

Factors Influencing Vietnamese Female Students' Intention to Choose Psychology

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ABSTRACT: Psychology is a very useful field in social science with a newfound growing trend in development. For female students in Vietnam, the choice of this field of study doesn't just reflect its match with one's personal abilities and value in society, but also opens up to a plethora of career possibilities in the future. This study uses the Theory of Reasoned Action (TRA) and Holland's theory concerning choices for lines of work to examine female student's intentions on choosing to study psychology, including factors such as: personal motivation (MOT), family and social influence (SN), perception of career prospects (CAR), perception of the field of study (PER). The data used was collected from a survey and created with the Partial Least Squares Structural Equation Modeling method (PLS-SEM) to test research hypotheses. The results show that female students do have a tendency towards psychology based on a realistic perception of the field, personal ambition and motivation, and confidence in the field's development instead of being persuaded by the family's or society's influence. On that basis, this study proposes a few suggestions on career counseling in secondary education.

KEYWORDS: influential factors, intention, choice, study of psychology, female students, Vietnam

1. INTRODUCTION

In the context of a developing modern society, the demand for professionals in the field of psychology grows every day due to an increase in problems in mental health (VinUniversity, 2023). As routine-based jobs are gradually replaced by machines, professions that require emotional intelligence, empathy, and complex communication skills are expected to become increasingly valuable. Thus, psychology - with the function of providing knowledge on behaviors and emotions - will continue to become a necessary field in supporting labors and sustainable development. (Lent, R.W., et al., 2020)

The field of psychology is witnessing impressive growth in Vietnam thanks to more awareness in society and demands for human resources. With changes in emotional wellbeing, pressure from school and work, and relationships in society, access to psychological support is becoming increasingly important. Psychologists work not only in hospitals and schools, but also in businesses and non-governmental organizations (NGO), where they play a role in supporting mental health, and providing counseling for both personal and organizational development (VinUniversity, 2023).

In this context, psychology is peaking more and more interest from students, especially women - a group that usually makes up the majority of students in social sciences and humanities fields (Eagly, A. H., & Wood, W, (2012). Fields in which women tend to lean towards more than men are often ones relating to healthcare, education, and community support (Eagly, A. H., & Wood, W, (2012). This orientation partially reflects the differences in gendered roles in society. On the other hand, systems for advice regarding career orientation in high school still have many limitations. High school students in Vietnam usually aren't provided with enough information regarding their fields of study, leading to choices based on emotion or familial influences rather than on personal awareness and appropriate career orientation (Hang., T.T., 2020).

Because of the reasons above, researching factors influencing the intentions of Vietnamese female students in choosing to pursue psychology is necessary. According to Ajzen (1991), human behavior is best predicted by behavioral intention, and this intention is composed of three main components: behavioral beliefs, the attitudes toward the behavior; normative beliefs, the perceived attitudes of peers and respected figures toward the behavior; and control beliefs, or perceived ability to perform the behavior. The Theory of Planned Behavior (TPB) has been used numerous times to explain the behaviors in choosing careers in different contexts. Moreover, there are factors such as intrinsic motivation, the awareness of the profession's value, the influence of closed ones, as well as the confidence in one's personal abilities also hold significant influence over career choices (Holland, J. L. (1997), Hoa., N.T:N., et al, (2016). The goal of this study is to: (i) Identify and gauge the factors influencing the intentions of Vietnamese female students in choosing to study psychology, (ii) Propose recommendations to enhance awarenessproviding aid in the process of career orientation and choosing suitable majors for female students.

2. THEORETICAL FRAMEWORK

2.1. Overview of the study

(1) The concept of psychology

Psychology is a social science based on the research of behavior, thought, and emotions of humans, to understand the workings of the mind and the aspects that govern individual as well as collective behavior. Psychology is considered an interdisciplinary discipline, combining knowledge from biology, social science and philosophy, with the goal of constructing foundational theory and creating practical applications to improve mental health, improving life quality supporting performance in education, and pushing for the development of a cohesive society (Myers, D.G. 2014).

The rapid development of the study of psychology in these recent decades shows the increasing demand for society's need to tend to mental health. The World Health Organization (WHO) has affirmed that problems in mental health are the number one cause of a deteriorating quality of life. According to the WHO's estimate, in 2023, around 3.8% of the population suffers from depression, including 5% of adults (4% of men and 6% of women) and 5,7% of adults above 60 years of age. In the world, 280 million people have depression (WHO, 2023). These statistics demonstrate psychology's vital role in building sustainable systems for social wellbeing, responding to the need for comprehensive human development in this modern age.

In a modern content, when experiencing pressure at work, school, and as problems in society become more intense, the role of mental health professionals in schools, hospitals, the workplace and social organizations become increasingly important. Thus, in regards to potential job opportunities, mental health professionals can work in various different environments such as education, medicine, military, law, business, communications and social work.

In Vietnam, psychology is witnessing major development. From a major with little recognition and acknowledgement, it is now present in over 30 universities' formal training nationwide (Hanoi Medical University, (2024). According to statistics of the Ministry of Education and Training, the amount of students who pursue studies in psychology is steadily increasing each year, in which women take up an overwhelming majority. This fact confirms the increasingly confirmed social concept on the role of psychology as well as its gendered suitability in career choices.

