Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 4, 1711-1726 2024 Publisher: Learning Gate DOI: 10.55214/25768484.v8i4.1547 © 2024 by the authors; licensee Learning Gate

# Determinants of life insurance purchase decisions among university students in Hanoi, Vietnam

Pham Ngoc Huong Quynh<sup>1\*</sup> Nguyen Tien Dung<sup>2</sup>

<sup>1</sup>VNU University of Economics and Business, Vietnam National University, Hanoi, Vietnam and O.P. Jindal Global University, Sonipat, Haryana, India; quynhphamnh@vnu.edu.vn (P.N.H.Q.) <sup>2</sup>Faculty of Marketing, Thuongmai University, Hanoi, Vietnam; (N.T.D.)

**Abstract:** This article aims to evaluate the factors affecting the decision to buy life insurance for students in Hanoi, including the variables: awareness of life insurance value, motivations to purchase, barriers to purchase, company brand, and life insurance consultant. A quantitative survey was utilized to take the students in Hanoi, Vietnam. The study uses SPSS 20 analysis software based on 351 valid responses. The multiple regression results show that all of these factors have significant effects. Accordingly, the barrier factor has a negative impact, decreasing the ability to buy life insurance. In contrast, other factors have a positive impact, such as exceptionally high awareness of value and purchase motivation, which have the most substantial impact. Consultants and company brands also promote students' decision to buy life insurance. Insurance companies should focus on education, improving services, and building brands to increase the ability to purchase life insurance for students. In addition, raising awareness of the value of life insurance is also necessary for student customers. The findings suggest that targeted strategies addressing these key factors can effectively boost students' adoption of life insurance in Hanoi and Vietnam.

Keywords: Life insurance, Perception of value, Purchase barriers, Student purchase decision.

### 1. Introduction

The global life insurance industry has evolved significantly since its inception in 1958 in London, marking the beginning of the modern era of life insurance [1; 2]. In Vietnam, life insurance was officially introduced in 1986, laying the foundation for a new sector dedicated to providing financial protection services to the population [3]. Life insurance and other forms of insurance play a crucial role in risk-sharing and loss distribution among policyholders, offering financial security to individuals and their families. Over the past two decades, the life insurance industry in Vietnam has seen substantial growth, both in the diversity of products available and the number of customers served. Around 18 companies offer more than 450 life insurance products, reaching over 9.8 million people and representing approximately 10.19% of the country's population [4]. Despite this growth, the market still holds significant potential for expansion, particularly in reaching underserved customer segments that remain untapped.

As of 2023, Hanoi's population is approximately 8.5 million, with a GRDP per capita of 101.9 million VND [5]. The city is home to around 97 universities and 33 colleges, comprising one-third of the nation's total number of universities and accommodating 40% of the country's student population, totaling about 660,000 students from various regions [6]. Given this substantial student demographic, the life insurance market in Hanoi holds significant potential. However, student participation in life insurance remains low. A study by Hieu (2023) revealed that only 12.5% of university students are enrolled in life insurance, indicating a general disinterest in financial protection for themselves and their

<sup>\*</sup> Correspondence: quynhphamnh@vnu.edu.vn

families [7]. The primary reasons for this low uptake may include a need for more awareness about the benefits of life insurance, low or unstable income, and insufficient information and guidance from insurance companies [8]. This points to an apparent discrepancy between the potential need for life insurance among students and its actual utilization.

Research on the factors influencing life insurance purchase decisions has garnered considerable attention from scholars worldwide. Luciano et al. (2015) identified critical determinants among Italian youth, including normative beliefs, behavioral beliefs, subjective norms, and attitudes, significantly influencing their intention to buy life insurance [9]. In contrast, Cheng (2023) highlighted that religious considerations, savings motivations, and financial literacy play a crucial role in shaping students' insurance purchasing behavior in Malaysia [10]. Similarly, Jahan and Sabbir (2019) found that financial literacy, demographic factors, and savings motivations are critical drivers of life insurance purchase intentions in Bangladesh [11]. Moreover, Innocenti et al. (2019), in a study spanning 11 countries, demonstrated that indirect experiences, personal encounters, and previous health risks substantially influence life insurance purchasing decisions [12]. Specifically, individuals with a history of poor health are 25% more likely to purchase insurance, while those aware of the risk of severe illness are 40% more inclined to buy insurance [12].

In Vietnam, various studies have examined the factors influencing the decision to purchase life insurance, offering a comprehensive understanding of this issue. Minh et al. (2023) identified five primary factors affecting life insurance purchase decisions: family support, spiritual benefits, investment opportunities, and protection needs [13]. Similarly, Hai et al. (2021) highlighted seven key factors influencing small traders' decisions to purchase voluntary social insurance: health awareness, propaganda efforts, knowledge, attitude, moral responsibility, behavioral control, and family expectations [14]. Further, Giang and Hang (2022) found that insurance service quality, company reputation, barriers to purchase, perceived benefits, family opinions, and savings motivations play crucial roles in shaping insurance purchase intentions [8]. Huy et al. (2020) also emphasized five critical determinants for individuals' intention to purchase insurance: policy knowledge, procedural clarity, personal attitudes, risk perception, and moral responsibility [15]. These studies underscore the significant impact of family support, spiritual and material benefits, attitudes, knowledge of life insurance, and risk perception on insurance purchasing behavior.

