been adopted to perform meta-analyses with self-efficacy, proactive personality, innovation, and locus of control, which showed significant correlations between business creation and success. Business foundations support risk propensity, but achievement motivation is favorable for both the foundation and success of the business for managers and entrepreneurs. There is less moderation and complementing to the meta-analyses; recent single studies on moderators and mediators have been examined.

#### **KEYWORDS**

Meta-analyses, Big-Five, Entrepreneurs, Personality Traits, Small Businesses

## 1 | INTRODUCTION

In the last two decades (2000 – 2020), many types of research have focused on entrepreneurship, which has made it famous in social science and economics. Young individuals took the initiative and changed the trend of becoming jobholders into entrepreneurs and job creatives (Haltiwanger, 2022). Entrepreneurship, as delineated by (Schmookler, 2013). involves the analysis and harnessing of an individual's skills for initiating a business venture (Martínez-Gregorio et al., 2021), characterized entrepreneurs as pivotal actors or representatives within the business realm, imparting knowledge on effective business management techniques. Furthermore, entrepreneurship fosters critical thinking and cultivates self-confidence in individuals (Gautam et al., 2015), enabling them to confront global social and economic challenges. Given the dynamic nature of contemporary business practices. entrepreneurs are urged to embrace innovation and emerging technologies to navigate evolving economic landscapes (Piacentini, 2013). Thus, entrepreneurship is widely regarded as a potent means to address

financial challenges and stimulate a nation's economic growth (Ashraf et al., 2024).

Policymakers encourage individuals to become entrepreneurs (North & Smallbone, 2006). The ratio of self-employed is getting high, which helps in economic growth, and the sharing of new technology knowledge assists entrepreneurs in better performance (Kordab et al., 2020). In the 1970s and 1980s, the personality traits of entrepreneurs were ignored; over time, nearly from 1989 to 1990, Schumpeter highlighted the unique characteristics of an entrepreneur, which increased the growth and research work (Ebner, 2003). However, in several studies in the 1990s and 2000, researchers accepted and confirmed the importance of the fivefactor model (FFM) in entrepreneurial personality (Zhao & Seibert, 2006). In the last five decades, several researchers have discussed the meta-analysis of propensity risk for entrepreneurs. Thus, this research analyzed the Five-decade meta-analyses through systematic meta-analysis and compared the FFM with the personality traits of entrepreneurs (Li et al., 2023).

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Several studies have examined the consequential outcomes of personality traits among entrepreneurs. revealing notable findings regarding characteristics such as locus of control and alertness. (Jiatong et al., 2021), propensity risk (Li et al., 2020b), and pro-active personality behavior (Murad et al., 2021), perform better than the individuals who do not focus on their behavior (Chen et al., 2021). The Big Five model is considered less effective when compared to the specific personality traits characteristic of entrepreneurs (Hilliard et al., 2022). Researchers have shown a profound interest in entrepreneurship, conducting in-depth investigations to expand knowledge for entrepreneurs and contribute to the advancement of existing scientific literature (Urbano et al., 2019). Previous research endeavors have explored various meta-analyses aimed at substantiating the efficacy of entrepreneurship (Hinkle et al., 2020).

The meta-analyses were conducted by Conn, Valentine, Cooper, and Rantz (Conn et al., 2003). draw upon many individual studies from the literature, often omitting the need for hypothesis testing. Within metaanalyses, there is no strict requirement to elucidate the theoretical underpinnings of the study variables' amalgamation. Various types of personalities have been identified to influence entrepreneurial performance. including motivation levels (Littunen, 2000), determination in work, self-confidence, risk-taking behavior, time and event management skills, and consistency in work execution. By delineating the nexus between entrepreneurship and personality traits, recent meta-analytical investigations spanning five decades elucidate how researchers synthesize, integrate, and augment individual studies, considering mediating and moderating effects. This body of research aids in providing future research directions by highlighting unresolved issues and offering strategies for their elucidation. Understanding personality traits as a singular concept is intricate, particularly when analyzing individual actions and performance (Ashraf et al., 2017).

In the Big Five model, several traits overlap between narcissists and entrepreneurs, including agreeableness, low neuroticism, openness to experience, and high extraversion. Many researchers have explored entrepreneurship in conjunction with locus of control, self-efficacy, and risk propensity. Meta-analyses have indicated the influence of risk propensity on entrepreneurial intentions and personality traits (Zhao et al., 2010). Previous meta-analyses suggest that managers' performance tends to be inferior to that of entrepreneurs, irrespective of risk propensity (Stewart Jr Roth, 2004). Numerous prior studies have demonstrated a robust association between narcissism and risk propensity behaviors (Li et al., 2020). Narcissists exhibit a heightened determination towards their success, often without succumbing to the fear of failure (Foster et al., 2009), and research suggests that individuals with narcissistic tendencies engage in riskier behaviors and reap more significant benefits compared to non-narcissistic individuals. Conversely, overconfidence may impair rational risk assessment and success evaluation (Mathieu & St-Jean, 2013). Empirical evidence indicates that managers typically display lower levels of overconfidence compared to individuals with narcissistic traits (Koellinger et al., 2007).