(2) The intention in choosing a major

- The Theory of Reasoned Action (TRA)

The intention in choosing a major is an expression of behavioral intention, reflecting an individual's preparedness in performing a particular act, in this case pursuing a line of work (Ajzen, I. (1991). The basis of the Theory of Planned Behavior (TPB) is the extension of the Theory of Reasoned Action (TRA), developed by Fishbein, M., & Ajzen, I. (1975). The TRA explains the relationship between our attitude and behavior, while also emphasizing the role of subjective norms in predicting human behavior. Behavioral intention is influenced by two main factors:

- The Attitude towards the Behavior: Attitude: the extent to which an individual has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen, I., 1991). According to Fishbein, M., & Ajzen, I. (1975) this attitude consists of two elements: an individual's confidence that the behavior in question will lead to some result and the evaluated level of positivity or negativity of this result.

- The Subjective Norm: Subjective Norms reflect the social pressure an individual experiences from closed ones such as their parents, friends, teachers... making them question whether they should or not perform a behavior. These closed ones can provide information, guidance, or can also believe the behavior is suitable for the individual (Montano, D. E., & Kasprzyk, D. (2015).

The TRA emerged as a way of explaining the factors influencing behaviors related to intentional decision making. It affirms that human behaviors with purpose don't happen randomly, but are the results of a process of consideration, based on attitudes and societal standards that an individual is exposed to. Fishbein, M., & Ajzen, I. (1975) believed that between the behaviors that humans can evaluate and choose, behavioral intention is the most powerful factor. The higher the level of intention is, the higher the chances of that behavior being executed. The TRA is rooted in the following assumptions:

- Behaviors have a purpose and can be controlled (volitional control).
- An individual has enough information to carry out a decision.
- The intention of a behavior is the best way to predict the actual behavior.

Because of this, the TRA is fit for explaining voluntary and intentional behaviors (Ajzen, I., & Fishbein, M. (1980). The TPB extends the TRA by adding the element of Perceived Behavioral Control to explain situations in which individuals may not have full control over the behavior of interest. However, in the context where the field of study is considered to be under personal control and the individual can act according to their own will, the Theory of Reasoned Action (TRA) is more appropriate than the Theory of Planned Behavior (TPB) and is therefore chosen as the theoretical foundation for this study.

- Holland's theory on vocational personalities and work environments (1997)

Accompanying the TRA, Holland, J. L.'s theory on vocational personalities and work environments (1997) has been used to explain students' choices in their majors. This is one of the foundational and most significant theories in the realm of professions and its

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psychology. It emerged from the assumption that humans would be the most fulfilled and satisfied working in an environment matching their individual personalities (Holland, J. L. (1997). Holland's theory is built on two principle concepts:

- There are six different types of people in the workplace - every person leans towards certain personalities, interests, values and skills which fit one of the six types.
- There are six matching work environments, and the congruence between the person and environment will lead to career success and satisfaction.

According to Holland, J. L. (1997), each individual usually has a combination of three dominant personality types, called the Holland code. For example, "SIA" is the combination of Social- Investigative- Artistic which notoriously has the characteristics such as enjoying helping others, doing group work, teaching, counseling, and having good socializing skills. Psychology is regarded as an ideal environment for those belonging to the "SIA" group, where the student is fond of helping others (Social), is passionate about researching psychology (Investigative), and wants to express creativity via therapy (Artistic).

Furthermore, research on the factors influencing the intentions behind choosing majors show that we should be paying more attention to certain factors such as:

- The consideration of the profession's prospects: the consideration of a profession's potential prospects reflects an individual's level of care and their expectations regarding aspects such as potential job opportunities, the salary, the work environment, and the position in society which the major could offer after graduation. According to (Malgwi, C. A., et al, 2005), a profession's prospect is a key factor in a student's decision of a major, especially in a competitive and unstable labor market. Regarding the study of psychology, despite not bringing in an extraordinarily high salary, it still provides job stability in an era for demand in areas of education, medicine, enterprises, and society is rising. Besides, as society becomes more aware of mental health's importance in human life, the psychology major's position in society becomes more apparent.
- The consideration of what a major consists of: being aware of what a major consists of demonstrates the student's knowledge and understanding of the major's formation's specialties, demands, and value. Aspects such as the difficulty level, the curriculum, the requirements, the teaching methods, assessment form and its potential for application in real life all play a part in choosing a major. With psychology, many students tend to have a positive attitude since this field is linked to self-exploration, understanding others, and benefitting the community. However, if students perceive the field of study as abstract, overly theoretical, or difficult to apply in practice, this may reduce their intention to choose that major (Hoa., N.T.N., et al., 2016).
- Personal motivation: personal motivation is one of the main reasons that pushes students to finalize their decision on picking a certain major. In psychology's case, common motivations can be the desire to help others, enthusiasm for learning about and exploring human emotions and behaviors, or past personal experiences with mental health. According to Minh., P., et al, (2024), self-efficacy is a principal factor in being able to achieve one's studying or career goals. If the student is confident in their own learning abilities and works ambitiously in psychology, they'll tend to pick this profession with strong conviction. Career self-efficacy not only predicts major choice intention but also varies by gender, providing a foundation for personalized counseling programs (Nur Nasiyati., et al, 2022). This study also points out how female students are more confident in places involving career information and problem-solving skills. From the perspective of TRA, individual motivation, along with attitude toward the behavior and subjective norm, are the main components forming behavioral intention. Thus, individual motivation is not merely inspiration or preference, but an organized motivational system that strongly governs major choice behavior, especially for idealized majors like psychology.