Despite the growing popularity of life insurance in Vietnam, there remains a gap in research addressing the factors influencing students' decisions to purchase life insurance. Students often have low incomes and rely heavily on scholarships or part-time employment, so understanding how income levels and spending power affect their life insurance decisions is crucial. Students' perceptions of the value of life insurance are also vital, as a proper understanding of the associated risks and benefits significantly influences their purchasing behavior. Moreover, increased access to advice and information about life insurance can enhance awareness and encourage more students to consider insurance. The relationship between students and their families is another critical factor, as financial support or guidance from family members can significantly influence students' decisions regarding life insurance. Therefore, further research is needed to explore these dynamics and clarify the interaction between these factors and students' life insurance purchasing decisions.

Students represent a significant potential target group in the life insurance market. This article evaluates the factors influencing students' life insurance purchase decisions in Hanoi, focusing on critical variables such as awareness of life insurance value, purchase motivations, barriers to purchase, company brand perception, and the influence of life insurance consultants. Insurance companies can more accurately tailor their business and communication strategies to enhance student interest and life insurance awareness by gaining a deeper understanding of these factors. This, in turn, will contribute to market expansion and further development of the life insurance industry.

### 2. Literature Review

### 2.1. Ground Theories

Philip Kotler's theory of consumer behavior describes the purchase decision process through five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior [16]. Consumer behavior is influenced by four main factors: cultural (culture, subculture, social class), social (reference group, family, social role), personal (age, occupation, economic status, lifestyle), and psychological (motivation, cognition, learning, beliefs, attitudes). Consumers' perception and information processing are influenced by attention and decoding, leading to positive or negative attitudes toward the product, thereby influencing purchase behavior [17, 18].

Sheth et al. (1999) developed a theoretical model of consumer behavior in which perceived benefits and risks are considered essential factors in determining purchase behavior [19]. According to this theory, perceived benefits include convenience, financial value, and a sense of security that a product brings consumers. These factors determine whether consumers feel satisfied and happy with the product. In contrast, perceived risks involve factors such as the possibility of financial loss, health risks, and uncertainty about service quality. High perceived risks can make consumers anxious and hesitant when purchasing [19].

The study of Brahmana et al. (2018) on insurance purchase attitudes analyzed the perception of benefits and risks that directly affect consumer attitudes. The author pointed out that when consumers perceive health insurance benefits, they tend to develop positive attitudes toward purchasing insurance [20]. These benefits may include financial security in the face of health risks, access to high-quality medical care, and financial protection for themselves and their families in emergencies. Conversely, when consumers perceive a high level of risk, they often become hesitant or decide to decline to purchase insurance. These risks may include concerns about high insurance costs, complicated claims processes, and uncertainty about the actual need for insurance.

#### 2.2. Research Model and Hypotheses

Based on the background theory of Sheth et al. (1999) and Brahmana et al. (2018) on insurance purchase attitudes, risk and benefit perceptions are two critical factors affecting consumer attitudes toward purchasing health insurance. Applied to this study, the hypotheses are adjusted for life insurance products. Risk and benefit perceptions are individuals' negative or positive feelings toward life insurance. Benefit perception includes financial protection and peace of mind, while risk perception includes costs and risks of benefits.

Consumer behavior is often shaped by two main factors: perceived ease of use and perceived usefulness [21]. These factors contribute to the overall perceived value of a product, which is a critical determinant in purchasing decisions. Perceived value in life insurance refers to the benefits and significance consumers attach to the product. It includes financial security, peace of mind, and protection of loved ones. When customers, particularly students, perceive that life insurance brings significant value, they are more likely to purchase it. This awareness is influenced by the utility and benefits they associate with the insurance, such as future financial stability and protection against unforeseen events [21, 22]. When customers know that life insurance brings significant value, they tend to make a higher decision to purchase insurance. From there, the research hypothesis is proposed: *H1: Awareness about life insurance positively impacts students' decision to buy life insurance*.

When companies provide complete information about insurance products, consumers' understanding of those products will increase, increasing the likelihood of purchasing insurance [23, 24]. However, several barriers can impede this decision-making process. Issues such as late fee notifications, unresolved benefits from previous policies, or perceived indifference from the insurance company can create significant obstacles. These barriers often lead to distrust and hesitation among potential buyers, particularly students, who might already be cautious about financial commitments [25]. These negative experiences or perceptions can overshadow the perceived benefits, making it less

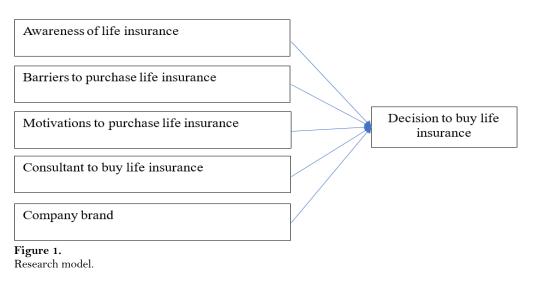
likely for students to purchase life insurance. Therefore, the research hypothesis is proposed: *H2: Barriers to buying life insurance hurt students' decision to purchase life insurance.* 

Motivation is a psychological factor influencing purchasing behavior, helping satisfy individual customers' needs [26]. Motivation is also a significant factor affecting purchasing general products, services, and life insurance [27, 28]. Motivation encompasses a range of intrinsic and extrinsic factors that compel individuals to act in specific ways, often seeking to fulfill their financial security, family protection, or future planning needs. These motivational drivers are crucial for students, who may prioritize life insurance to ensure economic stability and peace of mind for themselves and their families. Therefore, the research hypothesis is proposed: H3: Motivation to purchase life insurance positively impacts students' decision to buy life insurance.