Based on self-efficacy, an individual uses their ability to accomplish the tasks undertaken (Zhang & Welch, 2021), and self-efficacy does not depend on the individual's number of skills. Still, one's abilities are also considered in different situations. Entrepreneurs with self-efficacy ability perform better than those with nonself-efficacy attributes (St-Jean & Mathieu, 2015), which is also associated with business creation (Piperopoulos & Dimov, 2015). Chen et al., (1998) outlined, based on self-efficacy, that the students with entrepreneurial intentions performed more than those with nonentrepreneurial intentions (Wu et al., 2019). Individuals with narcissistic abilities magnify their abilities more (Piperopoulos & Dimov, 2015) and believe themselves unique and superior (De Raad, 2000), which all leads to self-motivation and entitlement.

Narcissists are always considered more appropriate and efficient in performing any task than others in current situations and regarding future aspects (Srinivas et al., 2022). This study adopted several single studies that explored the entrepreneurial traits associated with behavioral and mental processes (Markman & Baron, 2003). Experimental research on individual differences and field studies, including experiential (cognitive and affective) or psycho-physiological process measures, would have to rely on this theoretically richer notion of personality traits. The traits measured are based on people's thinking, situation, and actual internal situation, experience, and actions. To start a private business and become a business person cannot explain the entrepreneurial trait but the effect of this trait (Fabeil et al., 2020).

# 2. Preliminary Concepts 2.1. Entrepreneurship

Shane defines entrepreneurship as discovering, evaluating, exploiting, and identifying future goods and services that are not yet familiar or established in the market (Eckhardt & Shane, 2003). Entrepreneurship has been considered a key factor for business creation and is famous for researchers to engage organizations with entrepreneurial skills (Hertel et al., 2022). The study of entrepreneurship has much value in academic fields, professional management studies, and leading business schools (Ajaz et al., 2014). There are associations dedicated to the research and implementation of social entrepreneurship, as well as numerous websites where

individuals can learn about the concept and access information and advice on how to put it into practice. (Ashraf et al., 2019). Several editions of business iournals are dedicated to the realm of entrepreneurship (Epezagne Assamala et al., 2022). Therefore, entrepreneurship could be an attribute of managers and entrepreneurs (Stewart Jr et al., 1999), with uniqueness, novelty, and creativity (Cooper & Dunkelberg, 1986). Few researchers define entrepreneurship as adopting new technologies, and several studies have been excluded from these meta-analyses to differentiate between managers and entrepreneurs. The metaanalyses explored the personality aspects of (a) founding a small, privately owned business and (b) running it successfully as an owner in the early stages of the enterprise (Qader et al., 2022).

## 2.2. Personality Traits

The ideas of personality and personality traits explore the individual's understanding as an entrepreneur (Sui et al., 2021). From a broad perspective, personality traits include capacities, motivation, emotions, and attitude, despite all styles of an individual encountering positive business activities. Personality traits might be recognized at the child level, encouraged, and picked by the individual as an entrepreneurial skill. Personality captures a person's essence, and understanding an individual's personality predicts one's decisions and performance (Li et al., 2020). On the other hand, an individual's personality can be measured with behavior and performance. An entrepreneur's progress cannot be high if carelessness, a late-established independent business without guidance, and no personality traits are involved. The entrepreneurial capabilities and skills influence and boost the decision-making power to accomplish the tasks (Fleeson, 2001).

Entrepreneurs without personality traits wouldn't be able to run a proper business. The conceptualized entrepreneurial character attributes as genetically involved for co-decided psycho-physiological designs (hereditary influences) on enterprising action helps manage the different traits engaged in performance activities (Nicolaou & Shane, 2009). Previous research outlined that traits are consistent with behavioral and mental processes (John et al. 2008), and field studies, including proportions of experiential (cognitive and emotional) psycho-physiological interaction measures, would need to depend on this overly extravagant idea of individual personality. The proportions of the traits are typically founded on individuals' thoughts, behavior, and actions to perform in different feelings, circumstances. However, these reports are imagined as marks of inner causes (collaborating with the outer reasons) of an individual's encounters and activities. Meanwhile, the entrepreneurial success goal differs from the openness characteristic (Li et al., 2020).

#### 2.3. Five-Factor Model

Since the 1980s, the Five-Factor Model (FFM) has been the predominant framework for organizing personality traits (John et al., 2008). Similarly, research on entrepreneurs is directly associated with this, but not all personality traits can be related to the Big Five framework (Ashton et al., 2004). The five-factor model is mainly used to understand and solve problems efficiently: it is a better way to understand the relationship between personality traits. A few constructs like carefulness, accommodation, energy, and nervousness show the bells-shape differences between them. Many individuals are energetic, but few are not; all traits depend on psychological factors such as achievement, tolerance, and strength (Cai et al., 2021). These traits could be explained in several ways, such as if an individual is nervous and can be described as fearful, worried, and anxious. Beyond semantic similarity, psychologists have recognized that certain classes of traits exhibit close associations. For instance, while there is a distinct disparity between feelings of sadness and fear, individuals who frequently experience sadness often also show a propensity for experiencing fear.

# 2.3.1. FFM, Motivational Constructs and Personality Traits

Many of the theories, such as state vs. action orientation, self-efficacy, and locus of control, are directly associated with FFM, which are used for entrepreneurial research (Townsend et al., 2010) to specific purpose scales such as entrepreneurial selfefficacy, proactive personality, and entrepreneurial orientation (Fuller Jr & Marler, 2009). Moreover, to measure entrepreneurial performance personality traits, many theories are used, such as personal initiative, risk-taking propensity, internal locus of control, and need for achievement, and from these, some proved the weighted composites of the Big Five. Personality and dynamic traits are not identical, but both relate to each other (Cattell, 1943).

