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TÁC ĐỘNG CỦA ĐẶC ĐIỂM NHÂN CÁCH ĐẾN ĐẦU TƯ CÓ TRÁCH NHIỆM XÃ HỘI CỦA THẾ HỆ Z: TRƯỜNG HỢP CỦA VIỆT NAM

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Tóm tắt

Mục tiêu chính của nghiên cứu này là phân tích mối quan hệ giữa năm đặc điểm cá nhân lớn (Big Five) được đo lường bằng tính cách hướng ngoại, thân thiện, sẵn lòng tiếp nhận, cẩn thận, căng thẳng và ý định đối với đầu tư xã hội (SRI). Ngoài ra, mô hình của chúng tôi cũng bao gồm ba yếu tố của Lý thuyết Hành vi Đã lập kế hoạch, đó là thái độ đối với SRI, chuẩn mực xã hội và kiểm soát hành vi được cảm nhận. Nghiên cứu cũng xem xét tác động của các biến điều kiện được xác định bởi mối quan tâm đến môi trường và hiệu suất tài chính đối với ý định đối với SRI. Dữ liệu thực nghiệm được thu thập thông qua một cuộc khảo sát với 322 người tham gia tại Hà Nội, là các thành viên thế hệ Z (Gen Z). Kết quả cho thấy các biến đặc điểm cá nhân lớn (Big Five) ảnh hưởng đáng kể đến ý định đối với SRI ngoại trừ tính cách hướng ngoại. Hơn nữa, tính thân thiện, tính cẩn thận và tính sẵn lòng tiếp nhận ảnh hưởng tích cực đến ý định, trong khi căng thẳng có mối quan hệ tiêu cực. Kết quả cho thấy một cá nhân cởi mở với điểm số thân thiện cao, hoặc người muốn tránh bất kỳ sự hiểu lầm nào khi đưa ra quyết định tài chính, sẽ có xu hướng chọn lựa đầu tư xã hội trách nhiệm.

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Từ khóa: Năm đặc điểm tính cách lớn, Lý thuyết hành vi có kế hoạch, Ý định, SRI, Thế hệ Z

IMPACTS OF PERSONALITY TRAITS ON SOCIALLY RESPONSIBLE INVESTMENT OF GENERATION Z: THE CASE OF VIETNAM

Abstract

The primary objective of this research is to examine the correlation between the Big Five personality traits (namely extraversion, agreeableness, openness, conscientiousness, neuroticism) and the inclination towards socially responsible investment (SRI). The study also incorporates three components from the Theory of Planned Behavior—attitude towards SRI, subjective norms, and perceived behavioral control—into its model. In addition, it explores the influence of control variables such as environmental concerns and financial performance on SRI intention. Data was collected through a survey of 322 respondents in Hanoi, who belong to Generation Z (Gen Z). The findings reveal that the Big Five personality traits significantly impact SRI intention, except for extraversion. Specifically, agreeableness, conscientiousness, and openness have a positive association with intention, while neuroticism exhibits a negative relationship. These results suggest that individuals who are open-minded, highly agreeable, or inclined to avoid misconceptions in financial decision-making are more likely to opt for SRIs.

Keywords: Big Five personality traits, Theory of Planned Behavior, Intention, SRI, Gen Z

1. Introduction

In recent years, there has been a noticeable surge in global interest surrounding socially responsible investment (SRI), evidenced by a rise in media coverage and scholarly discussions (McLachlan & Gardner, 2004; Capelle-Blanchard & Monjon, 2012). SRI, as defined by Statman (2006), involves the integration of ethical, environmental, social, and corporate governance considerations into investment decisions, reflecting investors' personal convictions.

Vietnam has actively embraced Environmental, Social, and Governance (ESG) practices and SRI, with support from both governmental and corporate sectors, underlining the nation's commitment to sustainability and social welfare in economic advancement. By May 2023, the number of domestic individual accounts recorded by the Vietnam Securities Depository had exceeded seven million, indicating a growing interest in securities as a financial instrument. However, there remains a dearth of information regarding individuals' SRI intentions in Vietnam, prompting this study to investigate the factors influencing SRI intentions among Vietnamese retail investors.

While the Theory of Planned Behavior (TPB) has been commonly used to elucidate investment decisions, its direct linkage to SRI intentions has been limited. Therefore, our research extends the application of TPB to explore how retail investors perceive sustainable investing, while also examining the impact of Big Five personality traits, financial performance, and environmental concern on attitudes toward SRI.

Traditionally, investment behavior has been analyzed without accounting for age differences. Yet, research suggests variations across age groups, particularly among Generation Z in developing markets. As Generation Z, born after 1997, demonstrates pronounced ethical

inclinations, this study aims to investigate their SRI intentions in Vietnam, considering both personality traits and TPB factors?