Research by Huy et al. (2020) and Innocenti et al. (2019) showed that life insurance consultants impact customers' decisions to buy insurance. These consultants serve as vital intermediaries between customers and insurance companies, providing critical services such as answering queries, offering detailed information, and fostering long-term consumer relationships [15, 12]. Their expertise and personalized advice help demystify complex insurance products, making them more accessible and understandable for potential buyers. This relationship-building aspect is especially significant for students, who may rely on consultants to navigate the nuances of life insurance. Therefore, the proposed research hypothesis is H4: Life insurance consultants positively influence students' decisions to buy life insurance.

The brand is an essential company asset, affecting its performance and sustainability [29]. A reputable brand can build trust, leading to customer choice and loyalty [30]. Brand affects insurance companies' productivity and promotes customers' decisions to buy insurance [31]. For students, who might be more inclined to choose well-known and trusted brands, the brand's reputation can be a key deciding factor. Therefore, the research hypothesis is proposed as H5: The insurance company brand positively influences students' decisions to buy life insurance.

The proposed research model is shown in Figure 1.



### 3. Research Methodology

### 3.1. Scale Development

Based on the synthesis and inheritance of previous studies, combined with interviews with students and experts in the field of life insurance, this study proposes an official scale with 30 variables (See Table

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 4: 1711-1726, 2024 DOI: 10.55214/25768484.v8i4.1547 © 2024 by the authors; licensee Learning Gate 1). All scales are set on a 5-point Likert scale, with rating levels ranging from 1 to 5 (completely disagree to agree).

Factors Coding		Observed variables	Source	
	AWA 1	Buying life insurance helps me maintain a regular savings habit.	[21; 22; 23]	
	AWA2	Life insurance is a form of investment for the future.		
Awareness	AWA3	Life insurance gives me financial peace of mind.		
	AWA4	Life insurance creates a sense of security.		
	AWA5	Life insurance provides good protection for my family members.		
	MTV1	Life insurance contributes to ensuring financial stability for my family.	[27; 28; 29]	
	MTV2	Life insurance is a way to save for my children's education and leave an inheritance.		
Motivations	MTV3	Life insurance is a long-term investment.		
	MTV4	I choose life insurance when I need to treat an expensive illness.		
	MTV5	Life insurance helps me financially support my parents.		
	BRR1	I have difficulty having enough money to pay life insurance premiums.	[23; 24; 25]	
	BRR2	The time required to complete the life insurance payment should be shorter.		
Barriers	BRR3	I am still healthy so it is not necessary to buy life insurance right now.		
	BRR4	I still need clarification about the reliability and effectiveness of life insurance.		
	BRR5	Information about life insurance is not provided adequately.		
	CSL1	I decided to buy life insurance from consultants with whom I had positive experiences.	[15; 12]	
Consultant	CSL2	The consultant showed interest and enthusiasm when advising on life insurance.		
	CSL3	The consultant provided complete professional information and answered my questions.		
	CSL4	I prioritize choosing consultants with many years of experience in the life insurance field.		
	CSL5	I usually choose to buy life insurance from consultants who are my friends or relatives.		
Company Brand	BRD1	I prioritize life insurance companies with policies and activities for the benefit of the community.	[29; 31]	

Table 1.Proposed scale table.

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 4: 1711-1726, 2024 DOI: 10.55214/25768484.v8i4.1547 © 2024 by the authors; licensee Learning Gate

Factors	Coding	Coding Observed variables		
	BRD2	I choose life insurance companies that are reputable and widely known.		
	BRD3	I appreciate life insurance companies with good customer support services.		
	BRD4 I choose life insurance companies based on financial stability and long-term solvency.			
	BRD5	I prefer life insurance companies with prominent and reputable brands.		
	DCS1	I decided to buy life insurance based on the advice of an expert.	[19; 20]	
Decision to purchase	DCS2	I was persuaded to buy life insurance even though I did not intend to buy it.		
	DCS3	Investing in life insurance is a worthwhile choice.		
	DCS4	Buying life insurance is a good decision.		
	DCS5	I am satisfied with my choice of buying life insurance, which is reasonable.		

### 3.2. Data Collection Method

The pilot questionnaire was established, conducted with ten people, and discussed with students to adjust the questionnaire and scale to suit the model and reality. Afterward, expert opinions were consulted to complete the questionnaire, scale, and official model. According to Hair et al. (2019), 100 - 150 is the minimum sample size [32], and Bollen (1989) recommends at least five samples for each estimate [33]. With a research model with five factors and 30 observed variables, the sample size must be 150 or more, so 400 survey forms were distributed. During the official research phase, 400 survey forms (directly and online) were collected, of which 351 samples met the requirements and 49 were discarded.

### 3.3. Data Analysis Method

After cleaning the data, the data were analyzed using SPSS 20.0. The steps included (i) descriptive statistics, (ii) assessing the reliability of the scale with Cronbach's Alpha coefficient, and (iii) exploratory factor analysis (EFA). The research results will be compared with previous studies to draw official conclusions. Finally, the limitations of the research and future research directions will be pointed out.

### 4. Research Results and Discussion

### 4.1. Characteristics of the Research Sample

This article selected the research sample based on Hanoi with specific characteristics, as shown in Table 2.