Achievement motivation is prevalent in learning, observing, avoiding, performing, and correlating goals with performance towards Big Five motivational constructs (McCabe et al., 2013). Many theories regarding personality traits explore that internal satisfaction and external motivation build positivity in an individual's behavior (Read & Miller, 2021). The factor model explains that traits with Intellect and Openness are more flexible (Costa Jr & McCrae, 1994), and to build an organizational atmosphere, a functional personality is much more critical (Skimina et al., 2022). These personality traits refer to the adaption of characteristics to enhance an individual's dispositional traits, developmental adaptations, social-cognitive, and motivation (Li et al., 2020).

An individual's guiding principles regarding behavioral norms, occupational preferences, and aspirations to mold their lives in specific directions can be regarded as their personal values and Characteristic Adaptations that are likely to be affected by traits such as Openness and Intellect. (Schwartz & Bilsky, 1987), vocational Interests (Holland, 1959), and Major Life Goals (Roberts & Robins, 2000). Therefore, there is always a high correlation between Openness and learning goals, neuroticism and performance-avoidance goals, and conscientiousness and work avoidance goals. Another example of the relationship between the Big Five and measures of achievement motivation is given by (Heggestad & Kanfer, 2000). It appears justified to manage the Big Five and thought processes along these lines, although they are separated in most exact examinations and meta-examinations.

There is a vast difference between personality and dynamic traits, but the relationship has an association worthy of consideration. The level of achievement of motivation depends on the learning and performance goal, as well as work avoidance, which is associated with the Big Five on a global scale (Butt et al., 2019). There is a high correlation between learning goals and Openness (r = 0.45), Conscientiousness and work avoidance goals (r = 0.35), performance Avoidance goals, and Neuroticism (r = 0.40). Hence, it proves that motivation and the Big Five move parallel, although both were studied differently through meta-analyses and empirical studies.

# 3. Meta-analyses of Risk Propensity, Big Five with Entrepreneurs and Managers

# 3.1. Big Five, Entrepreneurs and Managers

These researchers use the reference of the Big Five for meta-analyses. The existing literature shows that only one subsume correlates directly with the Big Five. An overview in meta-analyses shows that an individual as an entrepreneur can only make bold decisions in any situation rather than a manager (Heilala, 2022). Entrepreneurs can earn more and support their families than the manager's income (Murad et al., 2022). Another famous saving is that an entrepreneur is an individual who is the owner of the business, and a manager is a person whose aim is to promote the company (Zhao & Seibert, 2006). During the cross-culture comparison, performance and uncertainty depend on the personality traits, which become low or high according to the individual. The empirical studies on the Big Five regarding personality traits assumed that entrepreneurs score high on Extraversion, Openness to Experience, and Conscientiousness (Zhao & Seibert, 2006).

Neuroticism and achievement motivation are moderating factors that differentiate entrepreneurs from managers, particularly concerning two cultural dimensions: performance orientation and uncertainty avoidance (Hosseini-Kamkar et al., 2021). An argument posits that individuals are likelier to exhibit behavior that aligns with their cultural norms. However, this suggests we would observe neurotic behavior more frequently in societies characterized by high uncertainty avoidance. It remains unclear how this would result in a more disparity Neuroticism significant in between entrepreneurs and managers in societies with high uncertainty avoidance. Nonetheless, due to societal factors and uncertainty avoidance tendencies, the proportion of entrepreneurs tends to be lower than individuals in traditional job roles (Stewart & Data, 1995).

However, neuroticism is high among managers and entrepreneurs due to differences in work culture. The information that helps to boost the business entrepreneurs can be utilized more efficiently than the managers because of limited decision-making power (Hongbo et al., 2020). Yet, there is no information for testing these hypotheses in broader terms for four decades (Rauch & Frese, 2007). For the mediator, one could contend (not contended by the creators along these lines) that in any business crisis, entrepreneurs with such personality traits (Neuroticism) can handle the problem due to individual visionary thoughts (Oxman et al., 2021). Entrepreneurs are more defensive than managers when dealing with any situation in the business. This could expand the positive attitude in accomplishing tasks for the entrepreneurs (Epezagne Assamala et al., 2022).

According to GLOBE (House et al., 2004), countries are divided into high or low categories based on performance and uncertainty avoidance in crosscultural comparison. The 24 single studies were focused on fulfilling the criteria of meta-analyses. Zhao and Seibert (2006) explored entrepreneurs' Big Five personality traits and personality implications and scored higher on Openness to Experience, Conscientiousness, and Extraversion but less on Neuroticism and Agreeableness. The averages of effect sizes (entrepreneurs minus managers) d<sup>0</sup>, corrected for reliabilities of the measures, are (0.18 Agreeableness), Conscientiousness), (0.59)achievement (0.47)motivation), (03 dependability), (0.18 Agreeableness), (0.38 Openness), (0.24 Extraversion; not significant), and (0.39 Neuroticism).

