

FACTORS INFLUENCING LOGISTICS-MAJOR GRADUATES'  
INTENTION TO PURSUE LOGISTICS PROFESSIONNHÂN TỐ TÁC ĐỘNG TỚI Ý ĐỊNH THEO ĐUỔI ĐÚNG NGHỀ  
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NGUYEN THI DUY LUYEN<sup>4</sup>, TRINH TUNG<sup>5</sup>, TRINH XUAN TIEN<sup>6</sup><sup>1</sup>FPT University, Ha Noi<sup>2</sup>FPT University, FPT Polytechnic, Ha Noi<sup>4</sup>YCH-Protrade Co., ltd, Bac Ninh<sup>5</sup>Academy of Policy and Development, Ha Noi<sup>3&6</sup>Hanoi Financial and Banking University, Ha Noi

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DOI: <https://doi.org/10.65154/jmst.2025.i84.890>**Abstract**

Logistics is currently a rapidly growing service industry in Vietnam, offering opportunities for both economic growth and domestic enterprises. But there is still a significant gap between this demand and the desire of logistics graduates to pursue a career in logistics. By combining three theoretical frameworks: Theory of Planned Behavior (TPB), Theory of Personality Traits (TPT) and Triple Helix model (THM), this study is conducted to identify factors influencing logistics-major graduates' intention to pursue the logistics profession. The paper identifies challenges such as the quality of training and training programs for logistics human resources that are not really linked to the practical operations of logistics, lack of practical experience and stress at work. The paper also provides feasible recommendations for universities, employers and policy makers to close this gap. By addressing these factors, Vietnam can nurture its workforce to sustain the growth and competitiveness of its logistics industry.

**Keywords:** Logistics major, Pursuit of logistics profession, Theory of Planned Behavior, Triple Helix model, Theory of Personality Traits.

**Tóm tắt**

Logistics hiện là một ngành dịch vụ đang phát triển nhanh chóng tại Việt Nam, mang lại cơ hội cho cả tăng trưởng kinh tế và doanh nghiệp trong nước. Tuy nhiên, vẫn còn một khoảng cách đáng kể giữa nhu cầu này và mong muốn theo đuổi sự nghiệp trong lĩnh vực logistics của sinh viên tốt nghiệp.

nghiệp. Bằng cách kết hợp ba khuôn khổ lý thuyết: Lý thuyết hành vi hoạch định (TPB), Lý thuyết đặc điểm tính cách (TPT) và mô hình Ba vòng xoắn (THM), nghiên cứu này được tiến hành nhằm xác định các yếu tố ảnh hưởng đến ý định theo đuổi nghề logistics của sinh viên tốt nghiệp chuyên ngành logistics. Bài viết chỉ ra những thách thức như chất lượng đào tạo và chương trình đào tạo nguồn nhân lực logistics chưa thực sự gắn kết với hoạt động thực tiễn của logistics, thiếu kinh nghiệm thực tế và áp lực công việc. Bài báo cũng đưa ra các khuyến nghị khả thi cho các trường đại học, nhà tuyển dụng và các nhà hoạch định chính sách để thu hẹp khoảng cách này. Bằng cách giải quyết những yếu tố này, Việt Nam có thể nuôi dưỡng lực lượng lao động để duy trì sự tăng trưởng và khả năng cạnh tranh của ngành logistics.

**Từ khóa:** Ngành Logistics, Theo đuổi nghề logistics, Lý thuyết hành vi hoạch định, Mô hình Ba vòng xoắn, Thuyết tính cách.

**1. Introduction**

The logistics industry in Vietnam plays a vital role as a service industry in the overall structure of the national economy [1]. It supports, connects, and promotes the socio-economic development of the whole country as well as each locality, contributing to improving the competitiveness of the economy [2], [3]. With its advantageous geographical location as a gateway for regional and global trade, Vietnam is poised to become a major logistics hub in Southeast Asia [4]. According to the Vietnam Chamber of Commerce and Industry (VCCI), logistics contributed

approximately 4 - 5% to the national gross domestic product in 2023, with an annual growth rate of 14 - 16% in recent years [4].

In the context of globalization and the 4.0 industrial revolution, the requirements for the quality of professional qualifications and skills of logistics human resources need to be increasingly improved. In particular, the labor force with in-depth specialized knowledge of the industry, foreign language skills, information technology applications, communication, and negotiation skills will be the key factors to help improve the capacity of enterprises. In the long term, human resources will be the decisive factor in helping Vietnamese logistics enterprises quickly catch up with other countries, improve competitiveness, and expand both domestic and global markets. Despite its rapid expansion, the sector faces significant challenges, particularly a shortage of skilled human resources [5]. By 2024, it is estimated that there will be over 40,000 enterprises participating in the logistics market, operating in the field of transportation and warehousing, including noticeably big names such as DHL, Maersk Lines, Transimex and Sai Gon New Port. Vietnam's logistics human resources, however, are currently undervalued in the international arena [6].

The demand for logistics talent is underscored by Vietnam's participation in numerous free trade agreements (FTAs), including the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP) [4], [10].