Despite numerous global studies on personality traits and investment intentions, empirical research on the influence of Big Five personality traits on Generation Z's investment decisions in Vietnam using the TPB framework is scarce. This research seeks to (1) assess the direct and indirect effects of personality traits, environmental concerns, and financial performance on Generation Z's intentions, and (2) lay the groundwork for further behavioral finance research in Vietnam.

Targeting Generation Z investors aged 18-26, born between 1997 and 2005, this study offers practical insights for individual investors, financial professionals, advisors, and governmental organizations, facilitating investment decisions aligned with personal values and effective SRI strategies.

2. Literature review on Big Five personality traits and socially responsible investment

2.1. Theoretical background

2.1.1. The Big Five Personality Traits

Personality can be categorized into five general dimensions: Openness to experiences, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Digman, 1990; McCrae & John, 1992).

Extraversion pertains to an individual's inclination to engage in conversation, socialize, enjoy the company of others, and possess a noticeable demeanor. Agreeableness characterizes one's propensity to find common ground and come to terms with others rather than rigidly adhering to personal opinions and decisions. Conscientiousness encompasses the inclination to exercise caution, adhere to schedules, follow rules, and demonstrate a strong work ethic. Neuroticism is defined as being emotionally sensitive and frequently experiencing negative emotions such as outrage, anxiety, and depression. Openness to experiences reflects an individual's inclination to embrace novel art, ideas, values, emotions, and behaviors. Conversely, individuals who score low on this dimension typically prefer familiarity, possess narrow interests, and may lack artistic or imagination inclinations.

2.1.2. Socially responsible investment intention

According to a study by Rosen et al. (1991), socially conscious investors are individuals who choose to invest in companies that align with societal values, such as those committed to mitigating air pollution. Pradhan (1995) argues that corporate practices aligned with social responsibility have become increasingly prevalent in the financial industry since the latter half of the 20th century. In their research on environmentally conscious investors, Lewis and Mackenzie (2000) found that many are motivated by a desire to avoid supporting hazardous enterprises and instead invest in businesses that have a positive social impact. Sparkes (2001) suggests that the term "SRI" (Socially Responsible Investment) is now commonly used to describe this approach, replacing the previous term "ethical investment."

To begin, "behavioral intention" is described as a direct precursor to actions (Ajzen, 2002). Intention represents an individual's keenness to engage in specific behaviors (Yadav & Pathak, 2017). When a person possesses positive attitudes, subjective norms, and perceives control over their behavior, they are more inclined to undertake specific actions. Consequently, we can define socially responsible investment (SRI) intention as an individual's readiness to allocate funds towards businesses that align with social values and initiatives, such as promoting environmental awareness and community well-being.

2.1.3. Generation Z

Generation Z, as defined by the Pew Research Center, encompasses individuals born between 1997 and 2012, following the millennial generation, which includes those born between 1981 and 1996. Please refer to Figure 1 for a breakdown of specific age ranges.

2.1.4. Theory of planned behavior (TPB)

The Theory of Planned Behavior (TPB), initially proposed by Ajzen in 1985 and further developed in 1991, has gained significant attention within the field of social psychology. This theory serves as an extension of the Theory of Reasoned Action and aims to provide accurate explanations for how knowledge and incentives influence human behavior. According to the TPB, three distinct factors shape human conduct: behavioral beliefs, normative views, and control beliefs. Behavioral beliefs pertain to an individual's perceptions of the likelihood of engaging in a specific behavior. Normative beliefs involve societal expectations and the influence of others. Control beliefs encompass beliefs regarding the presence of factors that can facilitate or hinder the execution of the behavior. In aggregate, behavioral beliefs contribute to the formation of a positive or negative attitude toward the behavior, normative beliefs shape subjective norms and perceptions of societal pressure, while control beliefs influence perceived behavioral control and self-efficacy. The effect of attitude and subjective norms on intention is further moderated by perceived behavioral control.

2.2. Literature review and hypothesis development

2.2.1. Five personality traits and socially responsible investment intention

The existing body of literature consistently highlights the significant influence of personality factors on investors' overall investment decisions, including those related to sustainable investments.

Zhongyang et al. (2022) and Gutsche et al. (2023) conducted studies on wealthy American investors and found that Openness to experience emerged as one of the most influential personality factors in shaping investors' behavior.

Priyadharshini (2020) empirically demonstrated that the personality trait of conscientiousness significantly affects the investment decisions of retail investors by developing a model to measure its impact level.

Nirmali and Bonaventura (2021) explored the influence of personality factors on stock investing decisions and discovered that extroverted individuals show a preference for stock investing, while individuals characterized by empathy, helpfulness, and interpersonal warmth

seek guidance from others, which negatively affects their tendency to engage in the investing process.