The effect of achievement motivation and neuroticism differentiates entrepreneurs from managers based on performance orientation and uncertainty avoidance (Hongbo et al., 2020). Due to the cultural difference, there is a vast difference between uncertainty avoidance and neuroticism (managers and entrepreneurs scores). Uncertainty avoidance is not very clear compared to neuroticism between entrepreneurs and managers (Li et al., 2020a). Indeed, according to this argument, societies characterized by high uncertainty avoidance would likely exhibit a higher prevalence of neurotic behavior (Li et al., 2020). The

moderator hypothesis proposed that individuals with stable emotions can become entrepreneurs, whereas for managers, high-level Neuroticism would be a minor hindrance in performing their tasks, and the moderator hypothesis is more conceivable (Li et al., 2020).

Zhao explains that the entrepreneur is more vulnerable than the manager to influence performance (Cai et al., 2021), which shows a massive difference in the performance of entrepreneurs and managers towards achievement motivation and performance orientation (Zhao & Seibert, 2006). The effect size shows that the confidence interval of performance orientation and uncertainty avoidance has much difference and is insignificant with a p-value greater than 0.05. To measure the moderator and culture dimensions, research focuses on personality measures achievement motivation and factors conscientiousness as a moderator predictor. Calculate the effect size of the moderator with a questionnaire and projective of achievement motivation (d0 = 0.62 and d0= 0.55) with the significant effect of projective measures (d0 = 0.24), and the questionnaire has insignificant results. Meanwhile, there is no overlapping, and the moderator effect was substantial (Cai et al., 2021).

# 3.2. Big Five - Intention and Performance

Entrepreneur known as a business founder who owns, runs, and manages the company. Zhao outlined in meta-analyses about the business intention, organizational performance with the Five Factor Model, and personality traits with risk propensity, which cannot be equated without considering the Big Five (Hongyun et al., 2021; Zhao & Seibert, 2006). The researcher did not find any overlapping between (Zhao et al., 2010) and (Zhao & Seibert, 2006) studies, whereas studies of (Rauch & Frese, 2007) were found in (Zhao & Seibert, 2006) and (Zhao et al., 2010). A survey by (Zhao et al., 2010) was used for specific personality traits that develop a relationship between predominantly and the scale of the Big Five. The firm's growth and profitability have been categorized into two parts: (a) financial profitability (liquidity, return on assets, and sales revenue) and operational effectiveness (productivity, firm size [number of employees], and overall performance), which is used as the criteria to measure the performance of a company (Jiatong et al., 2021).

To test the moderating effects of variables, several studies were analyzed through meta-analyses that combine and include operational and profitability over time (Li et al., 2021). Due to this, entrepreneurial tasks automatically relate to personality constructs, and many authors have explored the relevancy of personality traits. It is analyzed through meta-analyses that conscientiousness positively influences extraversion, emotional stability, and openness to experience about performance and intention (Murad et al., 2021). At the

same time, performance and intention have a negative impact due to Agreeableness. Risk propensity effects negative on performance and positive on intention, and the correlation is significantly different (Shahzad et al., 2021). Risk propensity is a positive indicator of intention but not much associated with performance.

# 3.3. Entrepreneurs and Managers - Risk Propensity

In the last ten years (Stewart Jr & Roth, 2001) concluded 12 studies on entrepreneurial personality traits such as risk propensity (Six of the Jackson Personality Inventory, four for Choice Dilemmas and two for someone else) and a comparison of managers with entrepreneurs. A comparison of personality traits between managers and entrepreneurs is justifiable other than the control variables such as industry, experience, education, and gender (Epezagne Assamala et al., 2022). It's indisputable that different types of opportunities attract people for work and are classified based on talent and personality traits (Meng et al., 2022). On the other side, an individual as a startup can utilize entrepreneurial personality traits to accomplish the task, and these traits help the entrepreneur to perform well in the market. In a joint venture of entrepreneurs, entrepreneurs from the same field can utilize their personality traits more than others and perform well (Schneider, 1987).

The 14 studies include 3000 participants and 16 independent samples, and the effect of risk propensity amounts to d0 = .36. The formula to calculate the reliability is minus managers from entrepreneurs and dividing the risk propensity by the whole standard deviation). The researcher outlines the difference between the measurement scale of Risk-Taking through questionnaires (1) Kogan Wallach and Jackson Personality Inventory and (2) between income and growth-oriented entrepreneurs. The effects of the risktaking scale for growth-oriented entrepreneurs and the Jackson Personality Inventory were higher than those of others. The study includes 15 single studies complementary to meta-analyses (Miner & Raju, 2004), regarding risk propensity, which shows less of an effect of risk propensity on managers and entrepreneurs (Murad et al., 2022). The study has been commented on by the study of (Stewart Jr & Roth, 2004), which also explores that all meta-analyses of the Miner Sentence Completion Scale -Form T (risk avoidance subscale) focus the risk perception rather than risk propensity and indicate a negative correlation between underestimating people and the risky action on the base of a dangerous decision (Qader et al., 2022). The original study by Stewart Jr and Roth (2001) conducted 2001 was argued Stewart's research and study 2004 that risk propensity was overestimated and proved by the different effect sizes between projective measures of risk perception (mean d = -0.30) and objective measure of risk propensity (mean d = 0.40).