These agreements have accelerated the growth of export-import activities, fueling the demand for efficient supply chain management and logistics solutions. However, the workforce has struggled to meet this demand due to inadequate training and low retention rates among graduates. According to Vietnam Chamber of Commerce and Industry (VCCI), the industry needs about 2 million skilled workers by 2030 [10], the current logistics human resources only meet about 40% of the industry's needs with an average growth rate of 30% per year of the logistics industry. Alarming, the number of workers who are professionally trained in logistics services only accounts for about 5 - 7% of the number of workers currently working in this field. Up to 85.7% of Vietnamese enterprises must train and develop logistics human resources through actual work. This gap underscores the need to understand why logistics-major graduates, who represent the primary pool of talent, are hesitant to pursue careers in the field

despite the industry's growth potential and increasing job opportunities [11].

This study aims to examine the impact of personal, organizational, and professional characteristics on the new logistics graduate students' intention to pursue a logistics profession. The findings of this study provide valuable insights for policymakers, educational institutions, and logistics companies. The study also provides recommendations to improve the attractiveness of the logistics profession and ensure a stable supply of human resources. As such, the study will contribute to the sustainable growth and competitiveness of the logistics industry in Vietnam. This research tries to provide insights into the predispositions of logistics graduates with recourse to combining three theoretical frameworks: Theory of Planned Behavior (TPB), Theory of Personality Traits (TPT) and Triple Helix model (THM) to better understand the factors and challenges of practicing logistics as a career.

The study responds to the following questions:

Research question 1: To what extent do the Theory of Planned Behavior, Theory of Personality Trait and Triple Helix model influence the career pursuit of logistics graduates in Vietnam?

Research question 2: How do the Theory of Planned Behavior, Theory of Personality Trait, and Triple Helix model interact to shaping logistics graduates career decisions?

Research question 3: What strategies can educational institutions and logistics firms implement to enhance logistics graduates career intentions in Vietnam?

## **2. Literature Review**

### **2.1. Logistics major**

Logistics is a critical field that supports the backbone of global supply chains and trade, facilitating the efficient flow of goods and services. The logistics major refers to a specialized educational track that equips students with the knowledge and skills needed to manage the efficient flow of goods, services, and information. Studies have shown that logistics education programs play a pivotal role in shaping the workforce and developing the skills needed to address the challenges of global supply chains [12], [13]. According to [14], logistics education equips students with both theoretical knowledge and practical skills, providing them with the tools needed to manage the complexities of global

supply chains. One of the effective ways to improve the quality of training is for schools to work closely with businesses to design their curriculum. This not only helps students access new technologies and trends, but also helps keep the curriculum updated and relevant to the requirements of the labor market.

Research by [15] highlights that logistics education must evolve in response to global economic changes, such as technological advancements and shifting consumer expectations. They argue that logistics programs should integrate new technologies and sustainability practices to meet the demands of the modern industry. Similarly, [16] stresses the need for logistics curricula to focus not only on traditional logistics operations but also on the evolving role of data analytics, digital technologies, and sustainability in logistics management. As such, this body of work emphasizes the critical role of logistics education in shaping the future workforce and preparing students to meet industry needs.

## 2.2. Pursuit of Logistics Profession

The decision to pursue a career in logistics is influenced by several factors, including individual preferences, societal expectations, career prospects, and the perceived attractiveness of the logistics field. One of the main drivers for students choosing logistics as a profession is the job stability and growth potential that the sector offers. Research by [17] identifies that students who view logistics as a stable career with long-term growth prospects are more likely to pursue it as a profession. Furthermore, the fast-paced nature and dynamic challenges in logistics are attractive to students who thrive in problem-solving and fast decision-making environments.

In contrast, many studies argue that while job security and career progression in logistics are important, the profession's perceived complexity and stress levels may deter some students from entering the field [18], [19], [20]. This point is echoed by [21], who found that the perception of logistics as a highly demanding profession can influence students' career choices.

## 2.3. Theory of Planned Behaviour (TPB)

The Theory of Planned Behavior (TPB), developed by [22], has been widely used in understanding human behavior and decision-making, particularly in predicting intentions. TPB suggests that human behavior is influenced by three primary factors: attitudes, subjective norms, and perceived behavioral control. In the context of this study, TPB

provides a useful framework to explore how students' attitudes toward logistics, their perceptions of societal expectations, and their perceived ability to succeed in the profession influence their intention to pursue a career in logistics.

Several studies have applied TPB to career choice behavior, showing that students' intentions to pursue specific professions, including health [23], [24], education and vocational training [25], entrepreneurship and business [26], environmental protection and sustainable tourism [27], and many other studies in many different fields. For example, [28] found that students' attitudes toward their chosen profession, shaped by factors such as job satisfaction and career growth potential, significantly influence their intention to pursue a career. [29] also highlighted that subjective norms and perceived behavioral control have significant impacts on career intentions in the context of entrepreneurship. In logistics education, [30] found that students' positive attitudes toward logistics as a profession, coupled with their belief in their ability to succeed, were strong predictors of their career intentions in the logistics sector.

## 2.4. Theory of Personality Traits (TPT)

The Theory of Personality Traits (TPT) suggests that individual personality characteristics significantly influence career choices and professional success. Personality traits such as conscientiousness, openness to experience, and extraversion have been identified as key predictors of career decisions [31]. The Proactive Personality trait is a critical factor in career decisions, as proactive individuals tend to take initiative, seek out opportunities, and engage in behaviors that lead to career success and satisfaction [32].

