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# Generation Z's Green Entrepreneurship Intentions: The Moderating Role Of Personality Traits

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**Abstract:** *Based on the theory of planned behavior, the study aims to discover the endogenous factors driving Generation Z's intention to entrepreneur a green business in Hanoi and explore the moderating role of personality traits. The study uses a quantitative method through hierarchical analysis in MMR regression. The results from a sample of 310 Gen Z sample in Hanoi reveal that business passion, attitude toward entrepreneurship, perceived of the environment and green technology, self-expectations, perceived behavioral control, and subjective norms are key endogenous factors influencing green entrepreneurship intentions among Generation Z. Additionally, the findings highlight that personality traits play a crucial moderating role in strengthening the impact of these factors on green entrepreneurship intentions. The study provides a foundation for policymakers and entrepreneurship support organizations to develop appropriate programs, creating more opportunities in the field of green entrepreneurship.*

**Keywords:** *Entrepreneurial Intentions, Green entrepreneurship, Generation Z, Hanoi.*

## 1. INTRODUCTION

In recent years, environmental pollution, depletion of natural resources, and climate change have become major challenges to sustainable development globally. According to reports from the United Nations and the World Bank, greenhouse gas emissions are rising rapidly, global temperatures are increasing at an alarming rate, and natural ecosystems are severely harmed by human economic and industrial activities. These issues not only directly affect the quality of life but also threaten the survival of many species. In Vietnam, with the goal of achieving net zero emissions by 2050. as one of the five most open economies in the world and the economy predicted to be most affected by climate change, the government has made strong commitments at COP 28 to emphasize the need for a transformation to a sustainable development model, minimizing environmental impact and adapting to climate change. In response to this situation, green entrepreneurship have become a prominent trend, aiming to combine economic development with environmental protection, use resources efficiently, and create eco-friendly products and services. Hanoi is one of the two major cities in Vietnam facing numerous challenges related to environmental pollution, waste, and climate change. Promoting green entrepreneurship is an important solution for sustainable development. At the same time, this city is home to a significant number of Generation Z residents, known for being a young, dynamic workforce capable of quickly adapting to changes in technology and global trends. Gen Z has grown up with an increasing awareness of environmental issues during a period when environmental protection campaigns, renewable energy use, and sustainable consumption have become popular trends, positioning them as key players in the green entrepreneurship movement. However, despite having great potential in science, technology, and economic infrastructure, these advantages are not fully realized. Entrepreneurship support policies remain incomplete and lack synchronization, resulting in a modest entrepreneurship rate, particularly for green entrepreneurship initiated by Gen Z in Hanoi. Moreover, most research currently focuses solely on student entrepreneurship, with very few studies dedicated to green entrepreneurship. Addressing this research gap and practical demands, understanding the intrinsic factors that motivate the green entrepreneurship intentions of Generation Z is crucial, as it provides a theoretical and practical basis to guide solutions that encourage the green entrepreneurship movement, thereby contributing to sustainable socio-economic development.

## 2. LITERATURE REVIEW AND RESEARCH MODEL

### 2.1. The concept of green entrepreneurship

Vu and Nguyen (2024) define entrepreneurship as the process of building, maintaining, and developing a business aimed at generating profits and other values, offering entrepreneurs the chance to pursue success, be more proactive at work, expand their creativity, and achieve career independence. According to Shane and Venkataraman (2000), entrepreneurship is the process of discovering, evaluating, and exploiting business opportunities to create valuable products and services. Entrepreneurship begins with identifying opportunities, developing ideas, and bringing them to life by establishing a new business to maximize market potential and create economic value (Nguyen et al., 2024). Green entrepreneurship is a branch of the entrepreneurship theme that focuses not only on profits but also on minimizing negative environmental impacts and promoting sustainable development. Studies by Gibbs and O'Neill (2014) and Schaltegger (2002) suggest that green entrepreneurship combines environmental awareness with business actions. Dean and McMullen (2007) define green entrepreneurship as the process of exploiting business opportunities arising from environmental challenges, creating a competitive advantage for businesses amid increasing trends in sustainable consumption. According to Schaltegger and Wagner (2011) and Truong (2024), green entrepreneurship represents a form of sustainable entrepreneurship that emphasizes innovation, aiming to develop solutions and products that not only provide economic benefits but also contribute to environmental protection. This ensures a balance between sustainable socio-economic growth and responsibility for preserving the ecosystem, thus creating long-term value for the community and future generations.In this study, green entrepreneurship refers to the innovative process of developing products, services, or business models that generate economic profits while minimizing negative environmental impacts. It represents a sustainable entrepreneurship approach that merges awareness of environmental responsibility with business activities, thereby contributing to socio-economic development in a sustainable manner and creating long-term value for the community.