In the study conducted by Nga and Ken Yien (2012), conscientiousness, openness, and agreeableness were found to significantly influence risk aversion, cognitive biases, and adherence to socially responsible investing (SRI) standards among Generation Y undergraduates, respectively.

Although empirical evidence specifically concerning the relationship between the Five Factors of Personality and Gen Z's intentions regarding SRI is limited, the existing research provides sufficient evidence to support the correlation between personality types and general financial investment decisions. Based on the aforementioned literature, we propose the following hypothesis:

Hypothesis 1: SRI intention is significantly influenced by personality traits.

Hypothesis 1a: SRI intention is significantly influenced by Extraversion.

Hypothesis 1b: SRI intention is significantly influenced by Agreeableness.

Hypothesis 1c: SRI intention is significantly influenced by Conscientiousness.

Hypothesis 1d: SRI intention is significantly influenced by Neuroticism.

Hypothesis 1e: SRI intention is significantly influenced by Openness to Experience.

2.2.2. Five personality traits and Theory of Planned Behavior

Durand et al. (2008) have posited that personality serves as a driving force behind human behavior. Numerous studies have emerged that illustrate the impact of personality traits on individuals' financial decision-making. Svendsen et al. (2013) have uncovered that subjective norms play a mediating role in linking extroversion and conscientiousness to behavioral intention. Nevertheless, there remains a dearth of research exploring the effects of personality factors on behavioral intention through psychological antecedents.

Mayfield et al. (2008) assert that behavioral intentions, representing an individual's readiness to engage in specific behaviors, are primarily cognitive in nature. Empirical research conducted by Mayfield et al. (2008) suggests that personality characteristics such as openness, conscientiousness, and risk aversion can influence short- and long-term investing intentions.

There is a need for further research as Wu and Chen (2006) found that the effects of attitudes, subjective norms, and perceptual behavior control on behavioral intention vary among different personality types.

Positive correlations between agreeableness and attitude towards Socially Responsible Investment (SRI), as well as subjective norms, have been observed by Picazo-Vela et al. (2010) and Wang et al. (2021). However, Conner & Abraham (2001) and De Bruijn et al. (2009) found no association between conscientiousness and perceived behavioral control. Conversely, Zaremohzzabieh et al. (2019) supported the notion that openness in SRI positively impacts attitudes towards behavior, subjective norms, and perceived behavioral control. Drawing from the aforementioned literature, we present our second hypothesis as follows:

Hypothesis 2: Attitude towards socially responsible investment is significantly influenced by personality traits.

Hypothesis 2a: Extraversion has a significant effect on attitude towards socially responsible investment.

Hypothesis 2b: Attitude towards socially responsible investment is significantly influenced by Agreeableness.

Hypothesis 2c: Attitude towards socially responsible investment is significantly influenced by Conscientiousness.

Hypothesis 2d: Attitude towards socially responsible investment is significantly influenced by Neuroticism.

Hypothesis 2e: Attitude towards socially responsible investment is significantly influenced by Openness to experience.

Hypothesis 3: Subjective norms are significantly influenced by personality traits.

Hypothesis 3a: Subjective norms are significantly influenced by Extraversion.

Hypothesis 3b: Subjective norms are significantly influenced by Agreeableness

Hypothesis 3c: Subjective norms are significantly influenced by Conscientiousness

Hypothesis 3d: Subjective norms are significantly influenced by Neuroticism.

Hypothesis 3e: Subjective norms are significantly influenced by Openness to experience.

Hypothesis 4: Perceived behavioral control is significantly influenced by Personality traits.

Hypothesis 4a: Perceived behavioral control is significantly influenced by Extraversion.

Hypothesis 4b: Perceived behavioral control is significantly influenced by Agreeableness

Hypothesis 4c: Perceived behavioral control is significantly influenced by Conscientiousness.

Hypothesis 4d: Perceived behavioral control is significantly influenced by Neuroticism.

Hypothesis 4e: Perceived behavioral control is significantly influenced by Openness to experience.

2.2.3. Attitude, Subjective norm, and Perceived behavioral control to SRI intention

East (1993) discovered attitude to be a significant predictor and employed it as one of the fundamental elements that explains the desire to invest. In a related study, Gopi and Ramaiah (2007) discovered a positive correlation between attitude and intention to invest using the theory of planned behavior, where attitude is one of the independent variables. Similar findings were made by Alleyne and Broome (2011) and Pascual-Ezama et al. (2014) about the relationship between behavioral intention and attitude toward stock investment.

The influence of subjective norms on behavioral intention has been highlighted by various researchers, including Sheeran and Taylor (1999), Godin and Kok (1996), among others. Gopi and Ramayah (2007) identified subjective norms as a crucial component in comprehending investors' inclination to invest, and similar findings were reported by Alleyne

and Broome (2011). Given the unfamiliarity of Socially Responsible Investment (SRI) in the securities market, there is a motivation to explore the impact of subjective norms, which consider the potential influence of peer pressure from friends, family, or other groups when selecting SRI stocks.