A study by [33] found that proactive individuals are more likely to engage in behaviors such as networking, seeking new opportunities, and actively solving problems—key skills needed in the logistics industry [34] found that proactive personalities were linked to better performance and job satisfaction in challenging and dynamic job environments, such as those found in logistics management. Similarly, [35] emphasized that individuals with proactive personalities are more likely to succeed in fast-changing industries, such as logistics, where adaptability, initiative, and self-starting behaviors are essential.

Moreover, [32] highlighted that individuals with

proactive personalities are more likely to overcome obstacles and drive change in organizations, qualities that are highly valued in logistics roles, which often involve problem-solving and managing complex supply chain issues.

Risk-Taking Propensity (RTP) can be defined as the making of decisions or actions that are uncertain, regardless of the outcome, the possibility of something adverse happening [36], or the ability to manage situations involving risk [37], [38]. It is a factor that influences TPB [39], [40]. [41] examined the factors influencing entrepreneurial intention among business students and identified that risk-taking behavior, need for achievement, job security, the entrepreneurial environment, and education were key determinants.

### 2.5. Triple Helix model (THM)

The Triple Helix of innovation, which [42] theorized in 1995. Their study argued that universities play an equal role with industry and government in fostering innovation and discussed the potential for collaboration between the three actors. THM of university - companies - government interactions is the key to innovation in increasingly knowledge-based societies.

Universities play the role of industry by stimulating the development of new companies from research, presenting “knowledge capitalization” as an academic goal [43], [44]. Companies develop higher education and share knowledge through joint ventures, acting like universities [45]. Governments act as public venture capitalists while continuing their regulatory activities [44]. In contrast to theories that emphasize the role of government or companies in innovation, the triple helix focuses on universities as a key source of entrepreneurship and technology as well as research [46].

Several studies have highlighted that such institutional collaborations improve the alignment between educational curricula and industry needs, ultimately enhancing students’ career readiness. [47] analyzed the factors that drive entrepreneurial intentions among young researchers in Pakistan. The results highlighted the importance of supportive policies from the government and universities, as well as increased collaboration between universities and businesses to build an innovation ecosystem. [48] proposed an entrepreneurial university model in which universities play an important role in innovation, entrepreneurship and knowledge transfer.

The study also emphasizes the role of supportive policies, innovation culture, financial mechanisms and industry linkages to promote university entrepreneurship.

Previous studies have mainly focused on factors such as attitudes, subjective norms, and perceived behavioral control through the Theory of Planned Behavior (TPB), but few have examined the combination of these factors with personality traits and support from stakeholders. Additionally, the role of educational institutions in shaping logistics graduates’ career intentions has not been fully explored. This study aims to fill this gap by applying the TPB model, integrating personality traits, and using the Triple Helix model to better understand the factors influencing logistics graduates’ career decisions in Vietnam.

## 3. Methodology

### 3.1. Research Hypothesis

This research advances the following hypotheses:

*H1: Attitude has a positive impact on the Pursuit Logistics Intentions (PLI).*

*H2: Subjective norms have a positive impact on the PLI.*

*H3: Perceived Behavioral Control has a positive impact on the PLI.*

*H4: Risk-Taking Propensity has a positive impact on the PLI.*

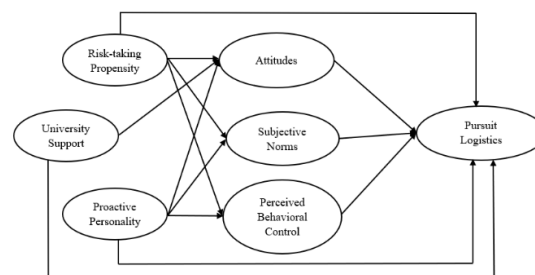
*H5: Proactive Propensity has a positive impact on the PLI.*

*H6: University Support has a positive impact on the PLI.*

*H7. The positive relationship between RTP (H7.1), PP (H7.2), US (H7.3), and PLI is mediated by the ATE.*

*H8. The positive relationship between RTP (H8.1), PP (H8.2), and PLI is mediated by SN.*

*H9. The positive relationship between RTP (H9.1), PP (H9.2), and PLI is mediated by PBC.*



**Figure 1. Research Model**

Based on the Theory of Planned Behavior (TPB), Big Five Personality Traits, and the Triple Helix Model, our research model assumes that attitudes (H1), subjective norms (H2), and perceived behavioral control (H3) have a positive impact on logistics students' intention to pursue a career in logistics. Additionally, we hypothesize that risk-

taking propensity (H4) and proactive personality (H5), as part of the Big Five, along with university support (H6) from the Triple Helix model, further enhance this intention.

