DOI: 10.31276/VMOSTJOSSH.2024.0061

Life insurance purchase intention from attitude to behaviour: Research in Khoai Chau district, Hung Yen province, Vietnam

Le Thanh Ha[1*], Le Thi Hong Quyen[2], Le Thi Thu Thao[2], Do Quang Giam[1]

[1]*Faculty of Accounting and Business Management, Vietnam National University of Agriculture, Trau Quy Town, Gia Lam District, Hanoi, Vietnam*
[2]*Faculty of Economics, Hung Yen University of Technology and Education, Dan Tien Commune, Khoai Chau District, Hung Yen Province, Vietnam*

Received 22 August 2024; revised 29 September 2024; accepted 21 October 2024

Abstract:

The study focused on identifying factors influencing customers' intention to purchase life insurance in Khoai Chau district, Hung Yen province, Vietnam. The study conducted a survey by questionnaire combined with in-depth interviews with 160 life insurance customers in Khoai Chau district, Hung Yen province, Vietnam. The exploratory factor analysis method combined with the linear regression model was applied to estimate the influence of factors. It is indicated that, alongside demographic factors that significantly impact customers' purchase intention, several key factors were analysed, including customers' attitudes, quality of products and services, barriers, and life insurance distribution channels. The results demonstrate that both customers' attitudes and the quality of products and services have statistically significant impacts on customers' satisfaction and purchase intention. While gender, income, and age significantly influence purchase intention, barriers negatively affect the buying decision. The study proposes essential solutions to enhance customers' purchasing decisions in Khoai Chau district and other areas in Hung Yen province, Vietnam, by improving satisfaction, targeting diverse income groups, segmenting customers by gender and age, and reducing barriers to purchasing life insurance.

Keywords: **behaviour factors, life insurance, purchase intention.**

Classification numbers: **2.1, 2.2**

1. Introduction

Life insurance plays a crucial role for individuals. Beyond providing financial protection, it facilitates savings, contributes to national economic development, and holds significant material and spiritual value for families. The primary purpose of insurance is to protect against unforeseen risks; it also integrates savings and investment elements [1]. In 2022, 19 insurance companies operated in Vietnam, with new insurance policies reaching 3,414,561 contracts. The total premium revenue from these contracts amounted to VND 45,622 billion, a 2.41% increase from 2021 [2]. Prominent life insurance companies in Vietnam include Bao Viet, Manulife, Prudential, AIA, Chubb, FWD, Daiichi, Hanwha, Aviva, Generali, Sunlife, Phu Hung Life, and MB Ageas [3]. The government aims to have 15% of the population purchase life insurance by 2025 [4], highlighting Vietnam's life insurance industry potential for growth.

According to the Law on Insurance Business No. 08/2022/QH15 dated 16 June 2022, effective 1 January 2023, life insurance is defined as: "Life insurance is a type of insurance in case the insured lives or dies". As explained by N.V. Dinh (2020) [5], life insurance represents a contract in which the insurer commits to paying a specified sum upon predetermined events, such as death, permanent total disability, or reaching a specified age. The insured must pay premiums in full and on time.

In today's insurance industry, life insurance offers financial protection against losses from unexpected events like death, injury, or incapacity while providing

*Corresponding author: Email: lethanhha89@vnua.edu.vn

opportunities for savings and investments. Insurance ensures financial security for individuals and their families, making it a popular tool for future financial planning.

Khoai Chau district, Hung Yen province, has witnessed robust economic growth, improved living standards, and rapid urbanisation. This makes it a promising market for the insurance industry, helping to mitigate risks for its residents. Insurance companies such as Bao Viet, Manulife, FWD, AIA, and Prudential dominate the agency channels in Khoai Chau. Additionally, local banks like Vietcombank, Vietinbank, and Techcombank distribute insurance products, often bundled with credit transactions, thus enhancing social security amid rising business risks, epidemics, and accidents. However, despite the companies' efforts, public awareness of life insurance remains limited. Analysing factors affecting local residents' intention to purchase life insurance is crucial to help insurance firms develop effective strategies, contributing to Vietnam's life insurance market growth.

Khoai Chau's proximity to Hanoi and its transition from an agricultural economy to industry and services, accompanied by a rising urbanisation rate, underline its economic potential. In 2022, the district's average per capita income reached VND 85 million [6]. However, this income level remains moderate. Additionally, the district's health insurance coverage rate of 92.3% only addresses basic healthcare needs [6]. Many residents work in agriculture and rural development sectors such as construction, carpentry, and small-scale mechanics, which are often associated with unstable and risky incomes. Thus, promoting life insurance alongside healthcare packages aligns well with the district's future needs, providing long-term financial security and risk mitigation.

Given that Khoai Chau district shares socio-economic characteristics with many rural areas undergoing industrial and urban development in Vietnam, the research findings here may be applicable to similar regions. While the district presents significant potential for the insurance market, challenges persist, particularly in raising public awareness of insurance benefits. The study identifies factors influencing insurance purchase decisions, aiding companies in designing targeted strategies and public education campaigns. This contributes to the life insurance market's growth in Khoai Chau district and provides tangible benefits to residents, enhancing social security in the region.