Perceived behavioral control encompasses the availability of appropriate resources and opportunities in a given subject, as stated by Ajzen (1991). It is associated with an individual's belief in the ability of resources, talents, and capacities. Perceived behavioral control is a key determinant of intention, reflecting an individual's perception of the ease or difficulty of performing a specific activity. This aspect is relevant to investors' capabilities and prospects in Socially Responsible Investment (SRI), as highlighted by Pascual-Ezama et al. (2014), Hofmann et al. (2009), and Osman et al. (2019). Based on this perspective, the following hypothesis is put forth:

Hypothesis 5: SRI intention is positively affected by Attitude.

Hypothesis 6: SRI intention is positively affected by Subjective norms.

Hypothesis 7: SRI intention is positively affected by Perceived behavioral control.

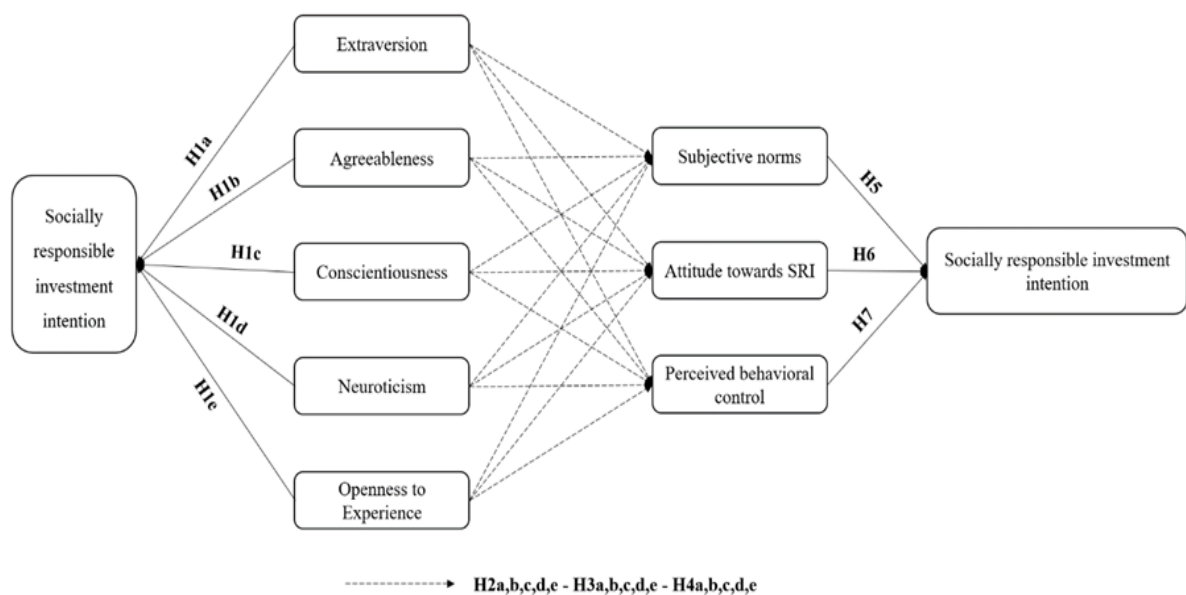


Figure 1: Conceptual framework

Source: Authors' synthesis

3. Research methodology

This study utilizes a comprehensive research approach that combines both quantitative and qualitative methods. It includes a survey with a wide range of questions, including Likert scales and absolute values, to effectively assess various factors. The quantitative part of the research focuses on examining the personality traits of investors, using a carefully calibrated scale to

thoroughly analyze qualitative data related to environmental concerns, financial performance, and intentions regarding socially responsible investments.

The research variables in this study were measured based on prior research and categorized accordingly. The Big Five personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) were measured using responses to five factors adapted from Goldberg (1992). For each trait factor, there were five questions. A five-point Likert scale was used to quantify these trait factors, ranging from 1 = very inaccurate to 5 = very accurate.

The three items assessing environmental concern were borrowed from Koenig-Lewis et al. (2014), and the three items measuring financial performance were borrowed from Luong and Ha (2011). Bringing together inquiries on the factors that drive intentions for socially responsible investment led to the identification of fifteen variables measured in total.. These variables were assessed using a five-point Likert scale, providing operational clarity from 'very inaccurate' to 'very accurate'.