The gender factor is also considered a specific factor in the study of major choice in psychology. According to social role theory, women are often socially expected to assume caring, supportive, and empathetic roles, which are the characteristics of a psychology major (Eagly, A. H., & Wood, W. (2012)). Studies have shown that women tend to be more "Social" and "Artistic" than men, which explains why female students often tend to choose majors such as psychology, education, and sociology. It also provides an explanation as to why in statistics for psychology admissions, the proportion of female students is always higher than that of male students.

2.3. Proposed Research Model

The research overview shows that Vietnamese female students' intention to choose psychology is influenced by many factors (Hoa., N.T.N., et al., 2016; Lent, R.W., Brown, S.D. and Hackett, G. (2000). The authors propose a research model with 4 independent variables affecting Vietnamese female students' intention to choose psychology, including: individual motivation, social influence, perception of career prospects, and perception of the major.

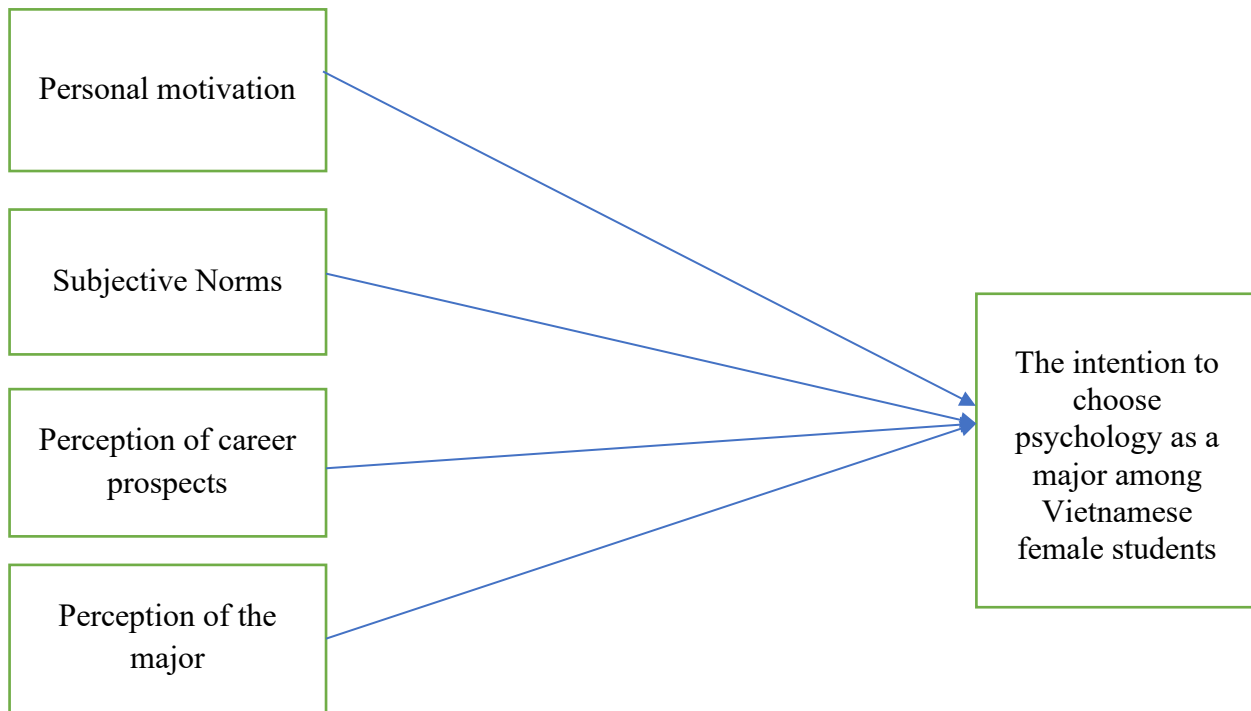


Figure 1. Proposed Research Model
Source: Developed by the research team

Research Hypotheses:

- H1:** Personal Motivation (MOT) has a positive influence on female students' intention to choose psychology.
H2: Subjective Norms (SN) has a positive influence on female students' intention to choose psychology.
H3: Perception of Career Prospects (CAR) has a positive influence on female students' intention to choose psychology.
H4: Perception of the Major (PER) has a positive influence on female students' intention to choose psychology.

Table 1. Proposed research scale

Section	Code	Affirmation
Personal motivation	MOT1	I want to study psychology to better understand people's psychology and behavior.
	MOT2	I want to help others overcome their mental health problems.
	MOT3	I believe I have qualities suitable for the psychology profession.
	MOT4	I am interested in knowledge related to human behavior and emotions.
Subjective Norms	SN1	My family supports my choice to study psychology.
	SN2	My friends think choosing psychology is a good choice for me.
	SN3	My teachers think choosing psychology is a good choice for me.
	SN4	Society in general (media, experts) values psychology as an important field.
Perception of Career Prospects	CAR1	I believe that psychology has many job opportunities after graduation.
	CAR2	I think mental health professionals can have good incomes.
	CAR3	I believe psychology will develop in the future.
Perception of the	PER1	I have researched the curriculum and formation in psychology.

