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Relationships Between Personal Traits, Optimism, Pessimism and Risk Attitudes: Case Study of Vietnamese Entrepreneurs

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Abstract

Entrepreneurship promotion is vital for a country's socio-economic development. Entrepreneurs, as founders and decision-makers, play a decisive role in the success of a business by determining its growth strategy. This study aimed to investigate risk attitudes of Vietnamese entrepreneurs and other related factors. To explore this, the study used the Big five model, optimism, and pessimism as independent variables, with risk attitude as the dependent variable. The research method is quantitative with a sample of 167 entrepreneurs. Structural Equation Modeling was employed to test the hypotheses. The study found a positive relationship between extraversion and risk attitudes; and the negative connections between conscientiousness, agreeableness, pessimism, and risk attitudes. Furthermore, the study revealed no significant relationships between openness, neuroticism, optimism, and risk attitudes. The results shed light on understanding about the entrepreneurs' risk attitudes.

Keywords: entrepreneurs, personality traits, optimism, pessimism, risk attitudes

1. Introduction

Promoting entrepreneurship is crucial for a country's socio-economic development. Developing and developed nations have recently implemented numerous policies to encourage entrepreneurship among their citizens. In Vietnam, the surge in entrepreneurship began in 2016, according to the Ministry of Planning and Investment (2022), the number of Vietnamese enterprises increased by 1.6 times between 2016 and 2020 compared to 2011 to 2025. General Statistics Office of Vietnam (2024) reported that 217706 businesses entered and re-entered the market in 2023; however 89100 companies suspended operations, a 20.7% increase from 2022; and 65500 firms ceased operations while awaiting dissolution procedures, a 28.9% increase; 18000 firms completed dissolution procedures. Despite being among the top 20 countries with the lowest success rates for startups (less than 10%), Vietnam hasn't seen a significant success in entrepreneurship due to high risk associated with market instability, complex capital management, and challenging business risk management.

Entrepreneurs must make decisions and understand risk management, requiring accurate risk identification and assessment. Their decisions impact the creation, growth, and survival of their businesses. Individual differences, particularly in personality, affect behavior and perception, influencing risk-taking. Personality traits can predict decision-makers' risk attitudes (Beyer et al.,

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2015). Risk attitude refers to an individual's mindset that can lead to positive or negative outcomes in decision-making (Hillson & Murray-Webster, 2007). This term is closely linked to how a person perceives risk, viewing it as either an opportunity or a threat. Risk attitude also reflects an individual's perception of uncertainty. Lee and Foo (2020) studied the relationship between personality traits and risk attitudes in managers in Malaysia's construction industry, using the Big Five personality traits (openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism).

Optimism and pessimism influence expectations about the future. A person can be optimistic in one area of life but pessimistic in another. Balancing optimism and pessimism is considered a hallmark of success. Optimism can lead to taking uncalculated financial risks, while excessive worry about failure can result in avoidance and passive behavior (Hecht, 2013). These attitudes are linked to distinct physiological processes and are reflected in thoughts, feelings, decisions, and behaviors. Thus, optimism and pessimism are important factors in studying entrepreneurs's risk attitudes.

Each country has unique economic, social, and cultural contexts, affecting the personality characteristics of business people. In Vietnam, there is limitted researches to formally investigate the relationship between personality traits and risk attitudes of entrepreneurs. Based on Yoo and Lee's (2020), to fully understand the risk attitudes, it needs to investigate the other predictors including optimism, and pessimism features. Therefore, this study aimed to explore whether personality traits, optimism, and pessimism influence the risk attitudes of Vietnamese entrepreneurs.

1.1 Risk attitude

Risk attitude is the evaluation of situations with intent, either favorably or unfavorably, in an appropriate manner. Rohrmann (2005) identified risk bias and risk aversion as key characteristics of risk attitude, while Hillson and Murray-Webster (2007) considered various factors. Risk is not stable or homogeneous; people tend to have sector-specific attitudes toward physical, financial, and social risks. Weber et al. (2002) categorized risk scenarios into five areas—ethical, financial, safety, recreational, and social—creating the domain-specific risk attitudes (DOSPERT) scale, influenced by risk-taking, risk perception, and expected benefits.

Risk attitude varies across different situations and types of risk. Individuals assess risks uniquely, not consistently across sectors, and their motivation for risk tolerance varies by situation. Pearson et al. (2002) found that respondents did not consistently, they avoid or seek risk across all areas and that gender influences risk aversion, with women generally being more risk-averse than men, except in social risks. Gender differences and the context of risk-taking affect how activities are perceived through the benefits of risk.

In this context, risk attitude is described as either risk-taking or risk-aversion. The concept seeks to determine whether an individual's personality influences their acceptance of business risk conditions and how these characteristics impact outcomes.