# 3.4. Business Creation and Success – Personality Traits

An entrepreneur is an individual who starts, owns, and manages a business. An entrepreneur's personality trait cannot be measured with the whole Big Five for organizational performance (Li et al., 2023). The researcher explained that risk propensity cannot only be defined by the Big Five. There is no specific study to explain this terminology for entrepreneurial business performance. The study of (Zhao et al., 2010) only focuses on the particular personality scale for their meta-analyses if there were empirically established links between this scale and predominantly one of the Big Five (Zhao & Seibert, 2006). The researchers categorized the profitability and firm performance on two dimensions: (1) operations and (2) financial matters and overall organizational performance (Li et al., 2023). However, these criteria are opposite but authentic when calculating entrepreneurial performance. Few studies focused on organizational performance based on operational and financial matters to test the moderating effects and meta-analyses. Along with entrepreneurial performance, organizational performance is also critical and is based on the personality traits of an entrepreneur (Zhao et al., 2010).

Collins et al., (2004) explained the achievement motivation meta-analyses in two different types, and the second type is included in the meta-analysis, which defines "manager" and "entrepreneurs." The existing studies compared entrepreneurial performance with managerial performance with the data of 3000 based on 18 different studies (Stewart Jr & Roth, 2004). Prior published meta-analyses of 104 researchers and 116 independent samples (Rauch & Frese, 2007). Another study explains that the difference between entrepreneur vs. manager can be measured by (a) entrepreneurial status and valid personality scale, (b) Pearson correlation, and (c) considering the 51 items of personality constructs (Wang et al., 2023). Thus, scales based on FFM are mixed with scales rooted in specific theories (like self-efficacy, delay of gratification, goal orientation, and proactive personality) or scales characterizing experience and behavior in specific classes of situations (like stress tolerance. innovativeness, passion for work). The entrepreneurial traits were examined on a five-point Likert scale by ten different researchers, and the scale shows negative results with connotations like rigidity, dogmatism, or shyness and characteristics perceived as dysfunctional for entrepreneurs, like conservatism or norm orientation (Wang et al., 2023). This shows the negative correlation between business success and creation and negative entrepreneurial characteristics.

The 0 and 1 code was used for managers and entrepreneurs in business creation, which was measured by organizational and individual success,

growth, and satisfaction. In the common method, the effect sizes are primarily large, and the N-weighted r coefficient for personality scales is acceptable, with r = 0.20 and r = 0.19 for business creation and success. The personality traits showed significantly stronger correlations with business creation and success (p < .01) when they were deemed necessary (r = .25 and r = .25) compared to traits considered unimportant (r = .13 and r = .03). This discrepancy between essential and unimportant characteristics could be attributed, at least partially, to the scaling issue mentioned earlier (Ashraf et al., 2024).

The effect sizes for business creation and success, encompassing eight traits, were examined, and sufficient studies were identified to substantiate the average effect sizes for business creation and success. Personality traits such as risk-taking (0.10, 0.10), locus of control (0.13, 0.19), need for autonomy (0.16, 0.31), stress tolerance (0.20, 0.10), generalized self-efficacy (0.25, 0.38), proactive personality (0.29), innovativeness (0.27, 0.24), and need for achievement (0.30, 0.22). Unsurprisingly, these meta-analyses yield similar conclusions. Collectively, these analyses suggest that both initiating and effectively managing a business venture are facilitated by the same personality traits.

#### 3.5. Achievement Motivation of Individuals

Previous research conducted by Collins and Stewart involved two separate meta-analyses focused on achievement motivation (Collins et al., 2004). Stewart's meta-analyses define managers and entrepreneurs' personality traits more deeply in different studies, with a score of 10 out of 18 on managerial and entrepreneurial traits and 18 studies with 3000 participants compared the achievement motivation of managers and entrepreneurs (Stewart & Roth, 2007). Based on data 18 studies, the N-weighted achievement motivation average effect size is d = .37, favoring entrepreneurs. It was measured using a projective technique and questionnaire. The study size was d = 0.22, and that of all others (n = 12) is d = 0.55\*, which means the confidence interval is 90% and doesn't include zero. To measure the projective test with the questionnaire, no consistency was found, and the effect size of entrepreneurs became high compared to managers d = 0.63\*, and the growth-oriented entrepreneurs were found to be different from incomeconcerned entrepreneurs with d = 0.69\*. It is explored that as the initiative demands an increase, the concept of self-directed formation becomes important for environmental motivation (Li et al., 2020).

# 4. Integration of Meta-Analyses

In FFM, most researchers focused on entrepreneurial temperament traits or not at a broader level, which is not

equivalent to five factors (Zhao et al., 2010). This study (meta-analyses) includes entrepreneurs' innovativeness and proactive personality traits; affiliation, attitude, value, and achievement are not temperament traits of entrepreneurs. Theoretically and empirically distinct individual dispositions with different causes and effects may be relevant in various situations and time perspectives (Zhao & Seibert, 2006).