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Major	PER2	I know what skills and qualities psychology requires.
	PER3	I know the difficulties of studying psychology.
Intention to choose psychology as a major among Vietnamese female students	INT1	I intend to choose psychology for university.
	INT2	I will prioritize psychology in my list of aspirations.
	INT3	If possible, I will choose to study psychology instead of other majors.

Source: Developed by the research team

3. RESEARCH METHODOLOGY

- Data Collection Method: Based on theoretical foundations and a comprehensive review of factors influencing Vietnamese female students' intention to choose psychology, four factors were included in the research model as variables: (i) "Individual Motivation," (ii) "Subjective Norm," (iii) "Perception of Career Prospects," and (iv) "Perception of the Major," influencing (v) "Intention to choose psychology for female students".

The survey questionnaire was designed with a Likert-5 scale, with:

- 1.StronglyDisagree
- 2.Disagree
- 3.Neutral
- 4.Agree
5. Strongly Agree

After developing the questionnaire, the research team conducted a pilot survey with 5 female students, then adjusted the scale and conducted a broader survey. The data collection method involved an online survey using Google Forms (link: <https://forms.gle/FwX7EUgtdwDxBnNo6>) targeting female high school students. Due to time and resource constraints for the survey, the author used a convenience sampling method, with a minimum required sample size calculated by the formula $n = 50 + 8m$ (m: number of independent variables) (Tabachnick and Fidell, 1996). In this research paper, with 4 variables, the minimum number of questionnaires to be collected was $50 + 84 = 82$ questionnaires. A total of 174 questionnaires were actually collected and processed using SMARTPLS software.

- Data Processing Method

Quantitative research methods were employed to process the collected research data.

The general form of the structural regression equation is:

$$INT = aMOT + bSN + cCAR + dPER$$

SMARTPLS software was used to test hypotheses and evaluate the impact of variables in the research model through two main steps: measurement model evaluation and structural model evaluation.

Step 1: Measurement Model Evaluation: Evaluation of the measurement model focuses on the reliability and validity of the measurement scales.

- Outer Loadings Evaluation: This index represents the strength of the relationship between observed variables and latent variables. According to Hair et al. (2016), an observed variable is considered good quality when its outer loading coefficient is ≥ 0.7 .

- Reliability Evaluation: Includes two main indices: Cronbach's Alpha and Composite Reliability (CR). Among these, CR is often preferred because it reflects reliability more accurately. According to Bagozzi & Yi (1988), a CR level of ≥ 0.7 is acceptable.

- Convergent Validity Evaluation: Based on the AVE (Average Variance Extracted) index. Hock & Ringle (2010) suggest that AVE ≥ 0.5 means that the latent variable explains at least 50% of the variance of the observed variable.

- Discriminant Validity Evaluation: Tested by the Fornell-Larcker criterion – the square root of a latent variable's AVE must be greater than its correlations with other latent variables.

- Multicollinearity Test: Based on the Variance Inflation Factor (VIF). A VIF level < 5 indicates that the model does not suffer from multicollinearity (Hair et al., 2016).

Step 2: Structural Model Evaluation: After the measurement model meets the requirements, the structural model will be evaluated through impact relationships, path coefficients, coefficient of determination (R^2), and effect size (f^2).

- Impact Relationship Test: Performed through Bootstrap analysis. Based on indices such as: Original Sample (original standardized impact coefficient), P-value (statistical significance test, considered at 0.05 level), T-statistics (t-test value).

- R^2 Coefficient (R square): Measures the explanatory power of independent variables on the dependent variable. R^2 values range from 0 to 1; higher values indicate a better predictive ability of the model.

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Additionally, when evaluating factors, collected data will be synthesized, calculated, and reflected in charts, tables, and figures using Excel software. For influencing factors designed with a Likert-5 scale, when evaluating the impact level of factors, the average value achieved for each scale will be calculated ; determine which average score range the value falls into and assess the impact level of each factor based on the achieved average value.

Interval value = (Maximum - Minimum) / n = (5-1)/5 = 0.8

Evaluation thresholds based on average score:

- + 1.00 - 1.80: Strongly Disagree
- + 1.81 - 2.60: Disagree
- + 2.61 - 3.40: Neutral
- + 3.41 - 4.20: Agree
- + 4.21 - 5.00: Strongly Agree

4. RESEARCH RESULTS

4.1. Characteristics of Survey Participants

The survey link received 174 responses, of which 100% were female high school students, with 42% in 12th grade (the final year of high school, preparing for major selection), 30% in 11th grade, and 28% in 10th grade.