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1.2. Big five personality traits

The Big Five model is a comprehensive framework for identifying an individual's personality traits by measuring openness, conscientiousness, extraversion, agreeableness, and neuroticism. Initially identified by Fiske in 1949, this model was further developed by Norman (1967) and McCrae and Costa (1997). According to Rauch (2014), these traits significantly influence career choices and job performance. Personality traits are not easily observed and must be interpreted through measurable responses. Zhao and Seibert (2006) found that entrepreneurs tend to score high on openness, conscientiousness, and extraversion, but lower score on agreeableness and neuroticism. However, some studies have produced different results. For instance, a survey of 218 entrepreneurs and managers in a major Canadian city revealed that entrepreneurs were significantly less conscientious and agreeable (Envick & Langford, 2000). John et al. (2008) describe the five major traits: openness to experience, conscientiousness, extraversion, agreeableness, neuroticism in detail as below.

Openness to Experience: Common perceptions of what defines openness are often inconsistent (Funder & Sneed, 1993). Researchers have suggested that entrepreneurs are drawn to the everchanging environment and new challenges in the business world. Those who thrive in such environments typically develop innovative solutions, business models, and products. McCrae & Costa Jr. (1987) explored interpersonal differences in openness, categorizing them based on influences such as culture and cognitive ability. Openness is distinct from skill and knowledge; it involves an individual seeking and appreciating new experiences for personal benefit. The traits of open-minded individuals include curiosity, creative thinking, and a willingness to embrace unique ideas and values. These individuals often experience intense emotions. Conversely, those who score low on openness tend to have a conventional outlook, exhibit dogmatic and rigid beliefs, and are less emotionally reactive (Widiger & Costa, 2012).

Conscientiousness: It represents a facet of ego and enduring strength, commonly associated with terms like willpower, initiative, and responsibility. Costa Jr. et al. (1991) describe conscientiousness as encompassing both restrictive and proactive elements. Proposed components of conscientiousness include competence, order, seriousness, ambition, self-discipline, and thoughtfulness (Costa Jr. et al., 1991). This dimension illustrates the level of organization, resilience, control, and goal-driven behavior. People who score high in conscientiousness are typically organized, independent, hardworking, self-controlled, careful, ambitious, and persevering. On the other hand, those with low scores tend to be aimless, lazy, careless, disorganized, and hedonistic (Widiger & Costa, 2012). Conscientiousness combines achievement, motivation, and confidence. Collins et al. (2004) concluded that entrepreneurs are more likely to succeed, suggesting that highly motivated individuals are drawn to environments where success is closely tied to their efforts. Conscientiousness merges aspects of organization and behavior, influenced by conscience or diligence (Widiger & Costa, 2012).

Extraversion: This measures how active, talkative, and enthusiastic an individual is (Costa Jr. et al., 1991). Highly extroverted people are socially active, and likable, while those with low scores are reserved and independent but not socially hostile. Introverts are not pessimists; they simply have less interest in social interactions (Widiger & Costa, 2012). Extraversion is crucial for

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describing behaviors, and predicting efficiency, well-being, risk-taking, and resilience (Leary & Hoyle, 2009). Entrepreneurs often exhibit high extraversion to sell their ideas (Kerr et al., 2017), though some avoid bureaucratic settings (Envick & Langford, 2000). Zhao and Seibert (2006) found no significant extraversion difference between entrepreneurs and managers.

Agreeableness: While extraversion is about the amount of social interaction one prefers, agreeableness focuses on the quality of interpersonal behavior. It shapes how individuals perceive others and influences their attitudes and creativity. According to Costa Jr. et al. (1991), agreeableness encompasses traits like trust, straightforwardness, altruism, compliance, modesty, and tenderness. Entrepreneurs are often seen as having low agreeableness because they prioritize their roles as future business leaders over pleasing others (Kerr et al., 2017). People high in agreeableness strive to be pleasant and likable and expect the same from those around them. The presence of individuals with varying levels of agreeableness can significantly impact social dynamics (Leary & Hoyle, 2009). Those low in agreeableness tend to be skeptical, rude, irritable, manipulative, hostile, and cruel (Widiger & Costa, 2012).

Neuroticism: Neuroticism measures the extent of emotional instability in a person. High neuroticism scores are associated with negative emotional states like anger, hostility, depression, anxiety, and mood swings. This trait is linked to a higher susceptibility to stress, increased self-awareness, strong desires, and difficulty coping with frustration when impulses cannot be acted upon (Widiger & Costa, 2012). Individuals with high neuroticism often respond poorly to stress, perceiving normal situations as risky and minor setbacks as overwhelming. They tend to be self-conscious, shy, and struggle to manage their desires or impulses when feeling sad. Despite these challenges, neuroticism is now recognized as a fundamental aspect of cognitive function (Widiger & Costa, 2012).