This research evaluates factors affecting life insurance purchasing behaviour in Khoai Chau district, Hung Yen province, and proposes solutions to encourage customer participation. It highlights how behavioural, service, product, and barrier factors, alongside distribution channels, influence customer satisfaction and increase purchase intention for life insurance products.

2. Literature review

From an overarching perspective, several previous studies have evaluated factors influencing the satisfaction of life insurance product buyers. As life insurance is not compulsory, the theoretical framework for understanding these factors is rooted in behavioural economic theory [7].

2.1. Satisfaction

Customers' satisfaction reflects the extent to which a product or service meets the expectations of life insurance buyers [8]. When customers receive exemplary service from their agents, coupled with a strong corporate image, their post-purchase satisfaction increases. This, in turn, fosters loyalty and enhances the likelihood of purchasing additional insurance products. Satisfaction serves as an intermediate variable between factors that influence expected value and customers' confidence in their decision to purchase life insurance [9].

2.2. Purchase intention

The insurance purchasing process begins with customers contemplating their intention to buy, facilitated by comprehensive and transparent information about the insurance product or service [10]. A strong intention to purchase insurance can drive sales, reduce costs, and support market expansion efforts [8, 11]. However, purchase intention is not the ultimate outcome of the decision-making process; it

results from weighing various factors and selecting a suitable insurance product [12]. In the insurance market, the decision to purchase life insurance often involves assessing long-term needs, financial capacity, and the benefits offered by the product [13].

2.3. Attitude towards life insurance

Perceived value represents a customer's holistic assessment of a product or service, considering the balance between perceived benefits and costs [14]. Two critical components influencing purchase intention are benefit awareness and risk awareness [10]. If customers perceive that participating in life insurance offers value, they are more likely to purchase it [15-17].

2.4. Products and services

Insurance companies cater to their customers by offering diverse products tailored to individual needs, backed by strong branding and high-quality consultancy services [10]. Expected benefits, ease of access when required, and brand strength significantly impact insurance purchasing decisions [16, 17]. Insurance consultants (ICS) play a pivotal role as intermediaries between insurers and customers, addressing customers concerns, fostering relationships, and ultimately strengthening the bond between customers and the company [11].

2.5. Barriers to buying life insurance

When companies provide comprehensive information, customers gain a clearer understanding of products and services, which can enhance their purchasing decisions [12, 18]. However, certain barriers - such as limited income, long-term commitment requirements, and various fees (e.g., risk fees, initial fees, contract management fees, and early termination fees) - deter customers from buying insurance [15, 16, 19].

2.6. Distribution channel factors

Traditional distribution channels, including direct and agent-based approaches, remain prevalent in the insurance industry. However, alternative channels, such as bancassurance and brokerage, are increasingly gaining traction. Furthermore, the emergence of digital platforms has facilitated the provision of online insurance products, offering customers greater convenience and accessibility [20].

2.7. Demographic factors

Previous research has demonstrated that demographic variables, such as age, occupation, gender, education level, and income, significantly influence customers' decisions to purchase life insurance [1, 21] (Table 1).

Table 1. Related studies.

Author	Research content	Influencing factors	Research planting range
L.Q. Hieu (2022) [17]	Factors affecting the decision to buy life insurance for individual customers in Thanh Hoa province	Value perception, buying motivations, barriers to buying, company brand, consultants, buying benefits, peer support	Satisfaction has not been assessed; purchase intention has not been assessed
N.T.B. Minh, et al. (2021) [16]	Factors influencing the decision to buy life insurance for individual customers in Ho Chi Minh city	Perception of values, barriers to buying life insurance, motivations for buying insurance, consultants, brands	Satisfaction has not been assessed; purchase intention has not been assessed
H.T. Nguyen, et al. (2018) [19]	Determinants of customer satisfaction and loyalty in Vietnamese life-insurance setting	Brand image, service quality, and price affect satisfaction, and loyalty	No mention of purchase decisions, and purchase intention
P.T. Loan, et al. (2016) [15]	Factors influencing the decision to buy Manulife life insurance in Khanh Hoa province	Personal characteristics, product value perception, company brand, customer service, previous insurance buying experience, relatives' opinions	Research on purchase decisions has not yet mentioned purchase intentions and satisfaction

In summary, while numerous international studies have explored insurance purchasing decisions and behaviours, research within the Vietnamese context remains limited. Although some studies have begun to examine the relationship between customers' satisfaction and purchase decisions, few have delved into the interplay between satisfaction and purchase intention. Thus, this study seeks to evaluate customers' intention to purchase insurance through the lens of satisfaction and behaviour.