### 2.2. Green entrepreneurship intention

Intention is a mental state that reflects an individual's desires, motivations, and plans, serving as the mediator between perception and action and expressing the individual's level of commitment to performing a particular behavior in the future. According to Ajzen (1991), intention motivates individuals to be willing to carry out behaviors, which are directly influenced by attitudes, subjective norms, and perceptions that govern behavior. Entrepreneurial intention is a psychological state that reflects an individual's readiness, commitment, and motivation to start a business. It encompasses not only desire but is also connected to innovative thinking and the ability to plan and act to establish a new business. According to Bird (1988), the entrepreneurial intention is driven by a desire to develop a business, characterized by an attitude of independence, autonomy, creativity, innovation, and a willingness to take risks to create new value within the organization. Meanwhile, Thompson (2009) argues that entrepreneurial intention represents an individual's firm affirmation of establishing the business and includes a clear action plan for doing so at some point in the future. Furthermore, Fayolle (2013) identifies the entrepreneurial intention as the driving force motivating individuals to develop an action plan to create a new business.

According to Richomme-Huet and de Freyman (2014), the intention of green entrepreneurship encompasses the cognitive behavior associated with the efficient use of resources, as well as the development of sustainable production and consumption models. Its goal is not only to create economic value but also to enhance the quality of life without compromising the needs of future generations. Studies by Ndubisi and Nair (2009) and Gibbs and O'Neill (2014) indicate that green entrepreneurship is not merely a trend; it is also a long-term strategy that balances economic growth with environmental protection, acting as a crucial driver in transforming the economy toward sustainable development. According to Schuyler (1998), the intention of green entrepreneurship not only motivates entrepreneurs to seek profits but also encourages them to pursue social and environmental values.

### 2.3. Research hypothesis and model

The theory of planned behavior (TPB), proposed by Ajzen (1991), is one of the models many researchers use to analyze and evaluate entrepreneurial intention (Phan & Giang, 2015; Nguyen, 2019; Mai et al., 2023). According to this theory, three main factors influence entrepreneurial intention:

- The attitude towards entrepreneurship reflects the individual's feelings and evaluations about starting a business.
- Subjective norms refer to pressures from the surrounding environment, including family, friends, colleagues, or society, that affect an individual's intention to be entrepreneurial.
- Perceived behavioral control reflects a person's confidence in their entrepreneurial abilities.

Furthermore, to understand the endogenous factors that influence Generation Z's intention toward green entrepreneurship in Hanoi, the author conducted an overview of several relevant domestic studies, including:

Ho and Nguyen (2021) studied the factors that affect young people's green entrepreneurship intention in Ho Chi Minh City using 250 survey samples and a multivariate regression model. The results showed that evaluating business characteristics, capacity beliefs, feasibility, desired perceptions, and responsibilities affect young people's green entrepreneurial intention.

The study by Truong et al. (2022) using logistic regression analysis indicates that the factors influencing the entrepreneurial intention of economics students in Hanoi include entrepreneurial attitudes, subjective norms, and entrepreneurial education.Research by Mai et al. (2023) examines the factors influencing green entrepreneurial intentions, green competitive advantages, and sustainable development among Vietnamese youth, utilizing analysis methods in SPSS26 and AMOS24 software. It reveals that the factors affecting green entrepreneurship include knowledge of green entrepreneurship, the spirit of green entrepreneurship, the green entrepreneurial environment, and the educational level of Vietnamese youth. Research by Nguyen and Pham (2024) on the factors affecting the entrepreneurial intentions of students graduating from universities in Hanoi indicates that capital, perceived behavioral control, attitudes, knowledge and experience, subjective norms, and entrepreneurship education influence these intentions.The study by Phung (2025) proposed a research model examining the factors affecting green entrepreneurship among Vietnamese entrepreneurs in light of the country's deepening commitment to international climate change agreements and the dual transformation goal of the economy. This includes factors such as environmental knowledge, personal motivation, corporate culture, investment in green technology, supportive policies, and market pressure.Research by Nguyen et al. (2016), Nguyen (2019), and To and Nguyen (2022) demonstrates that, in addition to the factors outlined in Ajzen's Theory of Planned Behavior (1991), personality traits, self-expectations, and a passion for business also significantly influence entrepreneurial intention.Based on the theoretical framework and overview of related studies, the authors proposed hypotheses in the research model including: attitude towards entrepreneurship, subjective norms, perceived behavioral control, business passion, perceived of the environment and green technology, and self-expectation. Additionally, the study examined the influence of personality traits in moderating the independent factors and green entrepreneurship intentions. According to Nga and Shamuganathan (2010), an individual's personality traits are regular patterns of behavior, thoughts, or feelings, which are internal characteristics that explain differences in individual behavior in similar situations. According to Wilbard (2009) and Scott (1991), personal traits such as self-confidence, proactive dynamics, ambition, high self-control, and a willingness to take risks affect the desire for success, as well as the ability to demonstrate a willingness to take risks, positively impacting the desire to start a business.