# 4.1. Risk Propensity and Achievement Motivation of Entrepreneurs

Meta-analyses have evaluated the risk propensity because the criticism gives clear experimental proof that entrepreneurs are more efficient than managers. Entrepreneurs are more risk-takers than managers. Meanwhile, entrepreneurs and managers face problems while taking risks, but goal-oriented people are much more risky than managers; as a result, Entrepreneurs earn more profit with better organizational performance (Stewart Jr & Roth, 2004). It is more dangerous for risk propensity to risk-inclined individuals. In any case, the policymaker develops a policy executed by the entrepreneurs and connected to the risk propensity. As an independent entrepreneur, it is essential to take risks and make prompt decisions according to the situation for the betterment of the organization. Risk propensity explores entrepreneurial intention, mainly affecting personality traits; entrepreneurs with high personality traits get inspiration to accomplish their tasks (Zhao & Seibert, 2006). Previous research focused on the entrepreneur and manager's performance intentions with risk propensity with the individual change (Zhao et al., 2010). These meta-analyses agreed on the vital role of risk propensity concerning entrepreneurs.

Zhao et al. (2010) explored the performance and intention of an entrepreneur; meanwhile, (Stewart and & Roth, 2001) compared both performances based on risk propensity with different variables in different studies. At the same time, meta-analyses prove the importance of risk propensity towards entrepreneurship. To assess risk propensity, utilizing the Big Five factors contributes to the validity of personality traits. Nicholson, Soane, Fenton-O'Creevy, and Willman (2005) investigated individuals' tendencies towards risky behavior across six distinct scenarios (risk-taking, safety, and social, finance, career, health, and recreation), finding closer alignment with the Jackson Personality Inventory (JPI) risk scale than with the Choice Dilemma Questionnaire or Miner's risk avoidance scale. Their results revealed beta-coefficients of 0.38 for Openness, 0.28 for Extraversion (both positive), and -0.19 for Neuroticism, 0.33 Agreeableness, 0.21 for and for Conscientiousness (all negative), explaining 43% of the variance in risk propensity measures. Additionally, when risk propensity is high, the negative coefficient of Conscientiousness impacts business success. It's worth

noting that many personality scales when reconstructed, may overlap with factors other than risk propensity as weighted composites of the Big Five.

Previous research analyzed achievement motivation as a dimension of Conscientiousness. Still, minimal research focuses entrepreneurial on achievement motives and personality traits in metaanalyses, which shows much of a gap in both characteristics. Achievement motivation is a critical success factor, and goal-oriented entrepreneurs focus intensely. Different study analyses show that dependability and achievement motivation have many differences: globally, researchers consider conscientiousness a component of an entrepreneur's success compared to managers. Regardless of their initial motivations, individuals who have established a business may retrospectively infer from this experience that they possess a heightened drive for achievement (Zhao et al., 2010).

In comparison, in relationship studies, inference creates problems. Individuals who established a business (out of the blue) could post hoc finish up from this reality that they should be incredibly accomplished in any other way they could not have possibly acted the achievement motivation. Coherently, such understanding can't be barred, albeit this causal way appears considerably less conceivable than the Appropriately Iongitudinal opposite. de-marked examinations could likely explain this issue. Longitudinal investigations on the personality entrepreneur's boat connection are still attractive (Stewart & Roth, 2007).

#### 4.2. Big Five

To sum up the meta-analyses for achievement motivation and risk propensity with the contribution of the Big Five to understand the concept of entrepreneurial behavior.

#### 4.2.1. Neuroticism

It contrasts emotional stability and quiet disposition with critical emotionality, such as feeling fretful, worried, hopeless, and tense. Contrasts Emotional Stability and collected demeanor with pessimistic emotionality, the feeling restless, apprehensive, miserable, and tense. Entrepreneurs tend to exhibit lower scores on neuroticism than managers, and they commonly report experiencing detrimental effects associated with neuroticism, both during the decision-making process of initiating a private venture and throughout its execution (Hartman & Betz, 2007). This contrasts with the effects of personality traits such as generalized self-efficacy, stress tolerance, and locus of control, which indicate a propensity towards emotional stability (the inverse of Neuroticism). Entrepreneurs typically exhibit lower

scores on Neuroticism compared to managers and often report significant adverse effects associated with Neuroticism. As empirical research shows, this corresponds to the impact of personality traits inherently aligned with Emotional Stability.

# 4.2.2. Agreeableness

Contrasts a prosaically and collective direction toward others with opposition and incorporates qualities like benevolence. delicate-mindedness. trust. unobtrusiveness. Entrepreneurs have lower scores in this viewpoint than managers in business, while no essential association between suitability and goals (of setting up a business) or business execution was found. Simply concerning an excellent method for different break faith evaluation (adjusted to meta-assessments), low significant negative (Rauch & Frese, 2007). Agreeableness should be perceptible in the helpful aftereffects of the need for opportunity on business and (less significantly) on business achievement point by point (Rauch & Frese, 2007) since confirmed serious solid areas for a relationship between the need for autonomy (Zhao & Seibert, 2006).

#### 4.2.3. Extraversion

"Suggests a lively methodology toward the social and material world and incorporates traits like friendliness, movement, emphatic and positive emotionality." Entrepreneurs are more extroverted than directors, and Extraversion shows powerless, however significant connections with goals (setting up a business) and business execution. One could imagine a specific affinity among Extraversion and proactive character (i.e., starting activities on potential open doors, molding the climate as per one's objectives, and being tireless in progress), which report higher scores for entrepreneurs than for directors (Zhao & Seibert, 2006). There is undoubtedly a significant relationship between a proactive personality and the self-assuredness and movement feature of Extraversion, in addition to features of Openness, Conscientiousness, Neuroticism. The proactive personality scale is like inventiveness, a specific reason scale that includes unrelated parts (Zhao et al., 2010).