Entrepreneurs are generally thought to exhibit low levels of neuroticism, as the confidence required to take business risks is incompatible with high neurotic tendencies (Zhao & Seibert, 2006). Bolger and Schilling (1991) studied the relationship between neuroticism and distress, finding that individuals high in neuroticism take longer to recover from daily stressors compared to those with lower levels. Factors such as the availability of social support and the presence of chronic stress significantly affect recovery rates, with those receiving less support experiencing prolonged effects of stressors (Bolger & Schilling, 1991).

1.3. Optimism and Pessimism

Optimism and pessimism, which reflect positive or negative expectations about the future, are not merely opposites but rather lie on a continuum with varying degrees (Hecht, 2013). Kahneman (2011) highlights the necessity of balancing optimism and pessimism for achieving success. While too much optimism can lead to reckless financial choices and overconfidence, excessive pessimism can cause risk aversion and missed opportunities. Success involves finding a middle ground between these extremes.

Optimism is defined by individuals maintaining unrealistic expectations about favorable outcomes (Astebro et al., 2014). Optimists tend to seek out positive reinforcement from their

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surroundings and often disregard information that does not align with their positive perspective (Hecht, 2013). This indicates that people with high levels of optimism usually exhibit high selfesteem, enthusiasm, and a propensity for taking risks. Entrepreneurs are typically viewed as highly optimistic, given that their business decisions are inherently risky. Although there are occasions when optimism can be disadvantageous or even harmful, such instances are relatively uncommon. In summary, the optimism behavior is important to learn about.

Pessimism: Pessimists often give more attention to negative signals and tend to overlook the positive aspects of situations (Hecht, 2013). This implies that individuals with high levels of pessimism frequently struggle with depression or excessive worry about their surroundings. They are more susceptible to external influences, tend to be timid, and are less likely to share their thoughts and feelings. Previous studies on the personality traits of entrepreneurs have not examined the relationship between pessimism and risk-taking, focusing solely on the link between optimism and risk-taking. To better understand the difference between these two attitudes, the author has decided to explore the relationship between pessimism and risk attitudes.

1.4. Hyphotheses development

Over the years, researchers have extensively studied personality traits and risk attitudes, with new dimensions continuously emerging from theoretical frameworks. Social psychologists have used the concept of attitude to describe human behavior. Ajzen (2005) proposed that attitudes, behaviors, and personality traits are interrelated. Like personality traits, attitudes are hypothetical constructs that cannot be directly observed but must be inferred from measurable responses (Lee & Foo, 2020). These responses, which include cognitive, emotional, and agreeable reactions, reflect the positive or negative impact of the subject's re-evaluation (Ajzen, 2005).

The theory of planned behavior explains the correlation between personality traits and attitudes indirectly. One factor influencing intent is the attitude toward behavior, which can correlate with personality traits. Murray-Webster & Hillson (2008) categorized factors affecting risk perception and attitudes into three groups: rational (conscious), subconscious, and emotional. These groups function similarly to personality traits. For example, in the Big Five personality traits, neuroticism and extraversion relate to how individuals manage emotions. Emotional factors like optimism and pessimism also influence risk perception and attitudes. Rational factors involve making logical judgments about risk severity, thereby affecting risk perception and attitudes. Optimism generally increases risk acceptance, while pessimism lowers risk tolerance.

Relationship between Openness and Risk Attitude

Openness typically refers to an individual's propensity to seek out new experiences (Lee & Foo, 2020). Individuals scoring high in openness are more likely to embrace uncertainty and take risks to gain new experiences for their own benefit. Conversely, those with low openness scores are generally less willing to take risks for new experiences. McGhee et al. (2012) found a correlation between openness and risk-taking behavior, a relationship further supported by research from Lee and Foo (2020). Therefore, this study hypothesizes a positive relationship between openness to experience and risk attitudes.

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Hypothesis 1 (H1): Openness to experience positively relates to risk attitude.

Relationship between Conscientiousness and Risk Attitude

Conscientiousness refers to an individual's sense of responsibility and goal-oriented behavior, indicating that those with high conscientiousness are typically well-organized and able to control their impulses, leading to careful decision-making in various situations. Previous research has suggested that individuals with high conscientiousness are generally more cautious about taking risks (Widiger & Costa, 2012). McGhee et al. (2012) found that teenagers with low conscientiousness scores significantly correlate with risk-taking behavior. Therefore, this study proposes a negative relationship between conscientiousness and risk attitudes.

Hypothesis 2 (H2): Conscientiousness negatively relates to risk attitude.