The proposed research model is shown in Figure 1 as follows:

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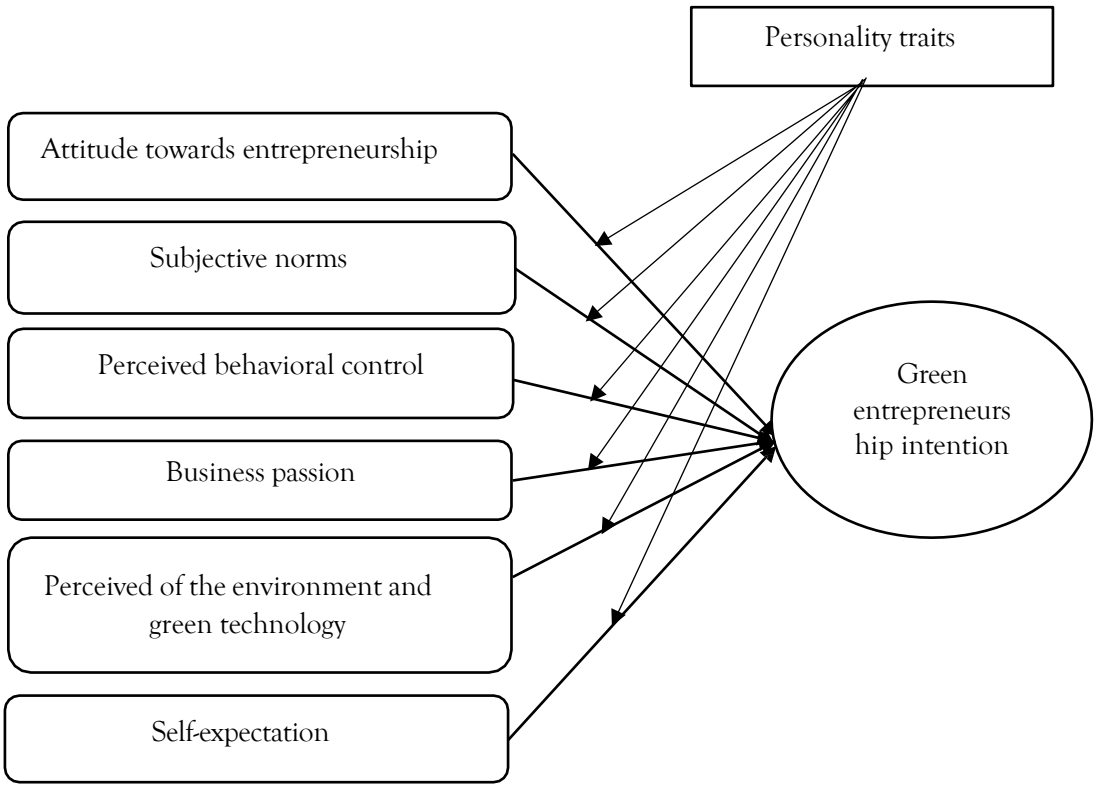


**Figure 1.** Proposed research model
*Source: Recommended by the author*

The proposed research hypotheses are as follows:
*H1: Attitude towards entrepreneurship will be positively associated with green entrepreneurship intention.*
*H2: Subjective norms will be positively associated with green entrepreneurship intention.*
*H3: Perceived behavioral control will be positively associated with green entrepreneurship intention.*
*H4: Business passion will be positively associated with green entrepreneurship intention.*
*H5: Perceived of the environment and green technology will be positively associated with green entrepreneurship intention.*
*H6: Self-expectation will be positively associated with green entrepreneurship intention.*
*H7a: Personality traits play a role in moderating the relationship between attitude towards entrepreneurship and green entrepreneurial intention.*
*H7b: Personality traits play a role in moderating the relationship between subjective norms and green entrepreneurial intention.*
*H7c: Personality traits play a role in moderating the relationship between perceived behavioral control and green entrepreneurial intention.*
*H7d: Personality traits play a role in moderating the relationship between business passion and green entrepreneurial intention.*
*H7e: Personality traits play a role in moderating the relationship between perceived of the environment and green technology and green entrepreneurial intention.*
*H7f: Personality traits play a role in moderating the relationship between self-expectation and green entrepreneurial intention.*