Drawing from the theoretical basis of factors affecting the decision to buy life insurance, this study is proposed according to the research model below (Fig. 1):

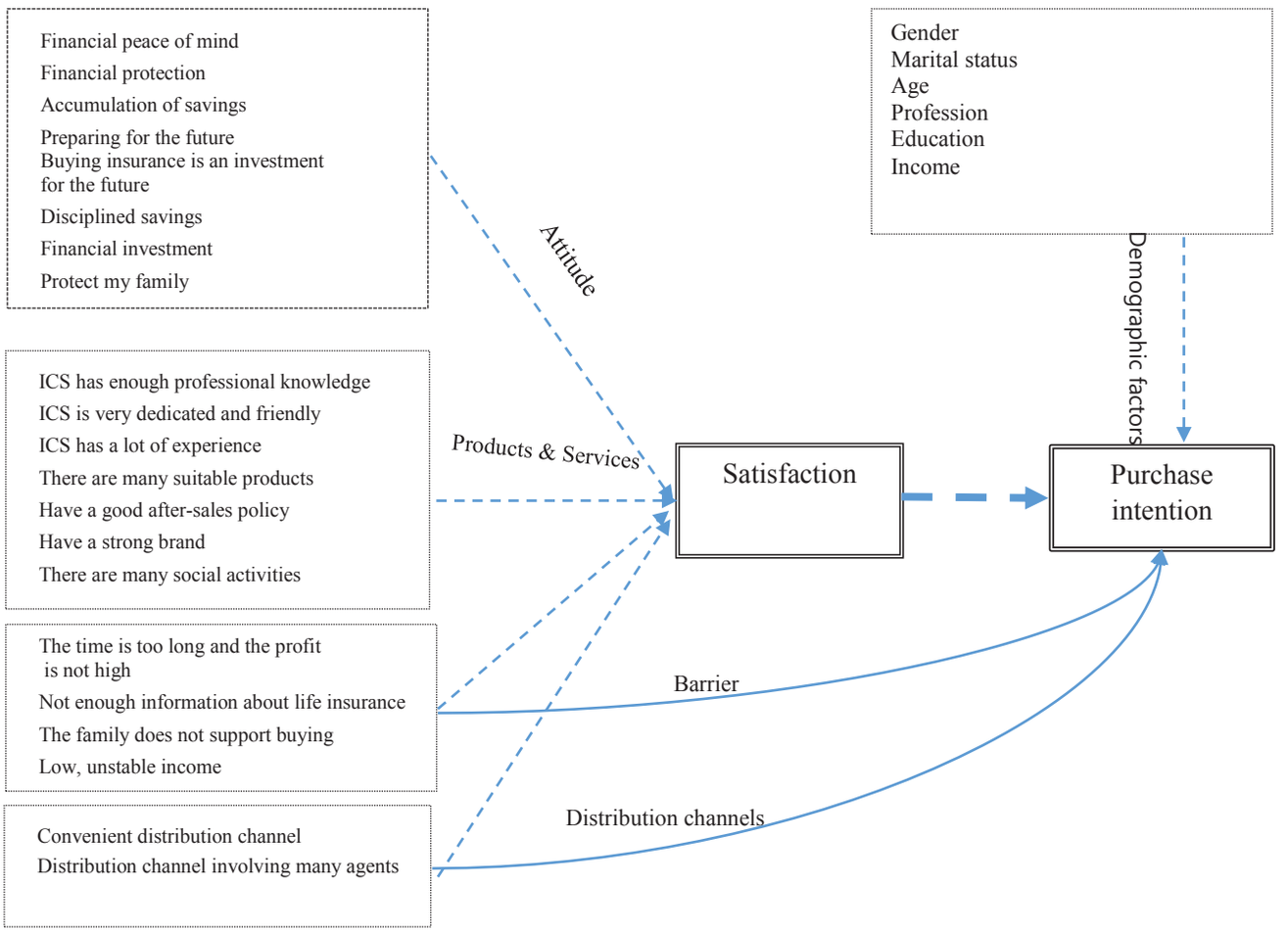

Fig. 1. Model of factors influencing the decision to buy insurance. Source: Synthesised by the authors.

3. Research methodology

3.1. Data collection method

3.1.1. Secondary data: Secondary data were collected from reports and research articles on the insurance market, published by the Insurance Supervision Administration and reputable journals.

3.1.2. Primary data: The author conducted 10 in-depth interviews: five with insurance customers representing different brands (Manulife, FWD, AIA, Bao Viet, and Chubb Life Vietnam) and five with experts, including two managers from FWD and Manulife, and three financial advisors from FWD, Manulife, and AIA. These interviews were conducted face-to-face. The interview questions explored factors influencing life insurance purchasing decisions, customer perceptions of the product, and barriers to purchasing life insurance. Additionally, expert advice formed the foundation for proposing solutions in the research project.

A large-scale survey was conducted to gather information from customers regarding their current life insurance situation and purchasing decisions. The sample was selected using a convenience sampling method, a non-probability sampling technique. The sample size was determined based on the requirements for Exploratory Factor Analysis (EFA) and multivariate regression. For EFA, with 22 observed variables, a minimum of 5 samples per variable was needed, amounting to 22×5=110 observations [22]. For regression analysis, a minimum sample size of 10 observations per variable was required. With 12 observational variables envisaged, the minimum number of samples was 160 [23].