## 4.2.4. Conscientiousness

Conscientiousness is directly associated with goaloriented behavior in terms of delaying gratification, planning, organizing tasks, acting, and rules to perform well. The researcher described conscientiousness as the main component of the Big Five and briefly described the higher level of an entrepreneur than a manager. There are two dimensions of conscientiousness (dependability and achievement motivation); the traits of achievement motivation prefer the entrepreneur over the manager. It makes sense to look for lower-level components (facets) of wellestablished global dimensions (Zhao & Seibert, 2006).

# 4.2.5. Openness to Experience

The expansiveness, profundity, creativity, and individual psychological and experiential life". Entrepreneurs score considerably more on Openness than managers. The close relationships of Openness with performance and intention for the Big Five components. Researchers say that the innovative capacity of an entrepreneur is beneficial for creating and achieving a business. There is a strong correlation between openness and innovativeness in the Big Five (Zhao & Seibert, 2006).

# 5. Indirect Effects 5.1. Mediating and Moderating Personality Trait Effects

Many of the meta-analyses cover the mediating and moderating effects of personality traits and try to summarize the personality effects. Still, there are very few studies, and the reporting data is not reliable enough to coat with an estimation of means and error variances. Therefore, after paying close attention, the author found a few studies that reported practical relevancy with the moderating and mediating effects (Ensley et al., 2006).

Göbel and Frese (1999) reported mediator as a complex variable that shows the correlation in 29 different personality traits, 13 strategies, and four human capital with self-reported success (growth, entrepreneur's job satisfaction, and income) in a heterogeneous sample of German small business entrepreneurs. The impact of general innovativeness (GI) on the intention to adopt innovations is mediating through innovativeness (SI), correlated with measuring both variables with Big Five (n = 188 entrepreneurs of small and medium-sized firms of various industries) with the following results: O (.41; .38), C (.51; .21), E (.24; .39), A (.38; -.34), and N (.22; .07). Big Five impact directly and indirectly the intention to adopt innovation (not reported information) (Marcati et al., 2008).

Intentions to found a private business can be conceived of as an additive effect of perceived desirability (attitude to ownership) and perceived feasibility (entrepreneurial self-efficacy). Expectations to establish a personal business can be imagined as an added substance impact of seen attractiveness (mentality to possession) and practicality (pioneering self-efficacy). The creators ordered business visionaries, as indicated by their example of seeing attractiveness and possibility. It has been found that entrepreneurs are influential (concerning business achievement) in dynamic, quick-evolving conditions. At

the same time, value-based authority became especially ominous in such a climate. A three-way relationship of ambitious self-efficacy dispositional certainty normal dynamism on firm execution (pay advancement and work improvement): in remarkable circumstances spearheading self- efficacy (selfexaminations of capacities in various venturesome activities) emphatically influences execution when cheerfulness is moderate, yet negative when it is high. In stable conditions, self-efficacy affected execution and was not directed by hopefulness. It appears to be that a highly elevated degree of dispositional idealism suggests overconfidence that is especially risky in robust conditions where convenient, practical decisions of chances and dangers are first and principal significant (Rauch et al., 2009).

Intentions to found a private business can be conceived of as an additive effect of perceived desirability (attitude to ownership) and perceived feasibility (entrepreneurial self-efficacy). However, controlling for some other variables possibly influencing entrepreneurial intentions, found in a sample of about 400 MBA students from a variety of countries (Australia, China, India or Thailand) a (multiplicative) interaction effect of desirability and feasibility: there were main effects of perceived desirability (b = .36) and perceived feasibility (b = .30) complemented by a negative interaction effect desirability x feasibility (b = .16), all coefficients being highly significant (p < .001). People high on desirability form intentions, even if the perceived feasibility is low, whereas people with low desirability tend to abstain from intentions only when low. The authors classify entrepreneurs according to their perceived desirability and feasibility pattern.

#### 5.2. Entrepreneurial Success Model

Meta-analyses can't make enough to mirror the consequences of studies, the plan of which is exceptionally mind-boggling (regarding several factors and associations between the factors). For Brave, only one model is acquainted here, which should give an impression of how such complex models could appear. The hypothesis expounded on the influence of entrepreneurs and managers believed to be intervened by action styles to obtain the objectives and accomplish the task. A few other exclusively trademark methods of data handling and acting in the specific climate are considered. The climate is described by the formative phase of the firm (life cycle), the speed of progress (dynamism), unfriendly monetary circumstances like high rivalry and absence of assets (aggression), and part of the business (industry). In blending with individual attributes. the climate influences entrepreneurial exercises, thus changing the climate. Personality and climate are seen additionally as mediators of the influence of methods of activities on business achievement.