### 3.2. Sample size and Data collection

In this study, G\*Power was used to calculate the

**Table 1. Items included in the model**

Items
<b>Attitudes toward Logistics (ATE)</b>
1. ATE1. Becoming a logistics employee implies more advantages than disadvantages to me.
2. ATE2. A career in logistics is attractive to me.
3. ATE3. Being a logistics employee would entail great satisfaction for me.
4. ATE4. I believe that if I join the logistics industry, I will certainly succeed.
<b>Subjective Norms (SN)</b>
1. SN1. I believe that people think I should pursue a career in logistics.
2. SN2. My friends see logistics as a logical career choice for me.
3. SN3. My parents are positively oriented toward a career in logistics.
<b>Perceived Behavioral Control (PBC)</b>
1. PBC1. I am prepared to join the logistics industry.
2. PBC2. I know what to study to become a logistics employee.
3. PBC3. If I tried to become a logistics officer, I would have a high probability of success.
<b>University Support (US)</b>
1. US1. My university provides adequate support in helping me explore logistics as a career.
2. US2. I am satisfied with the resources provided by my university to pursue a career in logistics.
3. US3. I frequently seek advice or guidance from my university's career services about logistics.
<b>Risk-Taking Propensity (RTP)</b>
1. RTP1. I can take risks with my career, such as changing industries or moving to new locations for logistics opportunities.
2. RTP2. I enjoy trying new things, such as exploring new logistics technologies or systems.
3. RTP3. I have taken risks in the last six months related to career decisions or career exploration.
<b>Proactive Personality (PP)</b>
1. PP1. I enjoy facing and overcoming challenges in pursuing my career in logistics.
2. PP2. Nothing is more exciting than seeing my ideas come to fruition in the logistics field.
3. PP3. I excel at identifying opportunities within logistics.
<b>Pursuit Logistics Intentions (PLI)</b>
1. PLI1. I prefer to work in logistics rather than in other industries.
2. PLI2. My career goal is to become a logistics manager or expert.
3. PLI3. I will make every effort to join and pursue a career in logistics.
4. PLI4. I have the firm intention to work in logistics someday.

	5-point Likert scale	Gender	Experiences	Education level	Graduation Status
1	Strongly Disagree (SD)	Female	Yes	University	Graduated
2	Disagree (D)	Male	No	College	Final year
3	Neutral (N)	Others			
4	Agree (A)				
5	Strongly Agree (SA)				

**Figure 2. Linguistic Scale**

sample size needed to ensure that the PLS-SEM analysis results had sufficient power to detect statistically significant relationships. The results from G\*Power showed that a sample size of 300-400 people would ensure high accuracy and reliability for the study. The survey was distributed to fresh graduates (less than 2 years), final year students majoring in Logistics Management and Supply Chain at universities such as: NEU, FTU, TMU, VMU; colleges: FPT Polytechnic, HTT from November 2024 to March 2025. This sample size is selected to ensure sufficient statistical power for data analysis using PLS-SEM. The sample size will be large enough to make meaningful generalizations to all logistics students nationwide.

Data will be collected through an online survey distributed through the university's internal system or via email to students who have chosen to participate. To test the above hypotheses, quantitative research methods were used in this study. The following are the details of the methodology of this study:

(1) Data collection: Data collection for this study was carried out through a questionnaire design based on the structure of TPB, TPT, THM and related literature. The second part uses a 5-point Likert scale to measure respondents' perceptions of factors influencing career paths.

(2) Sampling: To ensure representativeness of the sample, the sample includes gender, experience and from different levels of education (college and university).

(3) Linguistic scale: For convenience in data processing and calculation, in this study we converted the results from linguistic expressions to numbers as follows:

**Table 2. Measurement model evaluation results**

	Outer Loadings	Cronbach's alpha	rho_a	rho_c	AVE
ATE1	0.835	0.854	0.859	0.901	0.695
ATE2	0.801				
ATE3	0.861				
ATE4	0.836				
PBC1	0.853	0.831	0.832	0.899	0.747
PBC2	0.853				
PBC3	0.886				
PLI1	0.816				
PLI2	0.807	0.821	0.821	0.881	0.65
PLI3	0.805				
PLI4	0.797				
PP1	0.868	0.84	0.84	0.903	0.757
PP2	0.872				
PP3	0.871				
RTP1	0.901				
RTP2	0.882	0.87	0.871	0.92	0.794
RTP3	0.89				
SN1	0.858	0.788	0.793	0.876	0.702
SN2	0.842				
SN3	0.813				
US1	0.894				
US2	0.886	0.866	0.866	0.918	0.789
US3	0.884				

## 4. Data analysis

### 4.1. Demographic

In the research sample of 348 students, 53.45% were male, 37.07% were female, and 9.48% were of other genders, reflecting the diverse participation in terms of gender. In terms of work experience, only 35.63% of students had experience in the logistics field, while 64.37% had not, which may be due to their lack of exposure to practical work. In terms of educational level, 73.56% of students were studying in university programs, while the remaining 26.44% were college students. In terms of graduation status, 60.92% of students graduated, while 39.08% were final-year students. The research sample mainly consisted of male students, with university degrees, and many of them had no work experience. They were mainly graduates. These characteristics help provide an overview of the study population and the factors that may influence their intention to pursue a career in the logistics industry.