## 3. METHODOLOGY

The measurement scales are built based on the studies of Nguyen et al. (2016), Nguyen (2019), Ho and Nguyen (2021), Truong et al. (2022), Mai et al. (2023), and Phung (2025), including 30 observed variables

corresponding to six independent variables, a moderating variable, and a dependent variable. The study employed a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

A minimum sample size ratio of 5:1. and preferably 10:1. should be applied, as recommended by Hair et al. (2010) for exploratory factor analysis (EFA). The study selects the optimal ratio to preserve integrity while analyzing a total of 30 observed variables, necessitating a requirement of 300 votes. Nevertheless, the authors conducted a formal survey of 350 questionnaires to account for potential discards during the data cleansing process, which could have negatively impacted the study's results. The method employed for selecting a non-probability sample is convenient, involving the distribution of an online survey through a Google Form link to groups and entrepreneurship forums on social networks aimed at targeting Generation Z in Hanoi City. The survey period extends from September 2024 to January 2025. The results yielded 310 viable questionnaires, which are suitable for analysis using SPSS 26 software for conducting reliability analysis, exploratory factor analysis, correlation analysis, multiple regression analysis, and MMR hierarchical regression analysis.According to the MMR regression analysis method, the interactive variable used in the final model is created using the centering technique (subtracting the value of that variable from its mean). This begins with centering the observed variables (the independent variable and the moderating variable), followed by multiplying the centered moderating variable by each independent variable that has also been centered to form the interactive variable. The research model is represented by three regression equations as follows:

(1) The regression equations illustrate the impact of independent variables on the dependent variable:

$$GEI = \beta_0 + \beta_1*cATE + \beta_2*cSN + \beta_3*cPBC + \beta_4*cBP + \beta_5*cPEG + \beta_6*cSE$$

(2) The regression equation expresses the impact of the independent variable and the moderating variable (independent variable) on the dependent variable:

$$GEI = \beta_0 + \beta_1*cATE + \beta_2*cSN + \beta_3*cPBC + \beta_4*cBP + \beta_5*Cpeg + \beta_6*cSE + \beta_7*cPT$$

(3) The regression equations illustrate the impact of independent variables, moderating variable, and interacting variables on the dependent variable:

$$GEI = \beta_0 + \beta_1*cATE + \beta_2*cSN + \beta_3*cPBC + \beta_4*cBP + \beta_5*cPEG + \beta_6*cSE + \beta_7*cPT + \beta_8*cPT.ATE + \beta_9*cPT.SN + \beta_{10}*cPT.PBC + \beta_{11}*cPT.BP + \beta_{12}*cPT.PEG + \beta_{13}*cPT.SE$$

In which:

GEI (Dependent variable): Green entrepreneurship intention

PT (Moderating variable): Personality traits

Independent variables ($X_i$): Attitude towards entrepreneurship (ATE), Subjective norms (SN), Perceived behavioral control (PBC), Business passion (BP), Perceived of the environment and green technology (PEG), Self-expectation (SE)

Interacting variables: Personality traits and attitude towards entrepreneurship (PT.ATE), Personality traits and subjective norms (PT.SN), Personality traits and perceived behavioral control (PT.PBC), Personality traits and business passion (PT.BP), Personality traits and perceived of the environment and green technology (PT.PEG), Personality traits and self-expectation (PT.SE).

$\beta_k$: Regression coefficients.

## 4. RESEARCH RESULTS AND DISCUSSION

The statistical results derived from 310 survey samples collected from individuals belonging to Generation Z, who reside, study, and work in Hanoi, indicate that with respect to gender, 53.2% are female, whereas 46.8% are male, thus reflecting a relatively uniform gender distribution within the surveyed population. Concerning age, the majority of participants are situated within the 20-22 age demographic (58.6%), followed by those aged 23-25 years (32.1%). Participants under the age of 20 account for 7.8%, and those above 25 years represent merely 1.5%. In terms of educational attainment, 62.4% are undergraduate students, while 28.9% have completed their degrees and are currently employed, with postgraduate students comprising only 8.7%. The distribution of disciplines is also diverse, with 36.5% pursuing studies in economics, 29.7% in technology or engineering, 18.4% in social sciences, and 15.4% in various other

fields. With regard to entrepreneurial experience, only 11.2% have either initiated a business or are presently managing one, while the majority, totaling 88.8%, lack any previous entrepreneurial experience.