Characteristics	Selection	Frequency (people)	Percentage (%)
	None	5	1.4
	Under 1 million	70	19.9
	1 - 3 million	73	20.8
Income	3 - 5 million	182	51.9
	5 - 15 million	17	4.8
	Over 15 million	4	1.1
	Finances for yourself and your family are secure	100	28.5
Usamo status	Yes	52	14.8
Usage status	No	299	85.2
	Within 1 year	19	36.5
	Từ 1 - 2 years	14	26.9
Purchase time	Từ 2 - 3 years	10	19.2
	Từ 3 - 4 years	9	17.3
	Low income	136	45.5
	Do not understand well	150	50.2
	Do not trust	144	48.2
Reasons for not pursuing	Have bought other insurance products	147	49.2
	Very few risks in life	158	52.8
	The money earned can be invested in other, more profitable fields	166	55.5
	Other	150	50.2

### **Table 2.**Characteristics of the research sample.

### 4.2. Assessing the Reliability of Variables

4.2.1. Cronbach's Alpha Coefficient to test the Reliability of the Scale

The results of Cronbach's Alpha coefficient show that all factors affecting the decision to buy life insurance for students in Hanoi are shown in Table 3.

### Table 3.

Cronbach's Alpha coefficient of measurement factors.

Observed variable	Total	Cronbach's Alpha if the variable is removed
1. Awareness		Cronbach's Alpha: 0.773
AWA1	0.550	0.730
AWA2	0.591	0.715
AWA3	0.471	0.755
AWA4	0.580	0.720
AWA5	0.539	0.734
2. Motivations		Cronbach's Alpha: 0.775
MTV1	0.549	0.734
MTV2	0.578	0.724
MTV3	0.577	0.723
MTV4	0.598	0.720
MTV5	0.456	0.768
3. Barriers		Cronbach's Alpha: 0.798

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 4: 1711-1726, 2024 DOI: 10.55214/25768484.v8i4.1547 © 2024 by the authors; licensee Learning Gate

Observed variable	Total	Cronbach's Alpha if the variable is removed
BRR1	0.588	0.759
BRR2	0.550	0.769
BRR3	0.559	0.768
BRR4	0.576	0.761
BRR5	0.635	0.742
4. Consultant		Cronbach's Alpha: 0.761
CSL1	0.613	0.690
CSL2	0.497	0.737
CSL3	0.413	0.754
CSL4	0.541	0.713
CSL5	0.607	0.690
5. Company brand (The 1 <sup>st</sup> )		Cronbach's Alpha: 0.696
BRD1	0.151	0.753
BRD2	0.536	0.613
BRD3	0.540	0.611
BRD4	0.539	0.606
BRD5	0.517	0.617
Company brand (The 2 <sup>nd</sup> )		Cronbach's Alpha: 0.753
BRD2	0.540	0.702
BRD3	0.571	0.687
BRD4	0.572	0.685
BRD5	0.527	0.709
6. Decision to purchase		Cronbach's Alpha: 0.799
DCS1	0.631	0.749
DCS2	0.547	0.775
DCS3	0.674	0.730
DCS4	0.582	0.761
DCS5	0.492	0.787

The Cronbach's alpha values for all concepts were above 0.6, indicating that the 6-concept scale was stable but did not exceed 0.95, indicating no content overlap [34]. Specifically, the initial Cronbach's Alpha coefficient was 0.696 for the Corporate Brand factor with five variables. However, the BRD1 variable had a low item-total correlation coefficient (0.151), so this variable was removed from the model. After removing BRD1, the Cronbach's Alpha coefficient increased to 0.753, indicating the scale's high reliability. Therefore, the remaining variables of this scale were retained for exploratory factor analysis (EFA). Finally, 29 observed variables, including 24 independent and five dependent variables, were retained for EFA analysis.

# 4.2.2. Exploratory Factor Analysis EFA to Evaluate the Scale 4.2.2.1. Analysis of Influencing Factors

The hypothesis H0 in this analysis assumes no significant relationship exists between the 24 observed variables in the population. To test this hypothesis, the KMO and Bartlett's Tests were performed. The test results showed that the KMO value was 0.833 and the Sig value was 0.000. These results showed that the 24 variables were significantly correlated with each other and were suitable for conducting exploratory factor analysis Table 4.

Cading	Factor						
Coding	1	2	3	4	5		
BRR5	0.758						
BRR1	0.740						
BRR3	0.714						
BRR4	0.706						
BRR2	0.681						
MTV4		0.723					
MTV1		0.721					
MTV2		0.706					
MTV3		0.674					
MTV5		0.653					
CSL1			0.784				
CSL5			0.727				
CSL4			0.709				
CSL2			0.656				
CSL3			0.555				
AWA2				0.754			
AWA4				0.694			
AWA5				0.686			
AWA1				0.667			
AWA3				0.661			
BRD4					0.760		
BRD3					0.749		
BRD2					0.748		
BRD5					0.674		
Initial eigenvalues	5.727	2.100	2.050	1.759	1.586		
Extracted variance (%)	23.864	8.749	8.542	7.331	6.608		
Total extracted variance (%)			55.094				
Sig			0,000				
КМО			0,833				

Table 4.EFA analysis results.

The results of exploratory factor analysis show that 24 observed variables are extracted into five factors with Eigenvalue = 1.586, explaining 55.094% of the data variation. The Varimax rotation method is applied to minimize the number of variables with significant coefficients on the same factor. Only variables with loading factors greater than 0.5 were retained. The results showed that all observed variables had loading weights more significant than 0.5, indicating a high correlation with the factors.

### 4.2.2.2. Purchase Decision Factor Analysis

Table 5 shows that, after EFA analysis for five observed variables of the decision to purchase (DCS), the following results showed that all five variables were retained: KMO = 0.784 (> 0.5), Sig Bartlett's Test = 0.000 (< 0.05), Eigenvalue = 2.799 (> 1), and extracted Variance = 55.982% (> 50%).