Relationship between Extraversion and Risk Attitude

Extraversion involves an individual's use of cognitive and emotional abilities in social interactions. Those with high extraversion scores are more willing to take risks to form beneficial social relationships, including those involving intimacy and interdependence (King, 1995). McGhee et al. (2012) also found that adolescents with high extraversion scores tend to engage in risk-taking behaviors. Consequently, this study proposes a positive correlation between extraversion and risk attitudes.

Hypothesis 3 (H3): Extraversion positively relates to risk attitudes.

Relationship between Agreeableness and Risk Attitude

Agreeableness ranges from compassion to antagonism (Widiger & Costa, 2012). Given this spectrum, analyzing the relationship between risk and agreeableness can be challenging. However, risk perception varies depending on the type of risk individuals encounter. In situations that threaten their health and well-being, highly agreeable individuals are likely to avoid risks to protect themselves. Conversely, individuals with low agreeableness scores, who tend to be uncooperative and hostile, may be more prone to taking risks. This suggests a negative relationship between agreeableness and risk attitudes (Widiger & Costa, 2012). Thus, this study hypothesizes that agreeableness is negatively related to risk attitudes.

Hypothesis 4 (H4): Agreeableness negatively relates to risk attitudes.

Relationship between Neuroticism and Risk Attitude

Neuroticism is a personality trait that highlights an individual's sensitivity to emotional stress in social and environmental contexts. Individuals with high neuroticism scores are more likely to experience emotional stress and therefore tend to avoid stressful or risky situations (Lee & Foo, 2020). This tendency arises because neurotic individuals often struggle to manage their emotions and desires when they are distressed (Widiger & Costa, 2012). Hence, this study hypothesizes a negative correlation between neuroticism and risk attitudes.

Hypothesis 5 (H5): Neuroticism negatively relates to risk attitudes.

Relationship between Optimism and Risk Attitude

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Optimism encourages individuals to take risks in a more measured manner (Houghton & Johnson, 2009). Research consistently indicates that those involved in business tend to exhibit higher levels of optimism compared to non-business individuals. Entrepreneurs, in particular, often make riskier business decisions and face greater financial losses (Puri & Robinson, 2007). The study by Shane (2008) suggests that entrepreneurs frequently overestimate their performance. Conversely, the research by Bengtsson & Ekeblom (2014) examining economic forecasts of entrepreneurs showed higher levels of optimism about the economy, with relatively fewer forecast errors. Hence, this study proposes that optimism is positively associated with risk attitudes.

Hypothesis 6 (H6): Optimism positively relates to risk attitudes.

Relationship between Pessimism and Risk Attitude

Pessimism is linked to decreased risk tolerance (Houghton & Johnson, 2009). Dawson et al. (2015) conducted a study comparing income expectations from a UK Household Panel survey spanning 1991 to 2008 with future income outcomes for entrepreneurs. They found that pessimistic entrepreneurs tend to outearn their optimistic counterparts, particularly at higher income levels and overall efficiency. This suggests that pessimistic entrepreneurs often opt for low-risk decisions, favoring stable outcomes with lower returns over higher-risk, higher-reward choices.

Hypothesis 7 (H7): Pessimism negatively relates to risk attitudes.

The conceptual framework was developed as in the following figure based on the literature review.





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2. Research method

2.1. Sample participant and research design

To identify the relationships between risk attitudes and influencers, the researcher applied deductive reasoning in this study.

The participants of this study were Vietnamese entrepreneurs. A questionnaire was used. Before collecting the preliminary data, the author conducted a pilot test with the aim of reviewing a questionnaire by using 35 offline participants. The data was collected through online surveys. 167 young Vietnamese entrepreneurs have participated in fully answering the questionnaire. The structured questionnaire includes four major sections for data collection: The first section has 20 items measuring the personal traits adapted from (John and Srivastava, 1999), the second part consists of 8 items related to optimism and pessimism (followed Extended Life Orientation Test (ELOT), the third contains 9 items exploring about risk attitudes of respondents adapted (Blais & Weber, 2006), and the last section focuses on collecting demographic information on respondents, including their business fields, gender, and education.

Kline (2015) suggested that the N:q ratio should be 10:1, meaning that each parameter in the model needs 10 participants. Consequently, with a total of 37 measurement items for 8 variables, this study requires at least 80 observations. The author collected responses from 167 participants, ensuring that all measurement items were answered and suitable for the data analysis.

2.2. Data analysis

According to Henseler and Chin (2010), the research model is assessed in two steps: evaluating the measurement and evaluating the structural model. Initially, the measurements were examined by assessing common method bias, the reliability, convergence value, and discriminant value.