**Table 1:** Results of reliability testing

| Sign | Items | Cronbach's Alpha | Corrected Item-Total Correlation | Cronbach's Alpha if items deleted |
|---|---|---|---|---|
| Attitude towards entrepreneurship | | | | |
| ATE1 | I am interested in green entrepreneurship. | 0.796 | 0.654 | 0.780 |
| ATE2 | If I have the opportunity and capital, I will pursue green entrepreneurship. | | 0.637 | 0.774 |
| ATE3 | I believe I receive more benefits by owning a business. | | 0.618 | 0.765 |
| ATE4 | Green entrepreneurship provides me with more opportunities for self-development. | | 0.602 | 0.747 |
| ATE5 | In my career choices, I aim to become a business owner. | | 0.595 | 0.731 |
| Subjective norms | | | | |
| SN1 | My family and friends support me in my green entrepreneurship endeavors. | 0.803 | 0.572 | 0.791 |
| | | | 0.564 | 0.783 |
| SN2 | Important people who support my green entrepreneurship. | | 0.557 | 0.776 |
| SN3 | People around me believe that the concept of being a green entrepreneur is commendable. | | 0.539 | 0.745 |
| Perceived behavioral control | | | | |
| PBC1 | I feel confident and successful in green entrepreneurship. | 0.847 | 0.685 | 0.833 |
| PBC2 | I believe that I can effectively manage my business when engaging in green entrepreneurship. | | 0.672 | 0.820 |
| PBC3 | I feel that I have sufficient capabilities for green entrepreneurship. | | 0.651 | 0.818 |
| PBC4 | I have a network of contacts who are ready to support me in green entrepreneurship. | | 0.638 | 0.805 |
| PBC5 | I understand the practical details necessary for green entrepreneurship. | | 0.624 | 0.794 |
| Business passion | | | | |
| BP1 | I am willing to invest significant time and effort into developing a green entrepreneurship idea. | 0.817 | 0.610 | 0.801 |
| BP2 | I am willing to take risks to develop ideas for green entrepreneurship. | | 0.572 | 0.795 |
| BP3 | I consistently refresh my business knowledge and stay informed about market fluctuations. | | 0.551 | 0.784 |

| Sign | Items | Cronbach's Alpha | Corrected Item-Total Correlation | Cronbach's Alpha if items deleted |
|---|---|---|---|---|
| Perceived of the environment and green technology | | | | |
| PEG1 | I believe that the issue of environmental pollution is an urgent concern today. | 0.825 | 0.636 | 0.821 |
| PEG2 | I believe that green technologies in business (such as solar energy and eco-materials) are highly beneficial for the environment. | | 0.623 | 0.814 |
| PEG3 | I believe that adopting green technology helps reduce environmental impact. | | 0.617 | 0.802 |
| Self-expectation | | | | |
| SE1 | I'm ready to embrace green entrepreneurship. | 0.789 | 0.574 | 0.770 |
| SE2 | I believe I possess the ability to seize opportunities effectively. | | 0.562 | 0.768 |
| SE3 | I believe I possess sufficient skills to tackle the challenges I face. | | 0.541 | 0.753 |
| SE4 | I know how to create a green entrepreneurship plan. | | 0.532 | 0.741 |
| Personality traits | | | | |
| PT1 | I am determined to face and conquer all challenging obstacles when green entrepreneurship. | 0.819 | 0.627 | 0.807 |
| PT2 | I want to embrace new challenges. | | 0.604 | 0.790 |
| PT3 | I want to be respected and recognized by everyone. | | 0.597 | 0.781 |
| PT4 | I always strive to surpass others. | | 0.583 | 0.778 |
| Green entrepreneurship intention | | | | |
| GEI1 | My objective is to become a green business owner. | 0.835 | 0.657 | 0.829 |
| GEI2 | I am prepared to invest both time and money to develop a green enterprise in the future. | | 0.631 | 0.810 |
| GEI3 | I believe that green entrepreneurship plays a crucial role in sustainable economic development. | | 0.629 | 0.808 |

*Source: Analysis results from SPSS 26*

The reliability test results indicate that the Cronbach's Alpha coefficient of the scales exceeds 0.7, and the Corrected Item-Total Correlation is above 0.3. Additionally, Cronbach's Alpha if items deleted is lower than the total Cronbach's Alpha, which means no variable is discarded. Consequently, the scale achieves reliability and discriminant validity, qualifying it for inclusion in exploratory factor analysis (EFA) (Hair et al., 2010) (see Table 1).