The questionnaire survey was used to collect information from customers consulted by companies

in Khoai Chau district, Hung Yen province. Online questionnaires were distributed via Google Forms and shared through Zalo and Facebook. Financial advisors were also requested to share the survey links with their clients. This process yielded 160 valid responses. The data collection period spanned from February 2023 to April 2023.

3.1.3. Scale design: The questionnaire employed a 5-point Likert scale, with response options ranging from (1) strongly disagree to (5) strongly agree (Table 2).

Table 2. Encoding scales and observational variables of research models.

Point	1	2	3	4	5
Degree	Strongly disagree	Disagree	Consider carefully	Agree	Strongly agree
	Do not buy	Unlikely to buy	Consider carefully	Buy	Definitely buy
	Very dissatisfied	Dissatisfied	Consider carefully	Satisfied	Very satisfied

Code	Target (N=160)	Scale
TD1	Buying insurance gives me financial peace of mind	Likert 5 levels
TD2	Financial protection for families	Likert 5 levels
TD3	Buy insurance to accumulate savings	Likert 5 levels
TD4	Preparing for life in the future	Likert 5 levels
TD5	Buying insurance is an investment for the future	Likert 5 levels
TD6	Buying insurance helps me practice disciplined saving	Likert 5 levels
TD7	Financial investment	Likert 5 levels
TD8	Insurance helps protect my family	Likert 5 levels
DV1	Consultants had enough expertise to answer my questions	Likert 5 levels
DV2	Consultants are very dedicated and friendly	Likert 5 levels
DV3	Consultants have a lot of experience and professional mastery	Likert 5 levels
DV4	I choose to buy insurance at a company that has many products to suit my needs	Likert 5 levels
DV5	I choose to buy insurance from a company with a good after-sales policy	Likert 5 levels
DV6	I choose to buy insurance from a company with a strong brand	Likert 5 levels
DV7	I choose to buy insurance from a company with many social activities	Likert 5 levels
RC1	Buying insurance for too long and the profit is not high	Likert 5 levels
RC2	I don't have enough information about insurance	Likert 5 levels
RC3	My family and relatives do not support me in buying insurance	Likert 5 levels
RC4	My income is low, unstable	Likert 5 levels
KP3	Convenient distribution channel	Likert 5 levels
KP4	Diversified distribution channels	Likert 5 levels

Source: Synthesised by the authors (2023).

3.2. Data processing method

The collected data were encoded and analysed using SPSS 22 software. Descriptive statistics were used to analyse the data. The reliability of the scales was assessed using Cronbach's Alpha, while EFA and multivariate regression were conducted to examine the factors influencing satisfaction and purchasing decisions in life insurance (Table 3).

Model 1: Linear regression estimating factors affecting customers' satisfaction:

$$Y=\propto_0+\propto_1 X_1+\propto_2 X_2+\cdots+\propto_n X_n$$

where, Y: customers' satisfaction - dependent variables have the following values (1=very dissatisfied, 2=dissatisfied, 3=considered, 4=satisfied, 5=very satisfied); X_i is the independent variable used in the model; $\propto$ is the correlation coefficient of independent variables; $\propto_o$ is the constant of the model.

Model 2: Linear regression model of factors influencing purchase intention:

$$Y'=\beta_0+\beta_1 X'_1+\beta_2 X'_2+\cdots.+\beta_n X'_n$$

where, Y' is the dependent variable of the purchase intention and has the following values (1=definitely will not participate, 2=does not participate, 3=consider, 4=participate, 5=firmly participate); X'_i are independent variables used in the model; β_i is the correlation coefficient of independent variables; β_o is the constant of the model.

Table 3. Variables in model.

Code	Explanation	Scale
GT	Gender	0=female, 1=male
MS	Marital status	1= unmarried, 2=married, 3=married, with children
AI	Average income/month	1=less than 10 million VND; 2=10-20 million VND; 3=20-30 million VND; 4=over 30 million VND.
EL	Client education level	1=intermediate or below; 2=college; 3=undergraduate, 4=postgraduate
Age	Client age	1=20-30 years old; 2=31-40 years old; 3=41-50 years old; 4=over 50 years old
OC1	Occupation of civil servant/office	1=profession of office civil servant; 0=none
OC2	Homemaker career	1=homemaker; 0=none
CS	Customers' satisfaction	5-level Likert scale
ATT	Attitude	EFA variables
PS	Products & services	EFA variables
BA	Barrier	EFA variables
DC	Distribution channels	EFA variables

Source: Synthesised by the authors (2023).

4. Results

4.1. General of life insurance in Khoai Chau district, Hung Yen province

In Khoai Chau district, the life insurance products currently available in the market are predominantly investment-linked products, focusing primarily on jointly linked products (Table 4). These products combine protection with investment features. Most participants in life insurance opt for Universal Life Insurance, which includes a single investment fund (the Universal Fund) formed from the premiums paid for insurance policies. A smaller proportion of customers participate in Unit-Linked Insurance, which includes at least two investment funds. This type of product requires sellers and buyers to possess a good understanding of investment funds, the stock market, and risk management, which limits its adoption among customers in Khoai Chau district.