### 4.2. Measurement Model Analysis

The research concepts were all measured using the outcome measurement model, so the scales were evaluated for individual reliability of the observed variables, internal consistency reliability, convergent validity, and discriminant validity [49]. The evaluation of the measurement model reflecting the results for the ATE, SN, PBC, RTP, PP, US, and PLI scales began with checking the reliability of each indicator variable. The reliability of internal consistency is usually evaluated based on two indices, namely the composite reliability and Cronbach's alpha [50]. Based on the results of PLS-SEM, the results of all factor loadings of the observed variables were higher than the threshold of 0.7 (Table 1), indicating that the individual reliability of the observed variables studied was good [49]. The SN scale (Cronbach's Alpha: 0.778; rho\_c: 0.876) has the lowest internal consistency reliability, and the RTP

**Table 3. Discriminant validity - Heterotrait-monotrait ratio (HTMT) - Matrix**

	ATE	PBC	PLI	PP	RTP	SN	US
ATE							
PBC	0.567						
PLI	0.756	0.722					
PP	0.528	0.633	0.502				
RTP	0.482	0.626	0.583	0.05			
SN	0.607	0.758	0.71	0.608	0.638		
US	0.488	0.064	0.354	0.033	0.046	0.023	

**Table 4. Path Coefficients results**

	Original sample	Sample means	Standard deviation	T statistics	P values	Support
ATE → PLI (H1)	0.249	0.248	0.052	4.796	0.000	Yes
SN → PLI (H2)	0.166	0.165	0.051	3.235	0.001	Yes
PBC → PLI (H3)	0.23	0.233	0.049	4.718	0.000	Yes
RTP → PLI (H4)	0.178	0.178	0.049	3.634	0.000	Yes
PP → PLI (H5)	0.092	0.091	0.056	1.643	0.101	No
US → PLI (H6)	0.191	0.191	0.04	4.799	0.000	Yes
RTP → ATE (H7.1)	0.407	0.406	0.039	10.386	0.000	Yes
PP → ATE (H7.2)	0.425	0.425	0.036	11.771	0.000	Yes
US → ATE (H7.3)	0.424	0.424	0.035	12.199	0.000	Yes
RTP → PBC (H8.1)	0.511	0.51	0.034	15.04	0.000	Yes
PP → PBC (H8.2)	0.508	0.508	0.034	15.019	0.000	Yes
RTP → SN (H9.1)	0.509	0.508	0.035	14.334	0.000	Yes
PP → SN (H9.2)	0.476	0.475	0.037	12.696	0.000	Yes

scale has the highest value (Cronbach's Alpha: 0.870; rho\_c: 0.920). In conclusion, The scales have high internal consistency reliability. The results of the convergent validity assessment (Table 1) show that the average variance extracted (AVE) of the variables PLI (0.650), ATE (0.695), SN (0.702), PBC (0.747), PP (0.757), US (0.789) and RTP (0.794) are all higher than **0.5**. So, all scales meet the required thresholds well and have high convergence [51].

The HTMT ratio helps to better detect problems related to discriminant validity [52]. HTMT is defined as the value generated by comparing the mean values of the correlations of the indicators across different constructs and within each construct (based on consistent loadings) [53]. If HTMT is less than 0.85, then there is discriminant reliability between the two reflective constructs. The highest HTMT value obtained in this study was 0.758. The HTMT results indicate that the model has excellent reliability and validity.

#### 4.3. Testing hypothesis

Attitude → Pursuit Logistics Intentions (H1): The path coefficient  $\beta = 0.249$  and T-statistic = 4.796 indicate a moderate yet statistically significant positive relationship between students' attitudes toward logistics and their intention to pursue a career in this field. This result underscores the importance of fostering positive attitudes towards logistics in shaping career intentions.

Subjective Norms → Pursuit Logistics Intentions (H2): With a path coefficient  $\beta = 0.166$  and  $p = 0.001$ , this path shows a significant effect, albeit weaker than attitudes, suggesting that social influences such as family, peers, and mentors have a positive but moderate impact on student's career intentions.

Perceived Behavioral Control → Pursuit Logistics Intentions (H3): The path coefficient  $\beta = 0.23$  and a significant T-statistic = 4.718 confirm that students' perceptions of their ability to pursue a career in logistics positively influence their career intentions.

Risk-Taking Propensity → Pursuit Logistics Intentions (H4): The path coefficient  $\beta = 0.178$  and T-statistic = 3.634 suggest that students' propensity to take risks plays a significant role in their career decision-making in logistics.

University Support → Pursuit Logistics Intentions (H6): The path coefficient  $\beta = 0.191$  and T-statistic = 4.799 indicate a positive and significant impact of university support, such as career guidance, resources, and exposure to the industry, on students' career intentions in logistics.

## 5. Discussion

Similar to previous studies, such as [54], [55] it has been shown that the factors in the Theory of Planned Behavior (TPB) - attitude, subjective norms, and perceived behavioral control - all have a strong influence on career intention.

In the context of Vietnam, where logistics has become a core element in integrating into the global supply chain, students with positive attitudes toward the industry will tend to persist in pursuing their career goals. The strong transformation of the logistics industry with large infrastructure projects such as deep-water ports, smart logistics centers, and digital platforms is expanding job opportunities and attracting young talents to the industry.

Previous studies [56], [57] and [58] found that proactive personality directly influences career intention. Individuals with a proactive personality actively seek opportunities and drive their career success. However, my research shows that PP indirectly impacts students' career intention through their attitudes toward the logistics industry. This may be due to the rapid development of the logistics sector in Vietnam, where positive attitudes, career opportunities, and university support play a larger role, with students needing adaptability to thrive in this changing environment.

Previous studies have shown that risk-taking propensity has a significant impact on career development, especially in industries that require creativity and the ability to adapt quickly to change, such as logistics. Research by [59] shows that risk-taking propensity and need for achievement are important factors determining students' entrepreneurial and career intentions in business and management-related fields.

Another important factor that has been studied previously is support from universities. According to [60], support from educational institutions through internship programs, career counseling, and relationships with companies is a factor that creates strong motivation for students to pursue a career. This is reflected in your research results, when it shows that support from universities in Vietnam has a strong influence on the career decisions of logistics students.