Table 5.	
EFA analysis	resul

Coding	Factor
Counig	1
DCS3	0.818
DCS 1	0.786
DCS 4	0.749
DCS 2	0.713
DCS 5	0.665
Initial eigenvalues	2.799
Extracted variance (%)	55.982
Total extracted variance (%)	55.982
Sig	0.000
KMO	0.784

### 4.2.2.3. Calibrating Hypotheses and Research Model

After testing reliability with Cronbach's Alpha and EFA analysis, the research model includes five independent factor groups with 24 observed variables and one dependent factor, Purchase decision, with five observed variables. The factor groups are identified as follows: Awareness: AWA1–AWA5; Motives: MTV1–MTV5; Barriers: BRR1–BRR5; Consultants: CSL1–CSL5; Company brand: BRD2–BRD5.

The research hypotheses are:

H1: Awareness of the value of life insurance positively affects students' decision to purchase life insurance.

H2: Barriers to purchasing life insurance negatively affect students' decision to buy life insurance.

H3: Motives to purchase life insurance positively affect students' decision to buy life insurance.

H4: Life insurance consultants positively affect students' decision to purchase life insurance.

H5: Life insurance company brand positively affects students' decision to purchase life insurance.

Then, proceed to code and calculate the average representative variables for the factors based on the rotated matrix table in EFA analysis. These variables will be used next in correlation and regression analyses (Table 6).

Coding of	factors.	
No.	Factor	Coding
1	Awareness of the value of life insurance	AWA
2	Motivations to purchase life insurance	MTV
3	Barriers to buying life insurance	BRR
4	Life insurance consultants	CSL
5	Life insurance company brand	BRD
6	Decision to buy life insurance	DCS

Table 6.

#### 4.3. Correlation Analysis

When performing linear regression analysis, the first step is to check the correlation between the dependent variable and the independent variables and between the independent variables with each other. If a high correlation is found between the dependent variable and the independent variables, this indicates a significant relationship and regression analysis may be appropriate. Conversely, if the independent variables have a high correlation, this may lead to multicollinearity. In theory, the correlation coefficient is significant when the Sig value  $\leq 0.05$ , with Sig < 0.05 marked with (\*) and Sig

< 0.01 marked with (\*\*). The results of the correlation analysis show that the Sig values are all less than 0.05, rejecting the hypothesis H0 and accepting H1, proving that the independent variables correlate with the dependent variable and are statistically significant (Table 7).

		Decision to purchase	Awareness	Motivations	Barriers	Consultant	Brand of company
Decision to	Pearson correlation coefficient	1	0.550**	0.509**	-0.508**	0.484**	0.483**
purchase	Sig value		0.000	0.000	0.000	0.000	0.000
	Number of observations	351	351	351	351	351	351
A	Pearson correlation coefficient	0.550**	1	0.301**	-0.318**	0.323**	0.330**
Awareness	Sig value	0.000		0.000	0.000	0.000	0.000
	Number of observations	351	351	351	351	351	351
	Pearson correlation coefficient	0.509**	0.301**	1	-0.287**	0.373**	0.277**
Motivations	Sig value	0.000	0.000		0.000	0.000	0.000
	Number of observations	351	351	351	351	351	351
	Pearson correlation coefficient	-0.508**	-0.318**	-0.287**	1	-0.288**	-0.219**
Barriers	Sig value	0.000	0.000	0.000		0.000	0.000
	Number of observations	351	351	351	351	351	351
Consultant	Pearson correlation coefficient	0.484**	0.323**	0.373**	-0.288**	1	0.236**
	Sig value	0.000	0.000	0.000	0.000		0.000
	Number of observations	351	351	351	351	351	351
Brand of	Pearson correlation coefficient	0.483**	0.330**	0.277**	-0.219**	0.236**	1
company	Sig value	0.000	0.000	0.000	0.000	0.000	
company	Number of observations	351	351	351	351	351	351

### **Table 7.**Correlation analysis results.

The results of the correlation analysis show that, with the Sig value = 0.000 < 0.05, there is a strong correlation between the independent variables (Value Perception, Purchase Motivation, Purchase Barrier, Consultant, Company Brand) and the dependent variable (Purchase Decision), with correlation coefficients ranging from 0.483 to 0.550. The most vital relationship is between Value Perception and Purchase Decision (r = 0.550), while the weakest is between Company Brand and Purchase Decision (r = 0.483). These results show that the independent variables are correlated with the dependent variable, so they are included in the regression analysis.

### 4.4. Research Results

Conduct multiple regression analysis with 06 identified factors, using the Enter method to evaluate the model's suitability. The results of the analysis are presented as follows Table 8.

# Table 8. Results of model suitability analysis.

Model	R	R-squared coefficient adjusted	1	Standard error of estimation	Durbin-Watson coefficient
1	0.769	0.591	0.585	0.470	1.997

The Durbin-Watson coefficient is 1.997, ranging from 1.5 to 2.5, indicating no autocorrelation. The adjusted  $R^2$  coefficient is 0.585, indicating that the model explains 58.5% of the variation in Purchase Decision. Next, the model is tested by the F statistic to determine the suitability and application significance of the model (Table 9).

Та	ble	9.

ANTOTA	. 11 .		1 .
ANOVA	table in	regression	analysis.