Table 4. Popular life insurance products in the Khoai Chau district.

No.	Company Name	Product	Age of participation	Coverage period	Fee payment period	Insurance benefits
1	Manulife	Manulife - the journey of happiness - the basic plan	From 1 month to 65 years old	Up to 99 years old	Mandatory for the first 3 years of the contract; Flexible payment from the 4th year	- Medical assistance - Death - Posthumous fulfilment
2	FWD	Stay ahead of change 3.0	From 30 days old to 69 years old	Up to 80 years old	Mandatory for the first 3 years of the contract; Flexible payment from the 4th year	- Later stage cancer - Death - Permanent total disability
4	AIA	Preeminent lifelong blessing	30 days old to 65 years old	Up to 100 years old	Mandatory for the first 4 years of the contract; Flexible payment from the 5th year	- Death - Permanent total disability - Insured with cancer
5	Baoviet	Happiness - basic program	From 0 years old to 65 years old	Lifetime or up to 90 years old	Mandatory for the first 4 years of the contract; Flexible payment from the 5th year	- Death - Serious accidental injury - Terminal critical illness
6	Prudential	Active life	From 30 days old to 65 years old	Up to 99 years old	Mandatory for the first 5 years of the contract; Flexible payment from the 6th year	- Death - Permanent total disability

Source: Results of expert interviews by the authors.

The survey results (Table 5) showed that 71.9% of the respondents were female, indicating a higher interest in life insurance among women. The majority of respondents (84.4%) were married with children. In terms of income, most respondents reported monthly incomes below VND 20 million, with 39.4% earning less than VND 10 million and 45.6% earning between VND 10 million and VND 20 million. The educational background of the respondents was predominantly tertiary, with 61.9% holding a university degree and 24.4% holding a postgraduate qualification. Most respondents were aged between 20 and 40 years.

Table 5. Survey sample characteristics.

Content		Amount	Rate (%)
Gender	Female	115	71.9
	South	45	28.1
Marriage	Unmarried	21	13.1
	Married, no children	4	2.5
	Already have children	135	84.4
Income	Under VND 10 million	63	39.4
	From 10 to 20 million VND	73	45.6
	From 20 to 30 million VND	16	10.0
	Over 30 million VND	8	5.0
Education	High school	15	9.4
	Intermediate College	7	4.4
	University	99	61.9
	Postgraduate	39	24.4
Age	From 20 to 30 years old	38	23.8
	From 31 to 40 years old	86	53.8
	From 41 to 50 years old	31	19.4
	Over 50 years old	5	3.1
Profession	Unskilled labour	46	28.8
	Domestic	5	3.1
	Civil servants, offices	109	68.1
	Total	160	100.0

Source: Compiled by the authors (2023).

4.2. Attitudes and views of customers about life insurance

The results of Cronbach's Alpha analysis revealed an Alpha coefficient >0.6 and a total variable correlation coefficient >0.5, confirming the reliability of the scale. The EFA results indicated a variance extraction rate >50%, KMO>0.5, loading factor >0.5, eigenvalue >1, and a significant Bartlett's test result (<0.05). Based on the EFA, 22 observed variables were grouped into

four main factors: attitudes, products and services, barriers, and distribution channels (Table 6).

Table 6. Factor rotation matrix.

No.	Exploratory factor analysis	Code	Components			
			1	*2*	*3*	*4*
1	Attitude	TD1	0.847			
		TD2	0.842			
		TD3	0.834			
		TD4	0.833			
		TD5	0.827			
		TD6	0.810			
		TD7	0.777			
		TD8	0.628			
2	Products & Services	DV1		0.839		
		DV2		0.812		
		DV3		0.808		
		DV4		0.805		
		DV5		0.760		
		DV6		0.722		
		DV7		0.627		
3	Barrier	RC1			0.877	
		RC2			0.847	
		RC3			0.824	
		RC4			0.566	
4	Distribution channels	KP3				0.821
		KP4				0.806

Source: Compiled by the authors (2023).

For the criteria evaluating customers' attitudes towards insurance, the aspects of insurance as a means to invest in the future, promote disciplined saving, and protect family received the highest ratings, with average scores ranging from 3.9/5 to 4.0/5 on the rating scale. Financial investment criteria were rated with the lowest average score, a 3.4/5. According to most customers, the essence of insurance is to financially protect against health and life risks as those who buy insurance are usually responsible for their families and relatives. Therefore, the criterion representing protection of relatives is most appreciated. However, purchasing life insurance is not only a protection but also a disciplined investment for the future. With strict terms of an insurance policy, customers must comply with rules such as premium due dates or else the contract will lapse. Satisfactory compliance ensures customers will be entitled to amounts such as accrued dividends, end-of-contract dividends, or interest from common and unit-linked funds. Therefore, paying fees in full and on time will help customers maintain a financial investment.