For the measurement of intention drivers, three items for the attitude construct were borrowed from Goles et al. (2008), Hasan et al. (2022), and Raut and Das (2020); three items for subjective norm were borrowed from Raut and Das (2020), Taylor and Todd (1995); and two items for perceived behavioral control were adapted from Arias-Oliva et al. (2019), Hasan et al. (2022). Merging inquiries concerning drivers of intentions toward socially responsible investment yielded a sum of nine measured variables. These variables underwent assessment utilizing a five-point Likert scale, with responses ranging from 1, indicating very inaccurate, to 5, representing very accurate.

The intention toward socially responsible investment questionnaire was derived from an inquiry in a research context by Raut and Das (2020) and Nugraha and Rahadi (2021) with three questions. Similar to the assessment of personality traits and intention drivers, a five-point Likert scale was used to measure the operationally specified elements of the variables, with response selections varying between 1 = never to 5 = always.

Furthermore, demographic data, encompassing age, gender, and annual income, was gathered to explore their impact on the respondents' big five personality traits, motivators of intention, and inclination towards socially responsible investment.

The survey, titled "Psychology and Investment Decisions," employed a 5-point Likert scale, spanning from (1) = very inaccurate to (5) = very accurate, to capture responses from individuals with varying levels of experience and different personality traits within the surveyed age range. The survey was conducted in Hanoi in February 2023, targeting Generation Z respondents aged 18 to 25 who attend college in large cities. Out of the initial 346 participants, 7% of incomplete responses and outliers were eliminated, resulting in a final sample size of 322 responses suitable for measuring the intentions of individual investors.

For data analysis, the researcher utilized the statistical software SPSS 26, employing steps such as descriptive statistics analysis, Cronbach's alpha reliability test, Pearson correlation analysis, and multiple linear regressions.

4. Research results

4.1. Descriptive statistics for independent variables

Table 1 provides descriptive statistics concerning both control and dependent variables. The findings indicate that all variables exhibit a normal distribution, as evidenced by their skewness falling within the acceptable range of -2 to +2. Values for asymmetry and kurtosis within this range are commonly acknowledged as indicative of a normal univariate distribution, as stated by George and Mallery (2021).

Table 1: Descriptive statistics

	Min	Max	Mean	Std. Deviation	Skewness
EXT	1.75	5.00	3.060	0.703	0.359
AGR	1.33	5.00	3.659	0.654	-0.561
CON	1.00	4.80	3.233	0.638	0.057
NEU	1.20	4.80	2.831	0.705	0.204
OPEX	1.75	5.00	3.344	0.611	0.069
AT	1.00	5.00	3.459	0.727	-0.752
SN	1.00	5.00	2.755	0.748	0.078
PBC	1.00	5.00	3.512	0.757	-0.382
EC	1.00	5.00	3.258	0.803	-0.555
FP	1.00	5.00	3.164	0.695	0.081
ITS	1.00	5.00	3.337	0.616	-0.334

Sample size (n = 332)

Note: EXT: Extraversion; AGR: Agreeableness; CON: Conscientiousness; NEU: Neuroticism; OPEX: Openness to experience; AT: Attitude; SN: Subject norms; PBC: Perceived behavioral control; EC: Environmental concern; FP: Financial performance; ITS: Intention towards SRI.

Source: Author's calculation

4.2. Cronbach's alpha reliability testing

In addition, the Cronbach Alpha's values of variables used in the model are summarized in Table 2 below:

Table 2: Cronbach’s alpha of “Big Five personality traits”, control and dependent variables

Construct/key dimensions/items	Cronbach’s alpha
Extraversion	0.726
Agreeableness	0.632
Conscientiousness	0.683
Neuroticism	0.785
Openness to experience	0.700
Attitude	0.686
Subject norms	0.823
Perceived behavioral control	0.669
Environmental concerns	0.724
Financial performance	0.668
Intention toward SRI	0.612

Source: Author’s calculation

As per the data presented in the table, the Cronbach alpha coefficients for all variables surpass the acceptable threshold of 0.6. Hence, the items used to assess each variable are deemed reliable and acceptable, given that the Cronbach’s Alpha coefficient exceeds 0.6, as outlined by Griethuijsen (2015).

4.3. Correlation matrix

Table 3: Pearson correlation results

	ITS	EXT	AGR	CON	NEU	OPEX	AT	SN	PBC	EC	FP
ITS	1										
EXT	0.050	1									
AGR	0.171***	0.133**	1								
CON	0.162***	-0.037	-0.148***	1							
NEU	-0.149***	0.158***	-0.184***	0.114**	1						
OPEX	0.163***	0.234***	0.095	0.251***	0.099	1					
AT	0.503***	-0.122**	0.205***	0.083	-0.162***	0.065	1				
SN	0.422***	-0.023	0.146***	0.135**	0.044	0.115**	0.512***	1			
PBC	0.413***	0.014	0.182***	0.053	-0.105	0.297***	0.535***	0.335***	1		
EC	0.555***	-0.053	0.203***	0.095	-0.157***	0.065	0.622***	0.533***	0.394***	1	
FP	0.464***	-0.009	0.164***	0.156***	-0.179***	-0.070	0.514***	0.367***	0.320***	0.569***	1