Next, to understand the relationships between the predictors and the dependent variable, a PLS-SEM (Partial Least Squares Structural Equation Modeling) was applied. This test holds statistical significance at the 5% level.

3. Results

3.1. Sample Profile

The participants are owners of small and medium enterprises (SMEs) across various sectors: Services (34.1%, n=57), services (34.1%, n=57), trading (31.7%, n=53), manufacturing (13.2%, n=22), and other sectors (21%, n=35). They directly manage the businesses and make crucial decisions for their company's growth and sustainability.

Most Vietnamese entrepreneurs are at young age nearly 70% of the sample: under 25 years old businessmen account for 30.5% (n=51), 25 to under 30 (37.1%, n=62), 30 to under 35 (16.8%, n=28), and 35 and above (15.6%, n=26). There is a gender disparity, with males representing 52.7% (n=88) and females 47.3% (n=79) of the sample.

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Additionally, most participants are married (74.9%, n=125), followed by single individuals (22.8%, n=28), and those who are divorced or have other marital statuses accounting for a minimal proportion of 2.4% (n=4). The duration of their business is categorized as follows: 12.6% of the entrepreneurs have run their business for less than 1 year, while the percentage of business owners with a length of time from 1 year to under 4 years, 4 to less than 6 years and from 6 years and more account for 36.5%, 18.6%, 32.3%; respectively.

3.2. Reliability Test

Before tesing the measurement reliability, the study used Harman's single-factor test to verify that the data collected was free of common method bias (Hair et al., 2011). The result of the measurement is considered acceptable if the overall latency factor has less than 50% of variance. The test result showed that one extracted factor accounts for 21.49% of the variance in the data sample. Therefore, there isn't a common method bias in the data set.

Reliability testing assesses the internal consistency of a measurement scale across various variables. Cronbach's alpha is a commonly used metric for evaluating the internal consistency of variables. According to Nunnally and Bernstein (1994), an internal consistency reliability measurement above 0.60 and a corrected item-total correlation above 0.30 are acceptable for further analysis. The reliability test demonstrated that Cronbach's Alpha of all items > 0.6 and corrected item-total correlations above 0.30 after excluding the measurement item N3 (a watched variable of the Neuroticism factor). Thus, the remaining 36 measurement items continue to be included in factor analysis.

Item	Α	С	Ε	Ν	0	OP	PE	R
A1	0.865	0.308	-0.190	-0.259	-0.009	-0.165	0.134	-0.424
A2	0.835	0.293	-0.208	-0.384	-0.085	-0.258	0.075	-0.436
A3	0.747	0.190	-0.144	-0.199	-0.141	-0.276	0.120	-0.271
A4	0.841	0.277	-0.141	-0.214	-0.093	-0.173	0.071	-0.428
C1	0.221	0.831	-0.172	-0.081	0.144	0.108	0.185	-0.247
C2	0.318	0.824	-0.039	-0.120	0.095	0.049	0.224	-0.296
C3	0.250	0.850	-0.140	-0.064	0.153	0.132	0.214	-0.380
C4	0.311	0.800	-0.072	0.002	0.130	0.025	0.228	-0.260
E1	-0.145	-0.166	0.813	0.153	0.028	0.272	-0.252	0.312
E3	-0.107	-0.041	0.785	0.279	0.047	0.366	-0.284	0.259
E4	-0.231	-0.105	0.881	0.270	-0.089	0.272	-0.362	0.482
N1	-0.319	-0.145	0.259	0.867	0.070	0.395	-0.008	0.319
N2	-0.307	-0.016	0.192	0.839	0.013	0.365	-0.082	0.259
N4	-0.144	-0.004	0.260	0.766	-0.039	0.359	-0.141	0.183
01	-0.132	0.162	-0.050	0.004	0.751	0.141	0.232	-0.067

Table 1: Discriminant validity - Cross loadings

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02	-0.043	0.129	-0.048	-0.027	0.881	0.177	0.191	-0.191
03	-0.045	0.166	-0.018	0.110	0.783	0.224	0.224	-0.116
O4	-0.123	0.078	0.036	0.033	0.787	0.170	0.174	-0.121
OP1	-0.205	-0.031	0.325	0.364	0.177	0.862	-0.026	0.160
OP2	-0.164	0.147	0.242	0.384	0.126	0.816	-0.115	0.123
OP3	-0.220	0.070	0.238	0.312	0.154	0.769	0.051	0.052
OP4	-0.267	0.166	0.325	0.407	0.260	0.838	0.007	0.132
PE1	0.097	0.234	-0.246	0.008	0.211	-0.009	0.799	-0.331
PE2	0.110	0.203	-0.372	-0.089	0.184	-0.069	0.838	-0.374
PE3	0.056	0.236	-0.317	-0.118	0.150	-0.025	0.785	-0.314
PE4	0.115	0.182	-0.278	-0.059	0.246	-0.019	0.845	-0.416
R1	-0.365	-0.342	0.301	0.311	-0.173	0.105	-0.291	0.715
R3	-0.358	-0.262	0.377	0.263	-0.042	0.221	-0.348	0.784
R4	-0.373	-0.315	0.283	0.197	-0.168	0.036	-0.300	0.768
R6	-0.328	-0.294	0.314	0.255	-0.180	0.057	-0.304	0.734
R9	-0.421	-0.249	0.413	0.214	-0.056	0.200	-0.375	0.749