The low score implies that the financial investment aspect of insurance is not a major consideration for most customers. The profitability rate of insurance products tends to be lower than that of other investment channels, owing to various fees, including initial fees, risk fees, and contract and portfolio management fees. Moreover, under the Law on Insurance Business, insurance companies primarily invest in government bonds, which offer relatively low returns.

For the product and service group criteria, the average scores ranged from 3.8/5 to 4.0/5. Notably, the criteria related to the quality of consultants and product diversity received the highest scores, both averaging above 4/5. Consultants play a pivotal role in clients' decisions to purchase insurance by offering expert knowledge and personalised advice. They help clients understand specific insurance products and design tailored financial solutions. Trust is built when consultants exhibit professionalism, honesty, and dedication. Their ability to address client concerns and provide ongoing support post-purchase enhances customer confidence, facilitating decision-making and ensuring a positive insurance experience.

Product diversity significantly impacts customers' purchase intentions. Each customer has unique needs, and a wide range of insurance products allows them to select options that best meet their specific requirements. For example, customers can choose policies aimed at life and health protection, creating education funds for their children, or building comfortable retirement funds. Besides benefits, customers also focus on fees, premium payment terms, and coverage periods. In response, insurance companies have developed a variety of products with flexible benefits, payment schedules, and contract terms. This flexibility empowers customers to manage their financial resources effectively while providing optimal protection for their families.

Additionally, customers tend to prefer well-known insurance brands. Recognisable brands often inspire trust and are perceived as more reliable. Established brands typically have a long history in the industry, a strong reputation for quality service, and the financial stability to guarantee benefit payments and customer support. These attributes make customers more comfortable purchasing insurance from reputable companies, as they believe such companies are committed to maintaining long-term customer relationships and honouring their commitments.

The barrier criteria reveal that long-term commitment and low returns associated with life insurance were rated the highest, with an average score of 3.8/5. The second most significant barrier was the lack of family and relative support for purchasing insurance, with a score of 3.4/5. Low income was another critical barrier, scoring 3.3/5.

Life insurance often requires long-term financial commitments before policyholders can access its benefits. The product's inflexible nature makes many hesitant to participate, especially since the returns are generally lower than those from other financial investment options. This limitation makes life insurance less appealing to individuals seeking high-yield investments.

Additionally, purchasing life insurance often involves consulting family members or relatives. Sometimes, these consultations result in disagreements, as relatives may have different financial perspectives or limited knowledge of insurance. Misinformation or negative perceptions about insurance, often spread through social networks, can also lead to disapproval.

Finally, customers with low or unstable incomes often worry about their ability to make long-term premium payments. According to contractual terms, failure to maintain timely and complete payments could result in a surrender value that is significantly lower than the total premiums paid, further deterring participation (Table 7).

Table 7. Statistics describing variables used in the model.

Code	Target (N=160)	Minimum	Maximum	Mean	Std. deviation
TD1	Buying insurance gives me financial peace of mind	1.00	5.00	3.862	0.820
TD2	Financial protection for families	1.00	5.00	3.825	0.835
TD3	Buy insurance to accumulate savings	1.00	5.00	3.562	0.887
TD4	Preparing for life in the future	1.00	5.00	3.775	0.853
TD5	Buying insurance is an investment for the future	1.00	5.00	3.937	0.798
TD6	Buying insurance helps me save disciplined	1.00	5.00	3.956	0.738
TD7	Financial investment	1.00	5.00	3.468	0.977
TD8	Insurance helps protect my loved ones	1.00	5.00	4.081	0.735
DV1	The counsellor had enough expertise to answer my questions	1.00	5.00	3.975	0.768
DV2	The counsellor is very dedicated and friendly	1.00	5.00	4.006	0.713
DV3	Consultants have a lot of experience and professional mastery	1.00	5.00	4.006	0.731
DV4	I choose to buy insurance at a company that has many products to suit my needs	1.00	5.00	4.093	0.689
DV5	I choose to buy insurance from a company with a good after-sales policy	2.00	5.00	3.993	0.695
DV6	I choose to buy insurance from a company with a strong brand	1.00	5.00	3.943	0.762
DV7	I choose to buy insurance from a company with many social activities	2.00	5.00	3.800	0.759
RC1	Buying insurance for too long and the profit is not high	1.00	5.00	3.312	1.059
RC2	I don't have enough information about insurance	1.00	5.00	2.993	1.006
RC3	My family and relatives do not support me in buying insurance	1.00	5.00	3.468	0.977
RC4	My income is low, unstable	1.00	5.00	3.356	0.927
KP3	Convenient distribution channel	1.00	5.00	3.250	1.021
KP4	Diversified distribution channels	1.00	5.00	3.268	1.020

Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalisation. Eigenvalue>1. Source: Compiled by the authors (2023).