*Note: ITS: Intention towards SRI; EXT: Extraversion; AGR: Agreeableness; CON: Conscientiousness; NEU: Neuroticism; OPEX: Openness to experience; AT: Attitude; SN: Subject norms; PBC: Perceived behavioral control; EC: Environmental concern; FP: Financial performance; *** and ** denote significance levels of 1% and 5%, respectively.*

Source: Authors' synthesis

The findings reveal strong correlation coefficients among the variables representing the big five personality traits. The majority of these variables demonstrate significant impacts on each other at both the 5% and 1% significance levels. However, certain correlations lack significance, including those between conscientiousness and extraversion, openness to experience and agreeableness, and openness to experience and neuroticism. As observed by Lockwood et al. (2009), the relatively weak correlations among the big five personality dimensions in empirical studies using big five measures are a common occurrence.

4.4. Multiple linear regression

Table 4: The Big Five personality traits and three components of the Theory of Planned Behavior

	Attitude toward socially responsible investment (AT)		Subject norms (SN)		Perceived Behavioral Control (PBC)		Intention towards socially responsible investment (ITS)	
	(1)		(2)		(3)		(4)	
Extraversion (EXT)	-0.074		-0.014		-0.053		0.070	*
Agreeableness (AGR)	0.194	** *	0.167	** *	0.157	**	0.009	
Conscientiousness (CON)	0.188	** *	0.211	** *	0.020		0.076	*
Neuroticism (NEU)	-0.076		0.108	*	-0.100	*	-0.069	*
Openness to Experience (OPEX)	0.098		0.105		0.379	** *	0.069	
Attitude toward SRI (AT)							0.107	**
Subject Norms (SN)							0.087	**
Perceived Behavioral Control (PBC)							0.099	**
Environmental Concerns (EC)							0.204	** *

Financial Performance (FP)				0.131	** *
Intercept	1.864	0.514	1.977	0.770	
Adj. R2	0.153	0.088	0.110	0.398	
N	332	332	332	332	

Source: Author's calculation

Due to the result, it was found that except extraversion, all four other personality traits including agreeableness, Conscientiousness, Neuroticism, and Openness to Experience were associated respectively with attitude, subject norms, and perceived behavioral control.

With coefficients of 0.182 and 0.189 and p-values less than 0.01 when conducting independent regressions of each personality trait, conscientiousness and agreeableness have the greatest impact on attitude toward socially responsible investing. At a 10% significant level, neuroticism has a negative and insignificant effect on attitude. Attitude is influenced by openness to experience at a moderate level, with a 0.18 coefficient at 5% significance. Thus, only conscientiousness and agreeableness, with coefficients of 0.188 and 0.194, demonstrate a 1% significant impact on attitude when all five personality traits are combined into a single model. With a coefficient of 0.223 and 0.18 at a 1% significant level, the model analyzing the relationship between each of the big five personality traits and subject norms reveals that openness and conscientiousness have a greater influence on subject norms than the other three traits. In model (2) only three traits including agreeableness, conscientiousness, and neuroticism demonstrate a positive relationship with subject norms. In model (3), agreeableness, neuroticism, and openness have a significant impact on perceived behavioral control.

Extraversion and Intention towards Socially Responsible Investment

The outcomes of the first model indicate no significant correlation between extraversion and intention toward SRI, as evidenced by coefficients of 0.031 and a p-value of 0.523, all exceeding 0.05. These relatively diminutive coefficients suggest that extraversion exerts a negligible impact on SRI intention. Moreover, the p-value fails to attain statistical significance. Consequently, in light of these results, hypothesis H1a is rejected, concluding that the study did not establish a substantial relationship between Extraversion and Intention toward SRI.

When someone is extroverted, they are more likely to be full of energy, highly positive emotions, and excitement, and they are also more likely to care about return than ethical aspects. As a result, they are less concerned about socially responsible investing. Our regression results confirm previous conclusions regarding the relationship between extraversion and socially conscious investing.

Agreeableness and Socially Responsible Investment

The result reveals a notable positive correlation between Agreeableness and Intention toward SRI, as evidenced by a coefficient of 0.144 and a p-value of 0.006. This finding suggests that more agreeable individuals are inclined to invest in socially responsible assets. Specifically,

for each increase of one level in agreeableness, the intention toward SRI is projected to increase by over 10%. These results, as per model (1), substantiate hypothesis H1b. The rationale for this outcome has been clarified by prior research cited in the literature review.