The factor extraction method used is Principal Axis Factoring with Promax rotation. The scale is accepted when $0.5 \leq \text{KMO} \leq 1$ (Hair et al., 2011); Sig coefficient. = 0.000 of the Bartlett test indicates that the observed variables are statistically significant; Total variance extracted $\geq 50\%$ (Gerbing & Anderson, 1988), and factor loading ≥ 0.7 showed appropriate reliability for factor analysis. Table 1 reports the cross-factor loadings of all the items that met the requirements after eliminating the unsatisfied. Discriminant validity was also tested using the criterion proposed by Fornell and Larcker (1981, as cited in Ab Hamid, 2017). According to this criterion, discriminant validity is established when the square root of the average variance extracted (AVE) by a construct is greater than the correlation between that construct and any other construct, as shown in Table 2.

	Α	С	Ε	Ν	0	OP	PE	R
Α	0.823							
С	0.331	0.826						
Е	-0.209	-0.128	0.827					
Ν	-0.327	-0.081	0.284	0.825				
0	-0.092	0.159	-0.025	0.029	0.802			
OP	-0.256	0.100	0.352	0.451	0.222	0.822		
PE	0.118	0.258	-0.370	-0.078	0.245	-0.038	0.817	
R	-0.484	-0.368	0.450	0.319	-0.171	0.156	-0.443	0.742

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3.3. Hypotheses Test

Before evaluating the structural model, collinearity is assessed first (Hair et al., 2011; Wong, 2013). Collinearity can be determined by examining the values of the tolerance coefficient and variance inflation factor (VIF). The overall tolerance values must be greater than 0.2 while the VIF value must be lower than 5.0. The result showed there are no Collinearity issues in the model.

To test the hypotheses, the path coefficients were investigated through bootstrapping at the significance level p (0.05). The total number of samples used was 5000. The overall models are structurally good with significant values (R2 risk attitude= 0,481). The model explains 48.1% of the variance in risk attitudes. The test result shows that Hypotheses H2, H3, H4 and H7 are supported; H1, H5 and H6 are not supported.

	1 0		
Hypothesis	Std (β)	р	Hypothesis
H1: Openness \rightarrow Risk attitude	-0.109	0.066	Not supported
H2: Conscientiousness \rightarrow Risk attitude	-0.127	0.026	Supported
H3: Extraversion \rightarrow Risk attitude	0.250	0.000	Supported
H4: Agreeableness \rightarrow Risk attitude	-0.341	0.000	Supported
H5: Neuroticism \rightarrow Risk attitude	0.134	0.051	Not supported
H6: Optimism \rightarrow Risk attitude	-0.052	0.520	Not supported
H7: Pessimism \rightarrow Risk attitude	-0.243	0.001	Supported

Table 3: Results of path significance.

Significant at p < 0.05

4. Discussion

This study investigated the relationship among personal traits, optimism, pessimism, and risk attitude. The results shed light on understanding about the entrepreneurs. This study confirms the positive relationship between extraversion and risk attitudes; and the negative connections between conscientiousness, agreeableness, pessimism, and risk attitudes. Besides, openness, neuroticism, and optimism have been shown to have no relationship with risk attitudes.

First, the finding showed that there is no significant relationship between openness and risk attitude. This finding contradicts previous research by Widiger & Costa (2012) and McGhee et al. (2012) on entrepreneurs' personality traits. The difference from the previous studies may be due to several reasons. In Vietnam, unique geographical characteristics, culture, and legal policies shape the open-minded personalities of individuals, including entrepreneurs. Nevertheless, it is not feasible to assess an entrepreneur's risk attitude based solely on their openness. Understanding this distinction is valuable for investors and corporate finance advisors.

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Next, the result confirmed the negative relationship between conscientiousness and risk attitudes with a path coefficient of $\beta = -0.127$ and a p-value of 0.026, indicating statistical significance at the 95% confidence level. Therefore, the hypothesis 2 is supported. This implies that individuals with higher levels of conscientiousness are more risk-averse, as their strong sense of responsibility and thoroughness lead to longer decision-making times due to their aversion to risk. This finding is consistent with previous researchs on the relationship between conscientiousness and risk attitude.