4.3. Factors affecting satisfaction and decision to buy life insurance

4.3.1. Factors affecting satisfaction

The results indicate that the adjusted R-Square value of the model is 0.621, signifying that 62.1% of the variance in the dependent variable (customer satisfaction) is explained by the independent variables. The test results confirm no multicollinearity issues within the model. The model is statistically significant at the 1% level, making it suitable for evaluating the factors influencing customer satisfaction.

The linear regression analysis reveals that two groups, Attitude and Products & Services, significantly impact customers' satisfaction, with correlation coefficients significant at the 1% level. The analysis finds no statistically significant correlation between Barriers or Distribution Channels and customer satisfaction with insurance services.

Customer attitude and the quality of products and services play pivotal roles in driving satisfaction in life insurance purchases. A positive attitude fosters trust and peace of mind, contributing to favourable perceptions of the products. Insurance products must ensure that customer interests are reliably protected by clearly outlining policy terms and providing reasonable premiums that meet clients' financial needs. Transparency is crucial for instilling confidence in purchasing decisions.

Professional and friendly customer support is essential for addressing queries and ensuring comprehensive post-purchase assistance. Providing complete and accurate information helps customers understand the product's benefits, fostering strong relationships and enhancing satisfaction with life insurance (Table 8).

4.3.2. Factors influencing buying decisions

The results reveal that the adjusted R-Square value of the model is 0.427, indicating that 42.7% of the variance in the dependent variable (customer buying decision) is explained by the independent variables. The model is statistically significant at the 1% level, making it appropriate for assessing the factors impacting insurance purchase decisions.

The variables GT (Gender), AI (Average Income), Age, CS (Customer Satisfaction), and BA (Barriers) demonstrate statistically significant correlations with purchase intention. This suggests that customer satisfaction, gender, income, age, and barriers influence life insurance purchase decisions.

Women are more likely than men to buy life insurance for several reasons. They often find counsellors more accessible and tend to be more cautious about financial risks, placing greater emphasis on securing family protection. Additionally, women often bear more significant family responsibilities, such as caring for children and relatives, making life insurance a crucial safeguard for their families.

Higher-income individuals are more inclined to purchase life insurance as they can more comfortably afford premium payments without significantly affecting their financial plans. In the Hung Yen area, the average life insurance contract size ranges from VND 15 to 20 million, making it accessible to individuals with monthly incomes of VND 20 to 30 million.

Table 8. Estimation results of factors affecting customer satisfaction.

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics	
		B	*Std. error*	*Beta*			*Tolerance*	*VIF*
1	(Constant)	3.925	0.036		107.748	0.000		
	Attitude	0.276***	0.037	0.368	7.542	0.000	1.000	1.000
	Products & Services	0.522***	0.037	0.698	14.293	0.000	1.000	1.000
	Barrier	0.057	0.037	0.076	1.547	0.124	1.000	1.000
	Distribution channels	0.038	0.037	0.051	1.048	0.296	1.000	1.000

Note: Double and triple asterisks (*) denote statistical significance at the 5 and 1% levels, respectively. Source: Compiled by the authors (2023).

Most customers with purchase intentions are married individuals aged 31-40, a financially stable demographic with growing family responsibilities, particularly for children. This age group typically enjoys good health, making them eligible for health insurance plans with higher coverage and lower premiums. Early participation in life insurance enables customers to secure higher sums insured at more favourable rates (Table 9).

Table 9. Estimation results of factors affecting customers' decision to buy life insurance.

Model		Unstandardised coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	*Std. error*	*Beta*			*Tolerance*	*VIF*
2	(Constant)	0.598	0.495		1.209	0.228		
	GT	-0.273**	0.137	-0.136	-1.990	0.048	0.766	1.305
	MS	-0.144	0.098	-0.109	-1.473	0.143	0.655	1.527
	AI	0.205***	0.072	0.185	2.855	0.005	0.859	1.164
	EL	-0.005	0.076	-0.005	-0.067	0.947	0.760	1.316
	Age	0.205**	0.086	0.170	2.387	0.018	0.710	1.409
	OC1	0.162	0.143	0.081	1.134	0.259	0.699	1.431
	OC2	-0.345	0.318	-0.067	-1.086	0.279	0.954	1.049
	CS	0.704***	0.074	0.584	9.485	0.000	0.952	1.050
	BA	-0.168***	0.055	-0.186	-3.025	0.003	0.957	1.045
	DC	-0.068	0.056	-0.075	-1.205	0.230	0.928	1.077

a. Dependent variable: QD

Note: Double and triple asterisks (*) denote statistical significance at the 5 and 1% levels, respectively. Source: Compiled by the authors (2023).

5. Solutions to improve satisfaction and decision to buy life insurance

5.1. Product solutions

Develop a diverse range of life insurance packages tailored to customers' specific needs, including options for personal and family financial protection, savings accumulation, and financial investment. Create products that combine insurance with investment, enabling customers to fulfil both protection and financial accumulation goals, with transparent benefit structures.

5.2. Consulting and support solutions

Implement ongoing training programmes for consultants to ensure mastery of product knowledge, contract details, and skills in sales and customer care. Advisors should adhere to professional ethics, providing advice aligned with customers' needs and financial capacities while offering attentive customer care.