Conscientiousness and Socially Responsible Investment

When examining the relationship between Conscientiousness and Intention toward SRI across models (1) and (3), the findings indicate a statistically significant 1% relationship between these variables, characterized by a positive coefficient and a p-value of 0.002. The influence of conscientiousness on SRI intention is delineated by coefficients exceeding 0.17 in both models, suggesting that individuals who exhibit higher conscientiousness are inclined towards SRI by approximately 17%. Conscientious individuals typically demonstrate caution, punctuality, commitment, dependability, organization, and discipline. Consequently, they tend to make well-informed investment decisions, avoiding financial choices rooted in misconceptions. They will therefore be more enthusiastic about SRI since they will take into account social and ethical issues in addition to the investment return. Our results support earlier research regarding the relationship between responsible investing and conscientiousness.

Neuroticism and Socially Responsible Investment

Per the findings from models (4) and (6), neuroticism exhibits a significant negative correlation with SRI intention, indicated by a coefficient of -0.138 and a p-value of 0.004, thereby confirming hypothesis H1d. Individuals with higher levels of neuroticism tend to display reduced interest in SRI, opting for less socially responsible investment choices instead. Neurotic individuals often grapple with feelings of distress, depression, anxiety, and heightened susceptibility to anger and agitation. Consequently, it is commonly expected that they lean towards risk aversion. Our observations suggest that during economic downturns, they tend to overemphasize the perceived threats, which aligns with our assumptions. Consequently, they may prioritize accurate returns over socially responsible investment opportunities.

Openness and Socially Responsible Investment

The analysis indicates a positive correlation between Openness to Experience and Intention toward SRI, supported by a significant coefficient at the 5% level of significance, thus confirming hypothesis H1e. With a coefficient of 0.113, Openness accounts for approximately 11% of the variation in SRI intention. Consequently, our findings in model (1) align with prior research regarding the association between Openness and socially responsible investment.

Table 4 presents a synthesis of the regression outcomes from the study:

Table 4: Regression results

Hypothesis		Model variables		Results
H1a	Extraversion	—————→	ITS	Not supported
H1b	Agreeableness	—————→	ITS	Supported
H1c	Conscientiousness	—————→	ITS	Supported

Hypothesis		Model variables		Results
H1d	Neuroticism	————→	ITS	Supported
H1e	Openness to Experience	————→	ITS	Supported

Source: Author's calculations

The study's most unexpected finding is that investors influenced by extraversion display minimal interest in SRI, while those influenced by conscientiousness exhibit the highest levels of intentionality. Previous research has indicated that individuals tend to become more environmentally aware with age, thus fostering increased interest in sustainable investing. However, education suggests the opposite trend, which presents a paradox considering that individuals with higher educational attainment often possess a more nuanced understanding of global issues. It is plausible that moral values or personal preferences exert a more significant influence than demographic factors, providing logical support for this observation. Although the authors merely speculate, earlier studies have highlighted personality traits as having a more substantial impact on investment behavior than demographic characteristics.

5. Conclusions and recommendations

This study explores factors influencing the SRI intentions of Vietnamese Generation Z, based on the Big Five personality traits and the Theory of Planned Behavior. The findings mostly align with previous research. Individual personality traits, namely agreeableness, conscientiousness, neuroticism, and openness, significantly influenced financial decision-making in socially responsible investment, while extraversion had barely discernible impact. Attitude toward SRI, subjective norms, and perceived behavioral control played certain roles in shaping Vietnamese Generation Z's SRI intentions. Our study suggests a rational decision-making process for analyzing SRI intentions over purely psychological and ethical reasoning. Gender, environmental concerns, and financial performance showed little moderating power on investment intentions, emphasizing the dominance of personality traits in rational financial decision-making.

This study enhances the understanding of individual investors' attitudes and preferences towards SRI, which is valuable for stakeholders. Investors can benefit from the study's findings by gaining a deeper understanding of the relationship between their personality traits, investment attitudes, and behaviors. Therefore, they can make more informed investment decisions that align with their personal traits, beliefs, and objectives. This study has significant implications for Vietnam's dedication to sustainable development, indicating a shift where financial returns are no longer the sole focus. Instead, social and ethical considerations are increasingly prioritized by both the government and individual investors, reflecting a lasting trend.

The findings shed light on Generation Z's personality traits, investment behavior, and expected financial gains from sustainable investing. Future research could explore further by

conducting cross-generational comparisons to highlight age-driven differences in personality traits, risk-return attitudes, and investment behavior. Additionally, expanding the model to include more variables would capture a broader range of investment-related factors.

Generation Z investors play an important role in shaping the future financial landscape, underscoring the importance of their financial knowledge and skills. In a world increasingly focused on sustainability, SRI serves as a vehicle to promote socially responsible practices and values through financial instruments.