Hypothesis H3 proposed that extraversion positively influences the risk attitude of Vietnamese entrepreneurs. The test supported this hypothesis showing a positive relationship between extraversion and risk attitude. Consequently, in Vietnam, entrepreneurs who are more socially active, talkative, people-oriented, cheerful, and likable are less risk-averse. They are more inclined to innovate and take bold actions to achieve significant success. This result aligns with studies of (Widiger & Costa, 2012; McGhee et al., 2012) on the relationship between extraversion and risk attitude.

The results validate hypothesis H4 showing a significant relationship between agreeableness and risk attitude. This implies that entrepreneurs who exhibit high levels of trust, straightforwardness, altruism, compliance, modesty, and tenderness tend to be more risk-averse. This finding aligns with previous research on the relationship between agreeableness and risk attitude.

Hypothesis H5 proposed that neuroticism negatively involves the risk attitude of Vietnamese entrepreneurs. However, SEM analysis shows no relationship. This finding is not aligned with previous studies by Lee & Foo (2020) and Widiger & Costa (2012), which suggested that neuroticism negatively impacts risk attitudes. Therefore, it is not appropriate to evaluate the risk-taking propensity of Vietnamese entrepreneurs based solely on neurotic traits such as anger, hostility, depression, anxiety, or moodiness.

Hypothesis H6 is not supported. This finding differs from the previous studies showing no significant relationship between optimism and risk attitude (Houghton & Johnson, 2009; Puri & Robinson, 2007; Bengtsson & Ekeblom, 2014). Consequently, it cannot be concluded that young Vietnamese entrepreneurs with high self-esteem and an optimistic future orientation are more likely to take significant risks.

Hypothesis H7 was supported indicating that pessimism negatively impacts the risk attitudes of Vietnamese entrepreneurs with a path coefficient of $\beta = -0.243$ and a p-value of 0.001, ensuring statistical significance at a 99% confidence level. This indicates that pessimism is inversely correlated with risk attitudes, suggesting that individuals who are overly anxious, shy, or less communicative tend to be more risk-averse. The finding aligns with the previous study.

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The findings confirm that conscientiousness, agreeableness, and pessimism negatively affect the risk attitudes of Vietnamese entrepreneurs, while extraversion is the only factor positively influencing risk attitudes. Openness, neuroticism, and optimism do not have relationships to risk attitudes. These results provide valuable insights into the personality traits of Vietnamese entrepreneurs and their impact on risk attitudes. Although optimism does not affect risk attitudes as previous studies suggested, pessimism negatively impacts risk attitudes, highlighting essential personality characteristics of Vietnamese entrepreneurs.

5. Limitations and future research recommendation

Although the valuable insights provided by this study, certain limitations should be admitted. First, the entrepreneurs were all small and medium business owners, making the results not representative of all Vietnamese entrepreneurs. Therefore, the findings mainly apply to entrepreneurs who own small and medium enterprises. Future studies should separately analyze the personality characteristics of small and medium business owners compared to those of large business owners or other influential groups, such as management.

There may be other personality traits, such as confidence or conservatism, that could also affect risk attitudes and enhance the model. Future research should consider incorporating these additional factors into the study of entrepreneurs' personality traits.

References

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of physics: Conference series* 890 (1). IOP Publishing.
- Ajzen, I. (2005). Attitudes, personality, and behavior. McGraw-Hill Education (UK).
- Astebro, T., Herz, H., Nanda, R., & Weber, R. A. (2014). Seeking the roots of entrepreneurship: Insights from behavioral economics. *Journal of Economic Perspectives*, 28(3), 49–70.
- Bengtsson, O., & Ekeblom, D. (2014). The bright but right view? A new type of evidence on entrepreneurial optimism.
- Beyer, A. R., Fasolo, B., De Graeff, P. A., & Hillege, H. L. (2015). Risk attitudes and personality traits predict perceptions of benefits and risks for medicinal products: a field study of European medical assessors. *Value in Health*, 18(1), 91-99.
- Blais, A. R., & Weber, E. U. (2006). A Domain-Specific Risk-Taking (DOSPERT) scale for adultpopulations. *Judgment and Decision making*, 1(1), 33-47.
- Bolger, N., & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. *Journal of Personality*, 59(3), 355–386.
- Collins, C. J., Hanges, P. J., & Locke, E. A. (2004). The relationship of achievement motivation to entrepreneurial behavior: A meta-analysis. *Human Performance*, *17*(1), 95–117.
- Costa Jr, P. T., McCrae, R. R., & Dye, D. A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO Personality Inventory. *Personality and Individual Differences*, 12(9), 887–898.