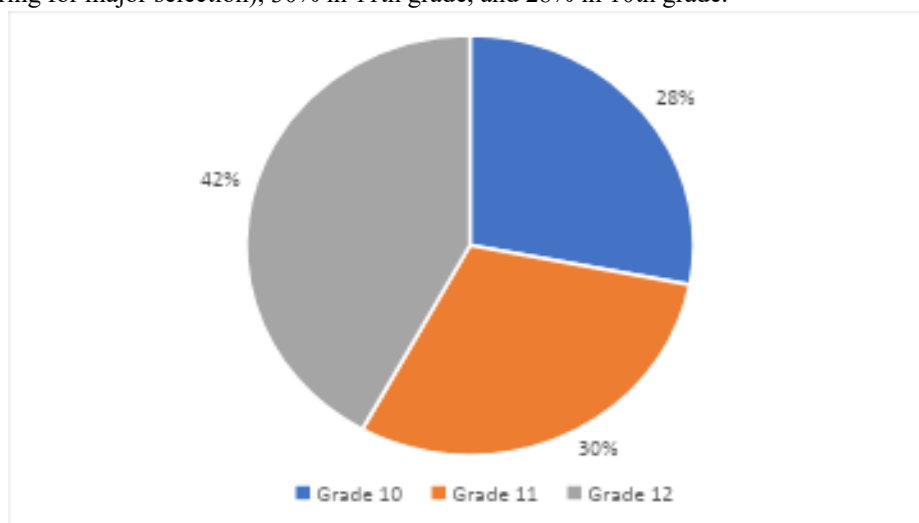


Figure 2. Percentage of Female Students Participating in the Survey by Grade Level
Source: Survey Results

Survey results for the question “Have you heard about psychology?”, show that 8% of participants had never heard of psychology; 48% of students, the largest proportion, “had heard of it but did not understand it clearly”; 32% of students stated that they had a basic understanding of psychology ; and 12% of respondents self-assessed that they understood psychology “very clearly”. The proportions of these groups indicate that the popularity and presence of psychology in daily life have improved.



Figure 3. Survey Results for the Question “Have you heard about psychology?”
Source: Survey Results

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4.2. Results of Quality Assessment of Observed Variables in the Measurement Model

Testing the Quality of Observed Variables

Table 2. Outer Loadings of Factors Influencing Female Students' Intention to Choose Psychology

	CAR	INT	MOT	PER	SN
CAR1	0,923				
CAR2	0,895				
CAR3	0,897				
INT1		0,919			
INT2		0,945			
INT3		0,888			
MOT2			0,851		
MOT3			0,834		
MOT4			0,879		
PER1				0,927	
PER2				0,937	
PER3				0,905	
SN1					0,927
SN3					0,914
SN4					0,928
MOT1			0,852		

Source: Research team's test results

The quality of observed variables is assessed through outer loadings. After re-running the model, the results from Table 2 show that the outer loadings of all correlation coefficients of the variables influencing female students' intention to choose psychology (all > 0.7) (Hair & et al, 2016) indicate that the observed variables are significant.

Testing the Reliability of the Measurement Scale

The reliability of the measurement scale for factors influencing female students' intention to choose psychology was assessed on SMARTPLS through two main indicators: Cronbach's Alpha and Composite Reliability (CR).

Table 3. Cronbach's Alpha and Composite Reliability of Factors Influencing Female Students' Intention to Choose Psychology

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CAR	0,890	0,892	0,931	0,819
INT	0,906	0,907	0,941	0,842
MOT	0,876	0,879	0,915	0,730
PER	0,913	0,915	0,945	0,852
SN	0,913	0,913	0,945	0,852

Source: Research team's test results

According to Table 3, after analyzing the reliability test using Cronbach's Alpha, all measurement scales satisfy the condition > 0.7 (DeVellis, 2012) and do not violate any rules for variable exclusion, thus no variables were excluded and are acceptable in terms of reliability.

The Composite Reliability (CR) of all observed variables is also > 0.7 (Bagozzi & Yi, 1988) (Table 3). Therefore, the measurement scale has reliability, is significant for analysis, and can be used in the subsequent factor analysis.

Convergence

According to the data analysis results in Table 3, the Average Variance Extracted (AVE) index of all variables is > 0.5 (Hock & Ringle, 2010), which indicates that the model satisfies the conditions for convergence.

Discriminant Validity

The results in Table 4 regarding the Fornell-Larcker criterion for the research model of factors influencing female students' intention to choose psychology all ensure discriminant validity because all square root AVE values on the diagonal are higher than their off-diagonal correlation coefficients. Therefore, in terms of discriminant validity, both criteria, cross-loadings and Fornell and Larcker's criterion, are satisfied.

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Table 4. Fornell-Larcker Criterion for the Research Model of Factors Influencing Female Students' Intention to Choose Psychology

	CAR	INT	MOT_	PER	SN
CAR	0,905				
INT	0,806	0,917			
MOT	0,697	0,816	0,854		
PER	0,812	0,865	0,766	0,923	
SN	0,794	0,856	0,822	0,894	0,923

Source: Research team's test results

f^2 Function Value

The initial analysis correctly used the f^2 (effect size) measure to assess the impact level of exogenous variables when removed from the model, according to Cohen's (1988) criteria, specifically: $f^2 < 0.02$: negligible; $0.02 \leq f^2 < 0.15$: small; $0.15 \leq f^2 < 0.35$: medium; $f^2 \geq 0.35$: large.