References

- Ajzen, I. (1985), "From intentions to actions: A theory of planned behavior", *Springer Berlin Heidelberg*, pp. 11-39.
- Ajzen, I. (1991), "The theory of planned behavior.", *Organizational behavior and human decision processes*, Vol. 50 No. 2, pp. 179-211.
- Baker, H. K., Kumar, S., Goyal, N. & Gaur, V. (2019), "How financial literacy and demographic variables relate to behavioral biases.", *Managerial Finance*, Vol. 45 No. 1, pp. 124-146.
- Capelle-Blancard, G. & Monjon, S. (2012), "Trends in the literature on socially responsible investment: Looking for the keys under the lamppost.", *Business ethics: a European review*, Vol. 21 No. 3, pp. 239-250.
- Conner, M. & Abraham, C. (2001), "Conscientiousness and the theory of planned behavior: Toward a more complete model of the antecedents of intentions and behavior.", *Personality and social psychology bulletin*, Vol. 27 No. 11, pp. 1547-1561.
- Csobanka, Z. E. (2016), "The Z generation.", *Acta Educationis Generalis*, Vol. 6 No. 2, pp. 63-76.
- De Bruijn, G. J., Brug, J. & Van Lenthe, F. J. (2009), "Neuroticism, conscientiousness, and fruit consumption: Exploring mediator and moderator effects in the theory of planned behaviour.", *Psychology and Health*, Vol. 24 No. 9, pp. 1051-1069.
- Digman, J. M. (1990), "Personality structure: Emergence of the five-factor model.", *Annual review of psychology*, Vol. 41 No. 1, pp. 417-440.
- East, R. (1993), "Investment decisions and the theory of planned behaviour.", *Journal of Economic Psychology*, Vol. 14 No. 2, pp. 337-375.
- Francis, T. & Hoefel, F. (2018), "True Gen': Generation Z and its implications for companies.", *McKinsey & Company*, Vol. 12.
- George, D. & Mallery, P. (2021), "IBM SPSS statistics twenty-seven step by step: A simple guide and reference.", *Routledge*.
- Godin, G. & Kok, G. (1996), "The theory of planned behavior: a review of its applications to health-related behaviors.", *American journal of health promotion*, Vol. 11 No. 2, pp. 87-98.

Gopi, M. & Ramayah, T. (2007), “Applicability of theory of planned behavior in predicting intention to trade online: Some evidence from a developing country.” *International Journal of Emerging Markets*, Vol. 2 No. 4, pp. 348-360.

Hofmann, E., Penz, E. & Kirchler, E. (2009), “The ‘Whys’ and ‘Hows’ of ethical investment: Understanding an early-stage market through an explorative approach.” *Journal of Financial Services Marketing*, Vol. 14, pp. 102-117.

Mayfield, C., Perdue, G. & Wooten, K. (2008), “Investment management and personality type.”, *Financial services review*, Vol. 17 No. 3, pp. 219-236.

McCrae, R. R. & John, O. P. (1992), “An introduction to the five-factor model and its applications.”, *Journal of personality*, Vol. 60 No. 2, pp. 175-215.

McLachlan, J. & Gardner, J. (2004), “A comparison of socially responsible and conventional investors.”, *Journal of Business Ethics*, Vol. 52, pp. 11-25.

Nugraha, B. A. & Rahadi, R. A. (2021), “Analysis of young generations toward stock investment intention: A preliminary study in an emerging market.” *Journal of Accounting and Investment*, Available at: <https://journal.umy.ac.id/index.php/ai/article/view/9606>.

Picazo-Vela, S., Chou, S. Y., Melcher, A. J. & Pearson, J. M. (2010), “Why provide an online review? An extended theory of planned behavior and the role of Big-Five personality traits.”, *Computers in human behavior*, Vol. 26 No. 4, pp. 685-696.

Sheeran, P. & Taylor, S. (1999), “Predicting intentions to use condoms: A meta-analysis and comparison of the theories of reasoned action and planned behavior 1.”, *Journal of applied social psychology*, Vol. 29 No. 8, pp. 1624-1675.

Statman, M. (2006), “Socially responsible indexes.”, *The Journal of Portfolio Management*, Vol. 32 No. 3, pp. 100-109.

Wang, Q. C., Chang, R., Xu, Q., Liu, X., Jian, I. Y., Ma, Y. T. & Wang, Y. X. (2021), “The impact of personality traits on household energy conservation behavioral intentions—an empirical study based on theory of planned behavior in Xi'an.”, *Sustainable Energy Technologies and Assessments*, Vol. 43, pp. 100949.

Zaremohzzabieh, Z., Ahrari, S., Krauss, S. E., Samah, A. A., Meng, L. K. & Ariffin, Z. (2019), “Predicting social entrepreneurial intention: A meta-analytic path analysis based on the theory of planned behavior.”, *Journal of Business Research*, Vol. 96, pp. 264-276