Model		Sum of squares	df	Mean square	F test	(Sig.)
	Regression	110.174	5	22.035	99.745	0.000
1	Residual	76.215	345	0.221		
	Total	186.389	350			

In which:

Dependent variable: decision to purchase (DCS)

Predictors: (Constant), awareness (AWA), motivations (MTV), barriers (BRR), consultant (CSL), Company brand (BRD).

It can be seen that the F test Sig is 0.00 < 0.05; Thus, the multiple linear regression model fits the data set and can be used.

Based on the results of Table 10, the factors in the analysis model all have a significance level of Sig = 0.00, indicating no multicollinearity; that is, the factors are not correlated. The analysis results also show that the assumptions of linear relationship, regular distribution of residuals, constant Variance of errors, and independence of errors are all met. The VIF index of the variables is all less than 2, which confirms that there is no multicollinearity.

Table 10.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Multicollinearity	
		В	Std. error	Beta			Tolerance	VIF
1	(Constant)	2.094	0.191		10.976	0.000		
	NTGT	0.190	0.028	0.264	6.758	0.000	0.777	1.288
	DCM	0.170	0.030	0.221	5.685	0.000	0.786	1.273
	RC	-0.190	0.028	-0.256	-6.777	0.000	0.834	1.200
	TVV	0.145	0.030	0.188	4.840	0.000	0.788	1.268
	THCT	0.171	0.027	0.234	6.244	0.000	0.844	1.185

In summary, based on Table 10, the research model has the following equation with a statistical significance level of 0.05%:

DCS = 0.264\*AWA + 0.221\*MTV - 0.256\*BRR + 0.188\*CSL + 0.234\*BRD + ui

Decision to purchase = 0.264 \* Awarencess + 0.221 \* Motivation - 0.256 \* Barriers + 0.188 \* Consultant + 0.234 \* Company brand + ui.

### 4.5. Discussion of Research Results and Policy Implications

The results of multiple regression analysis indicate that five factors: Awareness (AWA), Purchase Motivation (MTV), Barriers to Purchase (BRR), Consultant (CSL), and Company Brand (BRD) all have significant effects on the Decision to Purchase Life Insurance (DCS) of students in Hanoi. Accordingly, BRR has a negative impact, while the remaining factors have a positive effect.

Specifically, the standardized Beta coefficient for AWA is 0.264, with a P value of 0.000, less than the significance threshold of 0.05. This statistically significant result indicates a positive relationship between awareness (AWA) and the decision to purchase insurance (DCS). This finding aligns with the study by  $\lfloor 22; 35 \rfloor$ , which demonstrates that a higher perception of the value of insurance increases the likelihood of purchasing. To enhance awareness among students, insurance companies should implement educational and marketing campaigns within academic institutions and provide accessible online resources about life insurance. This approach can help students understand the benefits and importance of life insurance, thereby encouraging informed purchasing decisions.

In contrast, the BRR factor, which represents barriers, has a standardized Beta coefficient of -0.256, with a P value of 0.000. This negative and statistically significant relationship indicates that barriers to purchasing life insurance significantly reduce students' likelihood of making such purchases. According to the study of Nasir (2017), these barriers, which may include financial constraints and a lack of trust in insurance providers, deter students from buying life insurance [25]. Companies must design more flexible and affordable product packages tailored to students' limited income levels to address this issue. By doing so, they can reduce financial barriers and make life insurance more accessible to this demographic.

Furthermore, the standardized Beta coefficient for MTV, which stands for purchase motives, is 0.221, with a P value of 0.000, indicating a positive and significant influence on purchase decisions. This result is consistent with the findings of Lin (2017), which showed that stronger purchase motivations lead to more robust purchasing choices [26]. To enhance purchase motivation among students, businesses should organize interactive events such as seminars and exhibitions. These activities can engage students and provide valuable insurance information, increasing their interest and willingness to purchase life insurance.

The standardized Beta coefficient for CSL, representing consultant service levels, is 0.188, with a P value of 0.000. This positive relationship indicates that higher levels of consultant service significantly influence students' decisions to purchase insurance. According to studies by Zakaria et. al. (2016) and Hwang (2024), the enthusiasm and professionalism of insurance consultants have a notable impact on purchase decisions [36; 37]. Therefore, insurance companies should improve their consultants' treatment and working environment to enhance service quality. By investing in their consultants, businesses can ensure that students receive professional and enthusiastic service, which can positively influence their purchasing decisions.

Finally, the standardized Beta coefficient for BRD, which stands for brand reputation, is 0.234, with a P value of 0.000. This cheerful and significant relationship indicates that a strong brand reputation positively affects the decision to purchase insurance. This finding is supported by, the study conducted by Forlicz (2022), which showed that solid brands positively influence the decision to buy insurance [28]. To build a reputable brand, businesses should focus on providing high-quality products and excellent customer service. Companies can significantly affect their purchasing decisions by gaining students' trust through a reputable brand.

### 5. Conclusion and Limitations of the Study

Based on an analysis of 351 valid samples using SPSS 20 software, this study identified five primary factors influencing the life insurance purchase decisions of students in Hanoi: awareness of the value of life insurance, barriers to purchasing life insurance, motivation to buy life insurance, the brand of the life insurance company, and the role of life insurance consultants. The awareness of the value of life insurance reflects students' evaluation of the benefits and significance of insurance in safeguarding personal and family finances. Barriers to purchasing life insurance include factors that deter students from making a purchase, such as the perceived cost and the complexity of the process. Motivations to buy life insurance encompass the reasons driving students to seek insurance, primarily the need for financial protection. The brand of the life insurance company affects students' decisions through the company's reputation and public image, while life insurance consultants play a critical role by providing information and guidance. The study identified and assessed these factors' impact and proposed solutions to foster the sustainable development of the life insurance market in Hanoi and across Vietnam. Additionally, the study emphasized the importance of increasing awareness about the value and role of life insurance in the future.