The Triple Helix Model (THM), which has been shown by studies such as [61], can also be applied in the Vietnamese context. This model emphasizes collaboration between universities, government and industry to promote innovation and career

development. In Vietnam, this collaboration has been evident through government strategies, such as the national logistics development strategy, and public-private partnership initiatives, creating significant opportunities for students in the logistics sector.

## 6. Conclusion

Universities can use the results of this study to design education and career support programs that are tailored to the needs of logistics students, thereby helping them better prepare for careers in the logistics industry.

Research shows that proactive personality and risk-taking propensity have a strong impact on career intentions. Therefore, universities should integrate soft skills development programs, especially those related to proactive personality and risk-taking ability. Programs such as leadership training, project management, and extracurricular activities can help students develop proactive personalities, making them more confident in deciding to pursue a career in logistics.

University support has a significant impact on pursuit logistics intentions, demonstrating that university support is important in helping students form career intentions. Universities can enhance career support programs, such as career guidance, career counseling, logistics industry seminars, and connecting students with logistics companies. This will help students have a clearer view of the industry and career opportunities in logistics.

Universities need to build closer relationships with logistics companies to provide internship opportunities for students. Internship programs will help students have a realistic view of the industry, while helping them build practical skills and network in the industry.

Companies in the logistics industry can use the research results to design recruitment and human resource development policies that are more in line with the factors that influence students' career intentions.

Since proactive personality and risk-taking propensity have a great influence on students' decision to pursue a career in logistics, employers can look for candidates with proactive personalities and willingness to face risks in the work environment. Companies can organize interviews or psychological tests to assess this ability during the recruitment process.

Companies can build training programs focusing on leadership skills, risk management, and self-reliance to further develop proactive personalities in

employees. This not only helps employees improve their ability to work effectively but also helps the company maintain sustainable development in a rapidly changing environment.

Government or educational institutions can use this result to develop career development policies for students in the logistics industry.

Government and educational institutions can create programs to encourage initiative and risk-taking through propaganda campaigns, courses and seminars. This will help students have a more positive attitude towards entering professions that require change and innovation, such as logistics.

To help students have access to real-life jobs, government or educational institutions can support internship programs and job search support funds for students. These organizations can also create close links between universities and businesses to create job opportunities for new graduates in the logistics industry.

Overall, the results of this study show that PP and RTP play an important role in shaping ATE and indirectly influence Pursuit Logistics Intentions. Universities and businesses need to cooperate to build a supportive learning and working environment, helping students develop both soft skills and positive attitudes towards the logistics industry. These strategies will not only help increase logistics career intentions but also create a workforce that is ready to face challenges and contribute to the sustainable development of the logistics industry in Vietnam.

Although this study provides insight into the factors influencing students' logistics career intentions, some limitations can be mentioned. First, the study was conducted on students from a few universities in Vietnam, so the results may not be representative of the entire international student population. Second, the study did not control for other factors such as practical experience or cultural factors, which may be important factors influencing students' career decisions. Therefore, future research may consider expanding the sample and including these factors to further clarify their influence on logistics career intentions.

## REFERENCES

- [1] N. T. Anh, N. T. T. Hương, V. T. Van Khanh, P.P.T. Van Anh, and D. N. Ha (2021), *Developing logistics in vietnam after covid-19 pandemic*, Business Management and Strategy, Vol.13, No.2, pp.191.