Vol. 8, No.07; 2024

ISSN: 2456-7760

- Dawson, C., D.E. De Meza, A. Henley, G.R. Arabsheibani. (2015). The power of (non) positive thinking: Self-employed pessimists earn more than optimists. *IZA discussion paper* No. 9242.
- Envick, B. R., & Langford, M. (2000). The five-factor model of personality: Assessing entrepreneurs and managers. *Academy of Entrepreneurship Journal*, 6(1), 6–17.
- Funder D, Sneed C. (1993). Behavioral manifestations of personality: an ecological approach to judgmental accuracy. *J Personality Soc Psychol*. 64(3): 479–490.
- General Statistics Office. (2024). A picture of the business registration situation in 2023 and forecast of business trends in 2024. Retrieved January 6, 2024, from <u>https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2024/01/buc-tranh-ve-tinh-hinh-dang-ky-doanh-nghiep-nam-2023-va-du-bao-xu-huong-doanh-nghiep-trong-nam-2024/.</u>
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research*, 25(2), 186–192.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hecht, D. (2013). The neural basis of optimism and pessimism. *Experimental Neurobiology*, 22(3), 173.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, 17(1), 82–109.
- Hillson, D., & Murray-Webster, R. (2007). Understanding and managing risk attitude. Gower Publishing, Ltd.
- Houghton, J. D., & Johnson, T. D. (2009). Aggression, risktaking, and leadership effectiveness: Leadership lessons from the explanatory styles of civil war generals. *Int J Leadersh Stud*, 5, 51–68.
- John OP, Srivastava S. (1999). The Big-Five trait taxonomy: history, measurement, and theoretical perspectives. In: Pervin LA, John OP, editors. Handbook of personality: theory and research. Vol. 2. New York: Guilford Press; p. 102–138.
- Kahneman, D. (2011). Thinking, Fast and Slow, Farrar, Straus and Giroux, ISBN 9780374275631. *Reviewed by Freeman Dyson in New York Review of Books*, 40–44.
- Kerr, S. P., Kerr, W. R., & Xu, T. (2017). Personality traits of entrepreneurs: A review of recent literature.
- King, L. A. (1995). Wishes, motives, goals, and personal memories: Relations of measures of human motivation. *Journal of Personality*, 63(4), 985–1007.
- Kline, P. (2015). A handbook of test construction (psychology revivals): Introduction to psychometric design. Routledge.
- Leary, M. R., & Hoyle, R. H. (2009). Handbook of individual differences in social behavior. Guilford Press.
- Lee, C. K., & Foo, M. Y. (2020). Risk attitudes and the big five personality traits: A study on construction project practitioners in Malaysia. *International Journal of Construction Management*, 1–11.

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ISSN: 2456-7760

- Murray-Webster, R., & Hillson, D. (2008). *Managing group risk attitude*. Gower Publishing, Ltd.
- McCrae, R. R., & Costa Jr, P. T. (1997). Conceptions and correlates of openness to experience. In *Handbook of personality psychology* (pp. 825–847). Elsevier.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81.
- McGhee, R. L., Ehrler, D. J., Buckhalt, J. A., & Phillips, C. (2012). The relation between five-factor personality traits and risk-taking behavior in preadolescents. *Psychology*, *3*(8), 558.
- Ministry of Planning and Investment. (2022). The White Book. Vietnamese Enterprises 2022. Statistical Publishing House, 34 -35.
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory.
- Norman, W. T. (1967). 2800 personality trait descriptors-normative operating characteristics for a university population.
- Pearson, M. N., Russell, R. L., & Rohrmann, G. F. (2002). Functional analysis of a conserved region of the baculovirus envelope fusion protein, LD130. *Virology*, *304*(1), 81–88.
- Puri, M., & Robinson, D. T. (2007). Optimism and economic choice. *Journal of Financial Economics*, 86(1), 71–99.
- Rauch, A. (2014). Predictions of entrepreneurial behavior: A personality approach. In *Handbook* of research on small business and entrepreneurship. Edward Elgar Publishing.
- Rohrmann, B. (2005). Risk attitude scales: Concepts, questionnaires, utilizations. *Project Report. Online Access Http://Www. Rohrmannresearch. Net/Pdfs/Rohrmann-RasReport. Pdf, 13*, 2012.
- Shane, S. (2008). *Fool's Gold?: The truth behind angel investing in America*. Oxford University Press.
- Weber, E. U., Blais, A.-R., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15(4), 263–290.
- Widiger, T. A., & Costa, P. T. (2012). Integrating normal and abnormal personality structure: The five-factor model. *Journal of Personality*, *80*(6), 1471–1506.
- Wong, K. K.-K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1–32.
- Zhao, H., & Seibert, S. E. (2006). The big five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259.