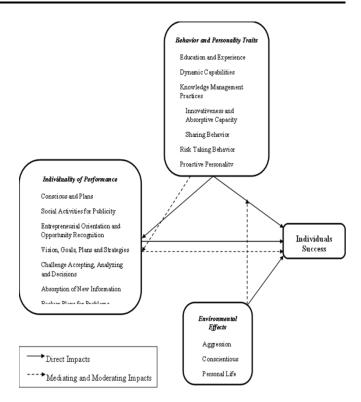


Fig. 1: PRISMA Flow Chart of Individual Success

# 5.3. Empirical Experiment and Motivational Entrepreneurship Behavior

Mental evaluation of business is solely settled on audits, routinely applied in field studies. Still, meta-analyses of predecessor conditions and cash-related consequences of the company overall draw on full-scale financial markers portraying the public or economies. The benefit of the exploratory framework in testing causal influences is ignored in mental business venture research. Exploratory monetary viewpoints also have rarely centered on the creative autonomous bearing. Starters with some affinity to the undertakings of money, the managers are for speculation choices, creativity, and activity. Research on how character tendencies impact commercial enterprise fireplace up, and success can assist with running the tutoring of hopeful commercial enterprise human beings and the adequacy of the enterprise. Since prompting hopeful commercial enterprise, human beings have advanced daily; dissecting the open doorways and impediments given by one's personality synthesis might be a valuable piece of directing and self-mirrored image. A couple of hopeful commercial enterprise humans will want help, while others may take advantage of indicators presumptuousness risks.

## 6. Conclusions and Discussion

Examining the duties and functions of entrepreneurs is a vital step in entrepreneurial research. These functions

and tasks vary from industry to industry according to their types, regions, and availability of resources, financial or human. Methods and techniques for organized and well-ordered analyses for entrepreneurial functions and tasks under different circumstances still await development. It should be an essential project for future psychological entrepreneurship research work. This organized and systematic analysis entrepreneurs' functions and duties and socioeconomic will reveal that ignored personality, i.e., cognitive abilities or values, are as important as the Big Five personality constructs or dimensions. The importance of FFM must not block or undermine the development of special-purpose scales; even it should be a routine matter and standard to include in any entrepreneurship theory on individual characteristics and distinctive abilities short but reliable and valid standards of the Big Five. This is the only way to assure comparability of the results across different personality standards and theories to learn whether a particular system or scale is inessential or has incremental validity to the Big Five.

In future research, there is a pressing need for correlational and longitudinal studies to establish robust causal inferences regarding the relationship between personality traits and entrepreneurial intentions, decisionmaking, and performance, thereby addressing common objections. These studies should also incorporate data on mental and behavioral processes that may mediate or moderate the influence of personality traits on entrepreneurial outcomes. Given that physiological measurement techniques may not always be feasible or applicable, mental processes can primarily be assessed through self-reports. Furthermore, selfreports and observer reports should be employed to evaluate behavioral processes accurately.

There may be skepticism regarding the extent to personality traits significantly which entrepreneurs' thoughts, actions, aspirations, and achievements. The impact of personality traits on entrepreneurs could be more pronounced than other professionals, given the greater autonomy inherent in the entrepreneurial role. Entrepreneurs have greater freedom in decision-making, environmental adaptation, and alignment with personal preferences. Guiding dynamic entrepreneurs to acquire knowledge about economic opportunities, regulations, financial support for startups, and risk management through their personality development relies on valuable insights gleaned from psychological research on entrepreneurship. Recent research has found that entrepreneurs with narcissistic tendencies exhibit a greater inclination towards risk-taking compared to nonnarcissistic individuals and managers. Substantial differences exist between entrepreneurs and managers regarding job nature, capabilities, personality traits, and risk propensity behaviors. Additionally, literature suggests that narcissistic entrepreneurs, when possessing personality traits like risk propensity, locus of control, and general self-efficacy, tend to perform better. These findings indicate that entrepreneurs may exhibit higher levels of narcissism compared to other professional groups.

## 7. Limitations to Meta-Analysis

Meta-analysis, like any research method, is not without limitations. One well-known issue is the file drawer problem, where meta-analytic estimates may be biased upwards due to the underrepresentation of null results in published literature. Additionally, meta-analysis can be prone to "garbage in garbage out" problems if primary studies vary widely in their methodological quality or measure different constructs inconsistently. Moreover, because meta-analysis primarily relies on correlations as input, it may struggle to address endogeneity issues.

One approach to mitigate these limitations is to supplement meta-analysis with narrative reviews. Narrative reviews involve categorizing and synthesizing research findings qualitatively, providing a holistic literature assessment. They are precious for identifying under-researched areas and resolving conflicting findings. Narrative reviews can also contextualize theoretical contributions, evaluate alignment between theory and empirical designs, and assess the quality of causal claims. While narrative reviews are subject to human biases, their qualitative evaluation complements quantitative orientation of meta-analysis. Consequently, a comprehensive review of the literature often requires both approaches to work in tandem.

#### **Declarations**

The study was conducted by the Declaration of Jiangsu University and approved by the Ethics Committee of Jiangsu University of China.

# **Ethics**

This research complied with the Ethical Code of Conduct of the American Psychological Association (APA). After getting approval from the department, the participants were offered a cover letter indicating the willingness of participants and the confidentiality of their responses. All the participants willingly took part in the questionnaire survey and informed the participants, and institutions provided consent. This work was conducted under the supervision of a Chinese professor, and the Institutional Review Board of Jiangsu University has approved the study.

# **Conflicts of Interest**

On behalf of all authors, the corresponding author states that there is no conflict of interest.

# **Competing Interests**

The authors have no relevant financial or non-financial interests to disclose.

#### **Data Availability Statement**

The datasets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

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#### **Author Contributions**

Zubair Javed and Muhammad Shayan read and approved the manuscript.

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