Table 5. Summary of f^2 Values

	CAR	INT	MOT_	PER	SN
CAR		0,082			
INT					
MOT		0,146			
PER		0,114			
SN		0,020			

Source: Research team's test results

In this model, from Table 5, we see:

- + The f^2 value of the CAR variable is 0.082 (value $0.02 < f^2 < 0.15$), so the impact of CAR on INT is small.
- + The f^2 value of the MOT variable is 0.146 (value $0.02 < f^2 < 0.15$), so the impact of MOT on INT is small and approaching medium.
- + The f^2 value of the PER variable is 0.114 (value $0.02 < f^2 < 0.15$), so the impact of PER on INT is small.
- + The f^2 value of the SN variable is 0.020, indicating that the impact of this variable on INT is small, but approaching negligible (value $0.02 < f^2 < 0.15$).

4.2.2. Results of Impact Assessment Using Structural Model

Assessing Impact Relationships

The relationships and impact levels of factors influencing female students' intention to choose psychology on SMARTPLS are shown in Figure 4.

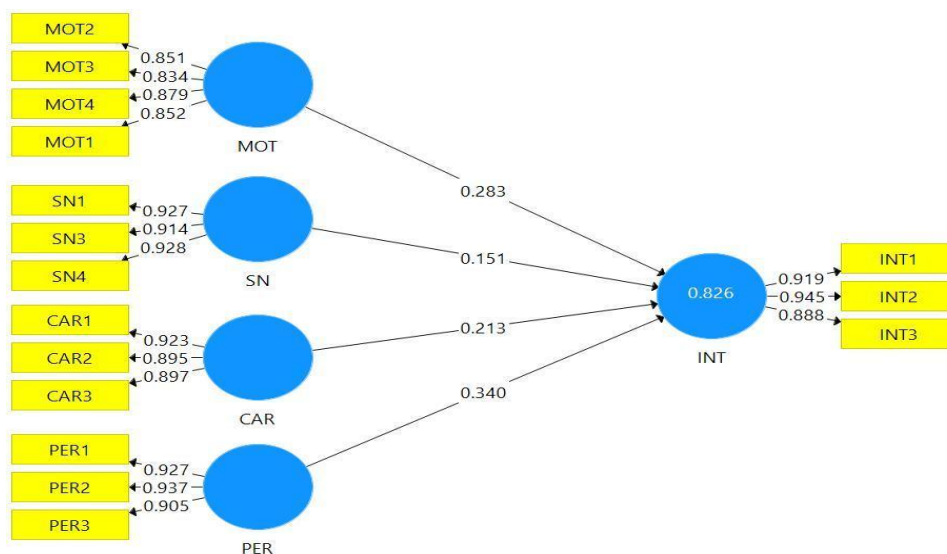


Figure 4. Factors Influencing Female Students' Intention to Choose Psychology

Source: SMARTPLS test results by the research team

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The results of the Bootstrap analysis to assess impact relationships are shown in Table 6. Accordingly, the factors CAR, MOT, and PER have P Values < 0.05 (Hypotheses H1, H3, H4 are all accepted at a 5% significance level), while the subjective norm factor (SN) has a P Value of 0.370 > 0.1, indicating that the subjective norm (SN) is not statistically significant and has negligible influence on major choice intention (Hypothesis H2 is not accepted).

Table 6. Structural Model Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CAR -> INT	0,213	0,208	0,078	2,720	0,007
MOT -> INT	0,283	0,279	0,066	4,288	0,000
PER -> INT	0,340	0,335	0,121	2,807	0,005
SN -> INT	0,151	0,163	0,168	0,897	0,370

Source: SMARTPLS test results by the research team

The test results in Table 6 show that with 95% confidence, the regression equation is as follows:

$$\text{INT} = 0.213 \cdot \text{CAR} + 0.238 \cdot \text{MOT} + 0.340 \cdot \text{PER}$$

Evaluating the Overall Coefficient of Determination R^2 (R square)

The results of the PLS Algorithm analysis provide the R^2 value, reflecting the explanatory power of the independent variables on the dependent variable. The R^2 index measures the overall coefficient of determination (R-square value), which is an indicator of how well the data fits the model (the model's explanatory power). According to Hair & et al (2010), R-square values of 0.75, 0.50, or 0.25 are suggested.

Table 7. Coefficient of Explanatory Power of Independent Variables for Dependent Variables (R Square)

	R Square	R Square Adjusted
INT	0,826	0,822

Source: Research team's test results

The results from Table 7 show that: The R^2 for the factor "Intention to choose psychology for female students (INT)" is 0.826, and the adjusted R^2 is 0.822, which is suitable for this study. Thus, the independent variables in the model explain 82.6% of the dependent variable.

Evaluating the Reliability Index (SRMR)

Standardized Root Mean Square Residual (SRMR): This index indicates the fit of the research model. According to Hu & Bentler (1999), typically a well-fitting model will have an SRMR value less than 0.08 or 0.1.

Table 8. Standardized Root Mean Square Residual (SRMR) Reliability Index

	Saturated Model	Estimated Model
SRMR	0,055	0,055

Source: Research team's test results

Through the SRMR research results in Table 8, the research model's Saturated Model is 0.055, which is less than 0.08; the Estimated Model is 0.055, which is less than 0.1. Therefore, this model is suitable for data analysis.