However, the research encountered several limitations. The current model only accounts for a portion of the Variance in factors influencing the decision to purchase life insurance, suggesting that other relevant factors might not have been included in the analysis or that the current factors may have yet to be fully measured. The sample size, comprising 351 respondents, may need to be sufficiently large to ensure representativeness and generalizability for the entire student population in Hanoi, meaning the results might not fully capture the diversity within the research group. Furthermore, since the study focuses exclusively on Hanoi, the findings may not directly apply to other regions of Vietnam, limiting the potential for broader application of the research conclusions at the national level.

### Acknowledgment:

The author would like to thank the VNU University of Economics and Business, Vietnam National University, Hanoi, Vietnam, and O.P. Jindal Global University, India for supporting me and sharing their experiences and information during the conduct of this research.

### **Copyright**:

 $\bigcirc$  2024 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

### References

- [1]. A. P. Liebenberg, J. M. Carson and R. E. Dumm, "A dynamic analysis of the demand for life insurance". Journal of Risk and Insurance, vol. 79, no. 3, pp. 619–644, 2012. https://doi.org/10.1111/j.1539-6975.2011.01454.x
- [2] S. Lim, T. Oh, and G. Ngayo, "Analyzing factors affecting risk aversion: Case of life insurance data in Korea," *Heliyon*, vol. 9, no. 10, pp. 20697, 2023. https://doi.org/10.1016/j.heliyon.2023.e20697
- [3] N. T. Luyen and N. T. N. Quy, "The impact of demographic factors on Vietnamese people's decision to purchase life insurance," *Journal of Social Sciences*, vol. 6, no. 298, pp. 5–16, 2023.
- [4] Vietnam Insurance Development Institute, "Vietnam has up to 1,300 life and non-life insurance products," VIDI-Vietnam Insurance Development Institute Electronic Information Portal, 2019. [Online]. Available: https://mof.gov.vn/webcenter/portal/ttncdtbh/pages\_r/l/chi-tiet-tin?dDocName=MOFUCM142652
- [5] Chinhphu.vn, "Hanoi Capital strives for GRDP per capita to reach about 12,000-13,000 USD by 2030," 2023. [Online]. Available: https://media.chinhphu.vn/thu-do-ha-noi-phan-dau-grdp-binh-quan-dau-nguoi-den-nam-2030-dat-khoang-12000-13000-usd-10223020816100406.htm
- [6] Ministry of Education and Training, "Higher education statistics 2023," 2023. [Online]. Available: https://moet.gov.vn/thong-ke/pages/thong-ko-giao-duc-dai-hoc.aspx
- [7] H. T. H. Nguyen, "Life Insurance: Factors Affecting Contract Premiums and Current Market Situation in Vietnam," HUFLIT Journal of Science, 2023.