- [2] VIMC (2025), *Ngành logistics Việt Nam nên khai thác tối đa những lợi thế đang có*. Accessed: Apr. 14, 2025.
- [3] N. Thị, T. Bình, and V. Tgk (2018), *Định hướng nâng cao năng lực cạnh tranh của các doanh nghiệp logistics Việt Nam hiện nay, Tạp chí khoa học Đại học Văn Lang*.
- [4] VCCI (2025), *TTWTO VCCI - Việt Nam đang sở hữu cơ hội vượt trội để trở thành trung tâm logistics của khu vực*. Accessed: Sepp.05, 2025.
- [5] Đ. T. Phương (2018), *Logistics Việt Nam trong cách mạng công nghiệp 4.0: cơ hội và thách thức logistics*, in *Vietnam in industrial revolution 4.0: opportunities and challenges*.
- [6] Bùi Duy Linh and Trần Thị Thu Hải (2025), *Mô hình chữ 'T' trong đào tạo nguồn nhân lực cấp quản lý cho ngành logistics tại Việt Nam*. Accessed: Apr. 14, 2025.
- [7] VCCI (2025), *TTWTO VCCI - Nhiều cơ hội cho logistics từ các FTA thế hệ mới*. Accessed: Apr. 14, 2025.
- [8] NOIT (2025), *TTWTO VCCI - Động lực củng cố, làm sâu sắc hơn nữa hợp tác thương mại, đầu tư giữa Việt Nam - Peru*, Accessed: Apr. 14, 2025.
- [9] VCCI (2025), *TTWTO VCCI - Đưa ngành logistics lên vị trí xứng tầm với tiềm năng phát triển*. Accessed: Apr. 14, 2025.
- [10] VIMC (2025), *Đến năm 2030 ngành logistics dự kiến thiếu 2 triệu lao động - Tổng công ty Hàng hải Việt Nam - VIMC.* Accessed: Apr. 14, 2025.
- [11] Dang Dinh Dao (2025), *Những vấn đề đặt ra về đào tạo và phát triển nguồn nhân lực logistics Việt Nam*. Accessed: Apr. 14, 2025.
- [12] M. Kilibarda, V. Pajić, and M. Andrejić (2019), *Human resources in logistics and supply chains: current state and trends*. *International Journal for Traffic and Transport Engineering*, Vol.9(3), pp.270 - 279
- [13] Nguyen Hoang Tien, Leo Paul Dana, Rewel Jiminez Santural Jose, Phan Minh Duc, and Nguyen Thanh Vu (2025), *Situation of training logistics human resources in Vietnam and development solutions*, Accessed: Sepp.05, 2025.
- [14] Lê Đức Thọ (2022), *Hiệu quả mô hình liên kết nhà trường - doanh nghiệp trong đào tạo nguồn nhân lực logistics*.
- [15] John. Mangan, Chandra. Lalwani, and Tim. Butcher (2008), *Global logistics and supply chain management*, pp.372, Accessed: Sepp.05, 2025.
- [16] Martin Christopher (2025), *Logistics and Supply Chain Management*. Accessed: Sepp.05, 2025.
- [17] S. Eitler (2023), *Pursuing a career in logistics: study choice motives and career expectations the asian conference on education 2023 official conference proceedings*.
- [18] M. Ramm, F. Multrus, and T. Bargel (2025), *Studiensituation und studentische orientierungen: 11. studierendensurvey an universitäten und fachhochschulen (langfassung)*, Accessed: Sepp.05, 2025.
- [19] C. Scherrer and S. M. Campbell (2016), *Industrial engineering students' perceptions of the logistics and supply chain industry*.
- [20] C. Cheng, S. S. M. Yuen, C. Cheng, and S. S. M. Yuen (2022), *What determines logistics sub-degree students' decision to pursue a bachelor's degree?*, *London Review of Education*, Vol.20, No.1, p.37.
- [21] J. Singh, R. Gowrishankar, A. A. Thomas, V. Jenifer, and PP.Annamuthu (2025), *The talent crunch: human resource challenges in supply chain and logistics management*, *Studies in Systems, Decision and Control*, Vol.555, pp.815-825, 2025.
- [22] Martin Eisenmann (2025), *Ittermann eisenmann digitalisierung von einfacharbeit in production und logistic*, Accessed: Sepp.05, 2025.
- [23] M. S. Garver, S. PP.Goffnett, R. Divine, Z. Williams, and C. F. Davis (2018), *Early career job choice in logistics: comparing shifts in attribute importance between internship and full-time roles*, *Journal of Transportation Management*, Vol.28, No.1, p.6.
- [24] R. M. Peters and T. N. Templin (2010), *Theory of planned behavior, self-care motivation, and blood pressure self-care*, *Res Theory Nurs Pract*, Vol.24, No.3, p.172.
- [25] G. Godin and G. Kok (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.
- [26] J. K. Ayeh, A. Bondzi-Simpson, and N. G. Baah (2023), *Predicting Students' Response to Entrepreneurship in Hospitality and Tourism*