5. DISCUSSION OF RESULTS

Among the four factors considered, three factors reached a statistical significance level of 5% (95% confidence), indicating an influence on high school female students' intention to choose psychology in Vietnam. Regression Equation:

$$\text{INT} = 0.213 \cdot \text{CAR} + 0.238 \cdot \text{MOT} + 0.340 \cdot \text{PER}$$

The SEM regression results confirm that internal factors and individual perception play a decisive role in forming the intention to choose a major. Among these, the "Perception of the Major" (PER) factor has the strongest influence with a coefficient of $\beta = 0.340$, confirming that understanding the training program, skill requirements, and difficulties of the major has a positive, significant impact on the decision to study psychology. Following that is "Individual Motivation" (MOT), with $\beta = 0.283$, demonstrating the role of passion, suitable qualities, and the desire to help others – core values associated with the psychology profession – in promoting the choice behavior. The "Career Prospects" (CAR) factor also has a clear influence ($\beta = 0.213$), indicating that belief in job opportunities, salary levels, and social status also contributes to forming the intention to choose a major.

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Notably, the “Subjective Norm” (SN) factor, representing influence from friends, family, and society, was not statistically significant in the model. This result reflects a new trend in female students' career orientation: major choices are no longer overly influenced by external factors or passive guidance from family, but rather based on active research and individual perception. This is a positive sign, indicating maturity in major selection thinking and autonomy in career decision-making among female students. Specifically, the influence of the factors is as follows:

(1) Individual Motivation (Motivation)

Individual motivation has an influence coefficient of 0.238, making it one of the important internal factors directly affecting major choice intention, because voluntary and internally driven decisions often have more lasting power. The MOT factor is measured by 4 observed variables:

Table 9. Mean Values of the “Individual Motivation” Variable

Code	Affirmation	Mean	Level of Agreement
MOT1	I want to study psychology to better understand people's psychology and behavior.	3.839	Agree
MOT2	I want to help others overcome mental health problems.	3.833	Agree
MOT3	I believe I have qualities suitable for the psychology profession.	3.759	Agree
MOT4	I am interested in knowledge related to human behavior and emotions.	3.977	Agree

Source: Compiled from survey data

All variables have a mean > 3.7, indicating a high and stable level of agreement. MOT4 (interest in the major) has the highest mean value in the entire questionnaire (3.977); MOT2 (desire to help others) and MOT3 reflect the learners' positive self-perception of their abilities and personal qualities.

In major selection, intrinsic motivation plays a decisive role in the level of commitment, persistence, and subsequent career satisfaction. The MOT factor includes both cognitive motivation (MOT1), social motivation (MOT2), and intrinsic personal motivation (MOT3, MOT4). The influence of MOT on major choice intention (INT) is positive and highly statistically significant. This is the second strongest influencing factor, only after perception of the major (PER). This shows that female students choose psychology not only for job opportunities or societal expectations, but mainly due to personal preference, passion, and a desire to contribute.

Therefore, career counseling programs should focus on inspiring interest and passion in students; building learning experiences that help students understand and feel a personal fit with the profession; and developing self-discovery activities to stimulate students' intrinsic motivation.

(2) Perception of the Major (PER)

Perception of the major (PER) is the strongest influencing factor on the intention to choose psychology, with an influence coefficient of $\beta = 0.340$ and a high statistical significance level ($p < 0.01$); affirming that the level of understanding, evaluation, and practical research about the major is a key factor directly influencing female students' major choice decision. This result is consistent with the study by Brown, S. D., & Lent, R. W. (2006), where a comprehensive understanding of the major (including information about the training program, skill requirements, prospects, and professional characteristics) plays a central role in forming and developing career choice intention.

In this study, PER is measured through 3 observed variables, specifically:

Table 10. Mean Values of the “Perception of the Major” Variable

Code	Affirmation	Mean	Level of Agreement
PER1	I have researched the curriculum and formation in psychology.	3.621	Agree
PER2	I know what skills and qualities psychology requires.	3.810	Agree
PER3	I know the difficulties of studying Psychology.	3.868	Agree

Source: Compiled from survey data

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All mean values are greater than 3.6, indicating a high level of agreement. Among these, PER3 has the highest mean score (3.868) – reflecting that students are not only interested in the major but also have a realistic view of the challenges of the profession, including the need for deep specialized knowledge, mental pressure when working, and other specific factors. PER2 (3.810) shows learners' correct perception of skill and quality requirements such as empathy, communication skills, listening, and professional ethics. PER1 (3.621) reflects active information seeking about training – a testament to a well-founded decision-making process.

The fact that female students in this study actively research the major shows the positive effect of career counseling and major communication activities in recent years. Given its role as the strongest influencing factor on major choice intention, PER needs to be given due attention in career guidance education. Universities, high schools, and counseling organizations need to:

- Enhance the provision of clear, attractive, and in-depth information about training content, admission requirements, job opportunities, and career challenges.
- Organize practical experience activities such as: career fairs, simulated classes, talk shows with alumni, connecting with psychological professionals - to help students gain a more realistic view of the major.
- Apply information technology and social media to communicate about the major in an accessible, vivid way, suitable for students' current information access habits.
- Integrate career guidance education into the main curriculum to raise early awareness of professions, thereby helping students set appropriate academic goals.