**Table 2:** Results of EFA of independent scales

| KMO = 0.816 | | |
|---|---|---|
| Bartlett's Test | Approx. Chi-Square | 10512.609 |

| | | |
|---|---|---|
| | df | 312 |
| | Sig. | 0.000 |

| Items | Factor | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| PBC3 | 0.813 | | | | | |
| PBC1 | 0.797 | | | | | |
| PBC5 | 0.785 | | | | | |
| PBC4 | 0.775 | | | | | |
| PBC2 | 0.767 | | | | | |
| PEG1 | | 0.809 | | | | |
| PEG3 | | 0.792 | | | | |
| PEG2 | | 0.779 | | | | |
| ATE2 | | | 0.786 | | | |
| ATE4 | | | 0.771 | | | |
| ATE1 | | | 0.754 | | | |
| ATE3 | | | 0.739 | | | |
| ATE5 | | | 0.728 | | | |
| SN3 | | | | 0.811 | | |
| SN2 | | | | 0.804 | | |
| SN1 | | | | 0.799 | | |
| BP1 | | | | | 0.827 | |
| BP3 | | | | | 0.815 | |
| BP2 | | | | | 0.806 | |
| SE1 | | | | | | 0.854 |
| SE4 | | | | | | 0.848 |
| SE2 | | | | | | 0.837 |
| SE3 | | | | | | 0.822 |
| % of Variance | 37.180 | 46.539 | 51.712 | 63.845 | 70.266 | 79.487 |
| Eigenvalue | 4.125 | 3.748 | 3.157 | 2.069 | 1.987 | 1.134 |

*Source: Analysis results from SPSS 26*

The results of the exploratory factor analysis (EFA) for the independent scales yielded a KMO coefficient of 0.816, satisfying the conditions of being greater than 0.5 and less than 1. The Chi-square statistic from the Bartlett Test reached a value of 10512.609, with a significance of 0.000 (less than 0.05), demonstrating that the observed variables are correlated within the factor and that the EFA is appropriate for the actual data. Additionally, to evaluate the level of interpretation of the observed variables for the principal component analysis (PCA) factor, combined with the Varimax rotation used as the coefficient extraction method, the research data was extracted into six factors (with an Eigenvalue greater than 1), explaining 79.487% of the significance of the variation in the data set. Furthermore, the factor loading coefficients of the observed variables are greater than 0.5 and converge into groups of observed variables with similar properties, which are then discriminated into six factors (see Table 2).

**Table 3:** Results of the EFA of the dependent scale

| Scale | No. | Factor loadings |
|---|---|---|
| Green entrepreneurship intention | GEI1 | 0.824 |
| | GEI2 | 0.812 |
| | GEI3 | 0.793 |
| KMO = 0.832 | | |

| | | |
|---|---|---|
| Bartlett's Test | Approx. Chi-Square | 298.574 |
| | df | 3 |
| | Sig. | 0.000 |
| % of Variance | | 80.133 |
| Eigenvalue | | 1.107 |

*Source: Analysis results from SPSS 26*

The results of the analysis of the dependent scale factor indicate that the KMO coefficient reaches a value of 0.832 (greater than 0.5 and less than 1). The results of Bartlett's test show that among the observed variables that are correlated with each other (sig = 0.000), the factor loading is greater than 0.5. At the Eigenvalue level of 1.107 (greater than 1), there is a factor extracted with a total extracted variance of 80.133% (greater than 50%). Therefore, the data obtained for the dependent variable scale met the established requirements (Hair et al., 2010) (see Table 3).