- [8] X. G. Pham and T. T. H. Nguyen, "Factors Affecting People's Intention to Purchase Life Insurance: A Case Study in Go Vap District, Ho Chi Minh City," *Journal of Science and Technology - IUH*, vol. 54, no. 06, 2022. https://doi.org/10.46242/jstiuh.v54i06.4214
- [9] E. Luciano, J. F. Outreville, and M. Rossi, "Life Insurance Demand: Evidence from Italian Households; A Micro-Economic View and Gender Issue," *SSRN Electronic Journal*, 2015.
- [10] Z. L. Cheng, "Factors Influencing Purchase Intention on Life Insurance in Low Rate of Urbanization States in Malaysia," in *Proceedings of the 10th International Conference on Business, Accounting, Finance and Economics (BAFE 2022)*, vol. 234, pp. 3–13, 2023. https://doi.org/10.2991/978-2-494069-99-2\_2
- [11] T. Jahan and M. M. Sabbir, "Analysis of Consumer Purchase Intention of Life Insurance: Bangladesh Perspective," *Khulna University Business Review*, pp. 13–28, 2019. https://doi.org/10.35649/KUBR.2018.13.12.2
- [12] S. Innocenti, G. L. Clark, S. McGill, and J. Cuñado, "The effect of past health events on intentions to purchase insurance: Evidence from 11 countries," *Journal of Economic Psychology*, vol. 74, p. 102204, 2019. https://doi.org/10.1016/j.joep.2019.102204
- [13] N. T. B. Minh, K. D. Nam, and T. T. T. Thuan, "Factors affecting the decision to purchase life insurance of individual customers in Ho Chi Minh City," *HCMCOUJS-Economics and Business Administration*, vol. 16, no. 2, pp. 156–169, 2020.
- [14] D. T. T. Hai, N. M. Huan, N. T. Ngoc, and B. T. X. Nuong, "Factors affecting the decision to purchase life insurance customers in Da Nang City," *Economics and Forecasting*, no. 10, pp. 236–239, 2024.
- [15] H. T. Huy, "Analysis of Retirees' Decision to Participate in Life Insurance in Can Tho City," Journal of Commercial Science, vol. 145, pp. 36–46, 2020. https://doi.org/10.2139/ssrn.2608482
- [16] P. Kotler and K. L. Keller, *Marketing Management*, Prentice Hall, 2012.
- [17] P. Kotler and K. L. Keller, *Marketing Management*, Pearson Education, 2011.
- [18] P. Kotler and G. Armstrong, *Principles of Marketing*, Pearson Higher Education, 2017.
- [19] J. N. Sheth, B. Mittal, and B. I. Newman, Customer Behavior: Consumer Behavior and Beyond, Dryden Press, 1999.
- [20] R. Brahmana, R. K. Brahmana, and G. Memarista, "Planned Behavior in Purchasing Health Insurance," *The South East Asian Journal of Management*, vol. 12, no. 1, 2018. https://doi.org/10.21002/seam.v12i1.7465
- [21] A. Strzelecka, A. Kurdyś-Kujawska, and D. Zawadzka, "Application of multidimensional correspondence analysis to identify sociometric factors voluntary life insurance," *Procedia Computer Science*, vol. 176, pp. 3407–3417, 2020. https://doi.org/10.1016/j.procs.2020.09.056
- [22] J. D. Cummins and M. Rubio-Misas, "Country factor behavior for integrated improvement of European life insurance markets," *Economic Analysis and Policy*, vol. 72, pp. 186–202, 2021. https://doi.org/10.1016/j.eap.2021.08.004
- [23] A. Wu and X. Zheng, "Assortative matching and commercial insurance participation: Evidence from the China Household Finance Survey," Journal of Asian Economics, vol. 80, p. 101459, 2022. https://doi.org/10.1016/j.asieco.2022.101459
- [24] M. Giri and D. Chatterjee, "Factors affecting in public status of rural and urban households: A study over two time periods India," in IIMBManagement Review, vol. 33. no. 4, pp. 360 - 371, 2021. https://doi.org/10.1016/j.iimb.2021.12.004
- [25] N. F. Nasir, R. M. Roslin, and C. B. Chui, "Decomposing the Theory of Planned Behavior and Incorporating Spiritual Intelligence to Further Understand the Purchase Intention of Life Insurance and Takaful," 2017.
- [26] C. Lin, Y.-J. Hsiao, and C.-Y. Yeh, "Financial literacy, financial advisors, and information sources on demand for life insurance," *Pacific-Basin Finance Journal*, vol. 43, pp. 218–237, 2017. https://doi.org/10.1016/j.pacfin.2017.04.002
- [27] S. L. Dragos, C. M. Dragos, and G. M. Muresan, "From intention to decision in purchasing life insurance and private pensions: Different effects of knowledge and behavioral factors," *Journal of Behavioral and Experimental Economics*, vol. 87, p. 101555, 2020. https://doi.org/10.1016/j.socec.2020.101555
- [28] M. Forlicz, "How perceived skills and risk attitude influence decision making regarding insurable losses results of computer-based incentivized experiment," *Procedia Computer Science*, vol. 207, pp. 1822–1831, 2022. https://doi.org/10.1016/j.procs.2022.09.240
- [29] M. H. Siddiqui and T. G. Sharma, "Measuring The Customer Perceived Service Quality For Life Insurance Services: An Empirical Investigation," *International Business Research*, vol. 3, no. 3, p. 171, 2010. https://doi.org/10.5539/ibr.v3n3p171
- [30] G. Pisoni and N. Díaz-Rodríguez, (2023). "Responsible and human centric AI-based insurance advisors," Information Processing & Management, vol. 60, no. 3, pp. 103273. https://doi.org/10.1016/j.ipm.2023.103273
- [31] N. S. Mahdzan and S. M. P. Victorian, "The determinants of life insurance demand: A focus on saving motives and financial literacy," *Asian Social Science*, vol. 9, no. 5, p. 274, 2013. https://doi.org/10.5539/ass.v9n5p274
- [32] J. F. Hair, B. J. Babin, W. C. Black, and R. E. Anderson, Multivariate Data Analysis. Cengage, 2019.
- K. A. Bollen, "Structural equation models with observed variables," in *Structural Equations with Latent Variables*, John Wiley & Sons, Ltd, pp. 80–150, 1989. https://doi.org/10.1002/9781118619179.ch4
- [34] Z. Zakaria, N. M. Azmi, N. F. H. N. Hassan, W. A. Salleh, M. T. H. M. Tajuddin, N. R. M. Sallem, and J. M. M. Noor, "The intention to purchase life insurance: A case study of staff in public universities," *Proceedia Economics and Finance*, vol. 37, pp. 358–365, 2016. https://doi.org/10.1016/S2212-5671(16)30137-X

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 4: 1711-1726, 2024 DOI: 10.55214/25768484.v8i4.1547

<sup>© 2024</sup> by the authors; licensee Learning Gate

- [35] S. L. Dragos, C. M. Dragos, and G. M. Muresan, "From intention to decision in purchasing life insurance and private pensions: Different effects of knowledge and behavioural factors," *Journal of Behavioral and Experimental Economics*, vol. 87, p. 101555, 2020. https://doi.org/10.1016/j.socec.2020.101555
- Z. Zakaria, N. M. Azmi, N. F. H. N. Hassan, W. A. Salleh, M. T. H. M. Tajuddin, N. R. M. Sallem, and J. M. M. Noor, "The intention to purchase life insurance: A case study of staff in public universities," *Proceedia Economics and Finance*, vol. 37, pp. 358–365, 2016. https://doi.org/10.1016/S2212-5671(16)30137-X
- [37] I. D. Hwang, "Behavioral aspects of household portfolio choice: Effects of loss aversion on life insurance uptake and savings," *Economics & Finance*, vol. 89(Part A), pp. 1029–1053, 2024. https://doi.org/10.1016/j.iref.2023.07.027