(3) Perception of Career Prospects (CAR)

Perception of career prospects is a factor that reflects students' understanding, evaluation, and expectations of future career prospects after choosing a major. In this study, CAR is identified as one of the factors that has a positive and statistically significant influence on the intention to choose psychology (INT), with an influence coefficient of $\beta = 0.213$, $p\text{-value} < 0.01$ (the more positive students' perception of career opportunities after studying psychology, the higher the likelihood of forming an intention to choose this major). Some previous studies approach the "career prospects" factor as the perception that a major has high "use value" as a strong motivation for career choice behavior. In this context, the "career value" that learners expect (such as stable employment, good income, promotion opportunities) is the motivation for choosing a major.

In this study, CAR is measured by 3 observed variables, the results are presented in Table 11:

Table 11. Mean Values of the "Perception of the Major" Variable

Code	Affirmation	Mean	Level of Agreement
CAR1	I believe that psychology has many job opportunities after graduation.	3.615	Agree
CAR2	I think mental health professionals can have good incomes.	3.636	Agree
CAR3	I believe psychology will develop in the future.	3.736	Agree

Source: Compiled from survey data.

All variables have a mean value > 3.6 , indicating a relatively high level of agreement from respondents. Specifically: CAR3 has the highest mean value (3.736), reflecting students' optimism about the long-term development potential of psychology in the future. Students generally have a fairly positive perception of job opportunities (CAR1) and income levels (CAR2) in the field. Overall, the results indicate that the female students participating in the survey have a positive but also quite cautious view of career prospects. To enhance the role of this factor, schools and training institutions need to:

- Update and publicize information about the psychology labor market transparently and understandably.
- Organize career orientation activities, such as workshops, seminars, and practical experiences with professionals in the field, to help students better understand feasible career paths.
- Connect students with alumni, experts, or businesses in the field of psychology to provide authentic and multi-faceted perspectives.
- Encourage students to actively seek information about professions through reliable platforms such as university websites, professional organizations, and job networks.

(4) Intention to Choose Psychology for Vietnamese Female Students (INT)

INT is measured by three specific variables based on different levels of intention: interest level, priority level, and behavioral commitment level ; with mean values of: INT1 (3.822), INT2 (3.845), and INT3 (3.638) respectively.

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Table 12. Mean Values of the “Perception of the Major” Variable

Code	Affirmation	Mean	Level of Agreement
INT1	I intend to choose psychology for university.	3.822	Agree
INT2	I will prioritize psychology in my list of aspirations.	3.845	Agree
INT3	If possible, I will choose to study psychology instead of other majors.	3.638	Agree

Source: Compiled from survey data.

Among these, INT2 has the highest mean, reflecting that many female students not only have a general intention but also identify psychology as a priority choice in their university applications. The small difference between the statements shows that although most students intend to choose this major, there is still some hesitation when directly comparing psychology with other options – this is clearly shown in INT3 with the lowest mean (3.638).

To understand female students' concerns when choosing psychology, the authors used an open-ended question “Please share what you are concerned about when considering choosing psychology?” in the survey questionnaire. Some common answers include:

- Concern that it will be difficult to find a job after graduation
- Concern that this profession may have unstable or low income
- Concern that family does not support this major choice
- Still unclear about the major, subjects, and training program
- Concern about not having suitable skills for this major; afraid of not being capable enough to pursue it
- Hesitating with another major that the student also likes

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From the perspective of education management and admissions, these research results suggest many important policy implications. Enhancing correct and comprehensive awareness of the major plays an important role in female students' career orientation, and career guidance efforts in high schools need to be strengthened.

- Universities need to invest in in-depth and transparent communication about psychology, emphasizing the characteristics of the major, competency requirements, job opportunities, and practical challenges.
- Experiential activities such as career workshops, simulated classes, and connections with current psychology students or professionals will help students gain a realistic understanding.
- Applying tools to help students explore themselves, develop passions, and identify suitable personal qualities will contribute to strengthening their belief and long-term commitment to their chosen major.
- Enhancing understanding will help students make informed decisions about choosing a major that aligns with their abilities and personal career orientation, thereby helping to reduce situations of studying misaligned majors or unemployment after graduation.

6. CONCLUSION

The results show that three out of four factors reached a statistical significance level of 5%, including: Perception of the Major (PER) with an influence coefficient of $\beta = 0.340$, Individual Motivation (MOT) with $\beta = 0.238$, Perception of Career Prospects (CAR) with $\beta = 0.213$. Meanwhile, Social Influence (SN), although having a positive coefficient, was not statistically significant ($p > 0.05$). This result confirms that female students tend to choose psychology based on their realistic perception of the major, internal personal motivation, and belief in career prospects, rather than being influenced by family or social impacts. The PER factor (perception of the major) had the strongest impact on the intention to choose, demonstrating the crucial role of providing clear, complete, and realistic information about the major in the career guidance process. The research contributes empirical evidence for the development of career counseling policies at the high school level. The results emphasize the necessity of focusing on raising awareness of the major, creating conditions to stimulate individual motivation, and clearly communicating the career prospects of Psychology. In the context of increasing concern for mental health, promoting this major in a systematic and correctly oriented way will contribute to improving the quality of career choices and developing human resources that meet societal needs. However, the scope of the research subject is still narrow, focusing only on high school female students, and not differentiating by region. Therefore, the results do not fully reflect the trend of major selection among all high school students. The next research direction is to expand the survey to male students and differentiate by students' living areas to gain a more comprehensive view of factors influencing major selection in Vietnam.

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