**Table 4:** Results of the EFA of the moderate scale

| Scale | | No. | Factor loadings |
|---|---|---|---|
| Personality traits | | PT1 | 0.798 |
| | | PT2 | 0.772 |
| | | PT3 | 0.769 |
| | | PT4 | 0.755 |
| KMO = 0.792 | | | |
| Bartlett's Test | Approx. Chi-Square | | 310.429 |
| | df | | 4 |
| | Sig. | | 0.000 |
| % of Variance | | | 78.211 |
| Eigenvalue | | | 1.513 |

*Source: Analysis results from SPSS 26*

The results of the exploratory factor analysis (EFA) for the regulatory scale indicate that the Chi-square statistic of Bartlett's Test reaches a value of 310.429 with a significance level of 0.000 (< 0.05), confirming that the observed variables are correlated. Additionally, the coefficient of KMO is 0.792, which shows that EFA is appropriate. Furthermore, the four observed variables of the scale have a factor loading coefficient for satisfaction greater than 0.5 (see Table 4).

**Table 5:** Correlation analysis

| | GEI | ATE | SN | PBC | BP | PEG | SE | PT |
|---|---|---|---|---|---|---|---|---|
| GEI | 1 | | | | | | | |
| ATE | 0.617** | 1 | | | | | | |
| SN | 0.705** | 0.301** | 1 | | | | | |
| PBC | 0.643** | 0.268* | 0.328** | 1 | | | | |
| BP | 0.728** | 0.314** | 0.199** | 0.313** | 1 | | | |
| PEG | 0.711** | 0.275** | 0.257* | 0.219* | 0.194** | 1 | | |
| SE | 0.690** | 0.332** | 0.241** | 0.208** | 0.225** | 0.272* | 1 | |
| PT | 0.742** | 0.260** | 0.303* | 0.187* | 0.374* | 0.191* | 0.240** | 1 |
| *significant at p < 0.05, **significant at p < 0.01 | | | | | | | | |

*Source: Analysis results from SPSS 26*

The results presented in Table 5 demonstrate a strong correlation between the independent and dependent variables, evidenced by a significance coefficient of less than 0.05 and a correlation coefficient

ranging from 0.617 to 0.742. Thus, the independent variables are deemed appropriate for inclusion in the model intended to elucidate the dependent variables. Concurrently, the Pearson test reveals that the independent variables exhibit correlation with one another, fulfilling the requisite conditions and eliminating any uncertainty regarding the phenomenon of multicollinearity. Moreover, the centering technique does not influence the correlation coefficient between the observed variables, whether prior to or subsequent to centering, thus affirming the compatibility of the variables for regression analysis.

**Table 6:** Results of hierarchical regression analysis

| | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | **Beta** | **VIP** | **Beta** | **VIP** | **Beta** | **VIP** |
| Attitude towards entrepreneurship | 0.231*** | 1.322 | 0.209** | 1.149 | 0.246** | 1.180 |
| Subjective norms | 0.195** | 1.290 | 0.214*** | 1.106 | 0.202*** | 1.195 |
| Perceived behavioral control | 0.207*** | 1.115 | 0.232*** | 1.238 | 0.214*** | 1.121 |
| Business passion | 0.246** | 1.184 | 0.217*** | 1.210 | 0.251*** | 1.236 |
| Perceived of the environment and green technology | 0.228*** | 1.276 | 0.193** | 1.162 | 0.237** | 1.115 |
| Self-expectation | 0.184*** | 1.103 | 0.188*** | 1.212 | 0.217*** | 1.260 |
| Personality traits | | | 0.205*** | 1.097 | 0.183*** | 1.207 |
| Personality traits and attitude towards entrepreneurship | | | | | 0.174*** | 1.264 |
| Personality traits and subjective norms | | | | | 0.125** | 1.183 |
| Personality traits and perceived behavioral control | | | | | 0.101*** | 1.274 |
| Personality traits and business passion | | | | | 0.141*** | 1.291 |
| Personality traits and perceived of the environment and green technology | | | | | 0.169*** | 1.255 |
| Personality traits and self-expectation | | | | | 0.148** | 1.171 |
| $R^2$ | 0.561 | | 0.589 | | 0.634 | |
| Adjusted $R^2$ | 0.502 | | 0.575 | | 0.601 | |
| Sig. | 0.000 | | 0.000 | | 0.000 | |
| Durbin – Watson | 1.891 | | 1.764 | | 1.805 | |
| *significant at $p < 0.05$, **significant at $p < 0.01$, ***significant at $p < 0.001$<br>a. Dependent Variable: GEI | | | | | | |

*Source: Analysis results from SPSS26*

The results of the MMR regression analysis using the hierarchical method demonstrate that all three models have an adjusted R2 lower than R2 (greater than 0.5), indicating adequate model fit. The significance coefficient is much smaller than the significance level of $\alpha$ = 5 percent, suggesting that the three regression models are sensible. The Durbin-Watson statistic falls within the acceptable range of 1.5 to 2.5, confirming that the results do not breach the first-order series autocorrelation assumption, and the VIF variance inflation factor is below 2, indicating that there is no multicollinearity issue. However, among the three models, model 3 boasts the highest corrected R2 coefficient compared to the others (adjusted R2 = 60.1 percent). Therefore, this model will be selected for explaining the analysis results in the following section.