- Education: An Application of the Theory of Planned Behavior*, Journal of Hospitality & Tourism Education, Vol.35, No.3, pp.265-276.
- [27] Norris F. Krueger and D. V. Brazeal (1994), *Entrepreneurial Potential and Potential Entrepreneurs*, Entrepreneurship Theory and Practice, Vol.18, No.3, pp.91-104.
- [28] H. Han, L. T. (Jane) Hsu, and C. Sheu (2010), *Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmentally friendly activities*, Tour Manag, Vol.31, No.3, pp.325-334.
- [29] T.: Kautonen, M. Van Gelderen, and M. Fink (2013), *Robustness of the Theory of Planned Behavior in Predicting Entrepreneurial Intentions and Actions*, Entrepreneurship Theory and Practice, Vol.39, No.3, pp.655-647.
- [30] L. Kolvereid (1996), *Prediction of employment status choice Intentions*, Entrepreneurship Theory and Practice, Vol.21, No.1, pp.47-58.
- [31] C. Cheng and S. S. M. Yuen (2022), *What determines logistics sub-degree students' decision to pursue a bachelor's degree?*, London Review of Education, Vol.20, No.1, p.37.
- [32] M. R. BARRICK and M. K. MOUNT (1991), *The big five personality dimensions and job performance: a meta - analysis*, Pers Psychol, Vol.44, No.1, pp.1-26.
- [33] T. S. Bateman and J. M. Crant (1993), *The proactive component of organizational behavior: A measure and correlates*, J Organ Behav, Vol.14, No.2, pp.103-118.
- [34] S. E. Seibert, M. L. Kraimer, and J. M. Crant (2001), *What do proactive people do? A longitudinal model linking proactive personality and career success*, Pers Psychol, Vol.54, No.4, pp.845-874.
- [35] Jerry Bryan Fuller, Kim Kester, and Susie Cox (2025), *Proactive Personality and Job Performance: Exploring Job Autonomy as a Moderator*, Accessed: Sep.05, 2025.
- [36] A. J. DuBrin (2013), *Proactive personality and behavior for individual and organizational productivity*, Proactive Personality and Behavior for Individual and Organizational Productivity, pp.1-223.
- [37] Y. Cai and H. Etzkowitz (2021), *Theorizing the Triple Helix model: Past, present, and future*, Triple Helix, Vol.7, No.2-3, pp.189-226.
- [38] Henry Etzkowitz (2025), *MIT and the rise of entrepreneurial science*. Accessed: Apr. 12, 2025.
- [39] H. Etzkowitz (2008), *The triple helix: University-industry-government innovation in action*, The Triple Helix: University-Industry-Government Innovation in Action, pp.1-164.
- [40] L. Leydesdorff (2010), *The knowledge-based economy and the triple helix model*, Annual Review of Information Science and Technology, Vol.44, pp.365-417.
- [41] H. Etzkowitz, A. Webster, C. Gebhardt, and B. R. C. Terra (2000), *The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm*, Res Policy, Vol.29, No.2, pp.313-330.
- [42] A. H. Samo and N. U. Huda (2016), *Triple Helix and academic entrepreneurial intention: understanding motivating factors for academic spin-off among young researchers*, Journal of Global Entrepreneurship Research 2019 9:1, Vol.9, No.1, pp.1-15.
- [43] R. Bizri, J. Hammoud, M. Stouhi, and M. Hammoud (2019), *The entrepreneurial university: a proposed model for developing nations*, Journal of Management Development, Vol.38, No.5, pp.383-404.
- [44] J. PP.J. de Jong, S. K. Parker, S. Wennekers, and C. H. Wu (2015), *Entrepreneurial behavior in organizations: does Job design matter?*, Entrepreneurship: Theory and Practice, Vol.39, No.4, pp.981-995.
- [45] R. Roy, F. Akhtar, and N. Das (2017), *Entrepreneurial intention among science & technology students in India: extending the theory of planned behavior*, International Entrepreneurship and Management Journal, Vol.13, No.4, pp.1013-1041.
- [46] L. R. Tolentino, PP.R. J. M. Garcia, V. N. Lu, S. L. D. Restubog, PP.Bordia, and C. Plewa (2014), *Career adaptation: The relation of adaptability to goal orientation, proactive personality, and career optimism*, J Vocat Behav, Vol.84, No.1, pp.39-48.
- [47] N. F. Krueger, M. D. Reilly, and A. L. Carsrud (2000), *Competing models of entrepreneurial intentions*, J Bus Ventur, Vol.15, No.5-6, pp.411-432.

- [48] G. Segal, D. Borgia, and J. Schoenfeld (2005), *The motivation to become an entrepreneur*, International Journal of Entrepreneurial Behaviour and Research, Vol.11, No.1, pp.42-57.
- [49] R. Uddin and T. K. Bose (2012), *Determinants of Entrepreneurial Intention of Business Students in Bangladesh*, International Journal of Business and Management, Vol.7, No.24.
- [50] M. Sarstedt, C. M. Ringle, and J. F. Hair (2022), *Partial Least Squares Structural Equation Modeling*, Handbook of Market Research, pp.587-632.
- [51] J. Hair, C. L. Hollingsworth, A. B. Randolph, and A. Y. L. Chong (2017), *An updated and expanded assessment of PLS-SEM in information systems research*, Industrial Management and Data Systems, Vol.117, No.3, pp.442-458.
- [52] C. Fornell and D. F. Larcker (1981), *Evaluating structural equation models with unobservable variables and measurement error*, Journal of Marketing Research, Vol.18, No.1, pp.39-50.
- [53] J. Henseler, C. M. Ringle, and M. Sarstedt (2015), *A new criterion for assessing discriminant validity in variance-based structural equation modeling*, J Acad Mark Sci, Vol.43, No.1, pp.115-135.
- [54] J. F. Hair et al. (2014), *Common beliefs and reality about partial least squares: comments on rönkkö and evermann recommended citation*.
- [55] I. Ajzen (1991), *The theory of planned behavior*, Organ Behav Hum Decis Process, Vol.50, No.2, pp.179-211.
- [56] Martin Fishbein and Icek Ajzen (2025), *Belief, attitude, intention and behaviour: An introduction to theory and research*. Accessed: Sepp.05, 2025.
- [57] J. M. Crant (1995), *The Proactive Personality Scale and Objective Job Performance Among Real Estate Agents*, Journal of Applied Psychology, Vol.80, No.4, pp.532-537.
- [58] H. Zhao and S. E. Seibert (2006), *The big five personality dimensions and entrepreneurial status: A meta-analytical review*, Journal of Applied Psychology, Vol.91, No.2, pp.259-271.
- [59] S. E. Seibert, J. M. Grant, and M. L. Kraimer (1999), *Proactive personality and career success*, Journal of Applied Psychology, Vol.84, No.3, pp.416-426.
- [60] Zainah Jalil and Norfahrin Abdul Rahim (2025), *Determinants of entrepreneurial intention among university students*. Accessed: Sepp.05, 2025.
- [61] M. R. Marvel and G. T. Lumpkin (2007), *Technology entrepreneurs' human capital and its effects on innovation radicalness*, Entrepreneurship: Theory and Practice, Vol.31, No.6, pp.807-828.
- [62] H. Etzkowitz and L. Leydesdorff (2000), *The dynamics of innovation: from national systems and 'mode 2' to a triple helix of university-industry-government relations*, Res Policy, Vol.29, No.2, pp.109-123.

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