With the regression weight results, the proposed hypotheses are accepted and positively influence Generation Z's intention toward green entrepreneurship in Hanoi. The final regression equation based on the standardized Beta coefficient is as follows:

GEI = 0.251*cBP + 0.246*cATE + 0.237*cPEG + 0.217*cSE + 0.214*cPBC + 0.202*cSN + 0.183*cPT + 0.174*cPT.ATE + 0.169*cPT.PEG + 0.148*cPT.SE + 0.141*cPT.BP + 0.125*cPT.SN + 0.101*cPT.PBC

The results of the analysis indicate that enthusiasm for business profoundly influences Generation Z's intention to pursue green entrepreneurship. Subsequently, the next most significant factors include attitudes towards entrepreneurship, perceptions of the environment and green technology, personal expectations, and perceived behavioral control, whereas subjective norms exhibit the least influence. Furthermore, personality traits function as a moderating element that amplifies the positive relationship between independent and dependent variables. The findings of this study are consistent with those presented by Nguyen et al. (2016), Nguyen (2019), Ho and Nguyen (2021), Truong et al. (2022), Mai et al. (2023), and Phung (2025). Nevertheless, disparities arise in the degree of impact and the hierarchy of influence of the independent variables, attributable to differing circumstances and study subjects. The most noteworthy finding of this study is the positive regulatory function of individual personality traits in the correlation between independent variables and the intention to engage in green entrepreneurship.

## 5. CONCLUSION AND IMPLICATIONS

Through comprehensive research analysis, it has been established that the endogenous factors influencing the intentions of Generation Z in Hanoi regarding green entrepreneurship comprise business passion, attitudes toward entrepreneurship, perceptions of the environment and green technology, self-expectations, perceived behavioral control, and subjective norms. Moreover, the findings of the study indicate that personality traits serve a significant moderating role in amplifying the impact of these factors on Generation Z's intentions regarding green entrepreneurship. It suggests that individuals possessing strong, proactive, and consistent personalities are more inclined to convert perceptions and motivations into practical actions. Based on the research findings, several recommendations are proposed for entrepreneurship support agencies and organizations to enhance Generation Z's inclination toward green entrepreneurship in Hanoi, as follows:

First, it is essential to foster business passion and raise awareness of green entrepreneurship by developing green entrepreneurship education programs in universities and entrepreneurship training centers. Focus on organizing entrepreneurship competitions centered around sustainable development, which will help Generation Z youth experience reality and cultivate green business ideas. Establish real-world models or business incubators specializing in green entrepreneurship, providing the younger generation opportunities to learn from successful enterprises.

Second, enhance attitudes towards entrepreneurship and cultivate green entrepreneurship mindsets through seminars with successful green entrepreneurship entrepreneurs. This will help Generation Z better understand the value and opportunities of green entrepreneurship. Additionally, create communication campaigns that highlight the benefits of green entrepreneurship for both the environment and the economy, thereby shifting young people's perceptions of this sector.

Thirdly, raising awareness of green technology and the environment, focusing on incorporating content on green technology and sustainable business models into training programs at universities. Creating conditions for green entrepreneurship to access advanced technology through innovation support programs. Encourage enterprises to cooperate with universities to research and develop green technology solutions.

Fourth, strengthen financial support and policies for green entrepreneurship by establishing support funds to help potential projects access investment capital. Offer tax incentives, loan support, and reductions in input costs for green entrepreneurship. Promote cooperation among the state, enterprises, and NGOs to create a sustainable green entrepreneurship ecosystem.

Fifth, develop business management and operational skills by providing training courses in financial management, business planning, and risk management for green entrepreneurs. Create mentorship programs to give young people the opportunity to work with experienced experts and entrepreneurs in the field of green entrepreneurship.

Sixth, leverage personal traits to design development training programs that enhance confidence, decision-making skills, risk management, and the willingness to accept challenges among young people. Encourage individuals with strong personalities to engage in green entrepreneurship projects, fostering an environment where they can showcase their strengths.

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