5.3. Brand and policy solutions

Design targeted advertising and promotional campaigns to foster customer trust and highlight benefits. In the context of the Fourth Industrial Revolution, insurance companies must prioritise digital transformation to enhance customer experiences during policy enrolment, contract execution, and brand interaction on e-commerce platforms. Moreover, robust after-sales services, including post-purchase customer care, are essential to ensure continuous support and satisfaction.

5.4. Income group solutions

To target specific income groups, companies should conduct market research to understand the unique needs of each group. Develop life insurance products tailored to the fees, benefits, and conditions applicable to different income levels. Select appropriate distribution channels for each group, such as insurance agents, online platforms, banking partnerships, event marketing, or collaborations with related partners. Customise outreach content to suit the targeted audience, and establish partnerships with organisations such as banks, financial institutions, or social organisations to access potential customers.

5.5. Age- and gender-specific solutions

Host events tailored to different age and gender demographics. For example, sporting events, healthcare consultation sessions featuring reputable medical experts, and collaborations with medical facilities for free health check-ups can effectively attract diverse customer segments. During these events, companies can introduce insurance products that meet the specific needs of attendees.

5.6. Solutions to reducing barriers

To mitigate barriers to life insurance participation, companies should refine their consultation processes and equip consultants with advanced skills in handling objections. Advisors must possess deep professional knowledge and be adept at addressing customer concerns effectively. New consultants should receive mentorship and managerial support during consultations to improve their skills.

6. Conclusions

Khoai Chau district, Hung Yen province, represents a promising market for life insurance development, offering significant financial and social security benefits to the community. Statistical analysis of customer attitudes toward life insurance in Khoai Chau reveals limited awareness of the product's benefits\the effect of the product has not been fully identified. At the same time, in Khoai Chau, there are still many potential customers with insufficient recognition of its value. Furthermore, barriers such as a lack of information and support from relatives and family members hinder purchase intentions. The research identifies a strong correlation between attitudes, product quality, and services with customer satisfaction. Additionally, a reciprocal relationship exists between satisfaction and purchase intention, while barriers negatively impact buying decisions. Key solutions include improving customer attitudes toward life insurance, enhancing product and service offerings, targeting diverse income, age, and gender groups, and reducing barriers to purchasing life insurance to boost buying decisions.

7. Limitations of the study

Due to resource constraints, this study focused on a single district and relied on a limited sample size. Moreover, only a subset of factors influencing satisfaction and purchase intention was explored. Future research should involve large-scale studies to comprehensively analyse the various subjective and objective factors affecting life insurance purchase intentions.

CRediT author statement

Le Thanh Ha: Conceptualisation, Methodology, Formal analysis, Investigation, Writing - Original draft preparation, Writing - Reviewing and Editing, Validation; Le Thi Hong Quyen: Writing - Reviewing, Validation, Resources; Le Thi Thu Thao: Conceptualisation, Formal analysis; Do Quang Giam: Reviewing and Editing, Validation and Supervision.

COMPETING INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article.

REFERENCES

[1] B. Ritika, K.B. Anil, T. Jyoti (2021), "Life insurance purchase behavior: A systematic review and directions for future research", *International Journal of Consumer Studies*, **45(6)**, pp.1149-1175, DOI: 10.1111/ijcs.12681.

[2] T. Thu (2022), "Life insurance revenue growth could reach 15% in the next 5 years", *Vietnam Insurance Development Institute*, https://mof.gov.vn/webcenter/portal/ttncdtbh/pages_r/l/chi-tiet-tin?dDocName=MOFUCM239840, accessed 15 May 2024 (in Vietnamese).

[3] Vietnam Insurance Association (2021), *Vietnam Insurance Market 2021*, 37pp (in Vietnamese).

[4] The Prime Minister of Vietnam (2023), *Decision No. 07/QD-Ttg Dated 05/01/2023 on Approving The Strategy for The Development of Vietnam's Insurance Market by 2023*.

[5] N.V. Dinh (2020), *Insurance Economics Textbook*, National Economics University, 263pp (in Vietnamese).

[6] People's Committee of Khoai Chau District (2022), *Summary Report on The Implementation of The New Countryside Program*, 31pp (in Vietnamese).

[7] M.M. Masud, M.R. Ahsan, N.A. Ismail, et al. (2021), "The underlying drivers of household purchase behavior of life insurance", *Society and Business Review*, **16(3)**, pp.442-458, DOI: 10.1108/SBR-08-2020-0103.

[8] S. Panigrahi, N.A. Azizan, M. Waris (2018), "Investigating the empirical relationship between service quality, trust, satisfaction, and intention of customers purchasing life insurance products", *Indian Journal of Marketing*, DOI: 10.2139/ssrn.3121509.

[9] R.K. Dahal, B. Ghimire, S.P. Joshi (2023), "Post-purchase satisfaction on life insurance policies: Evidence from Nepal", *Journal of System and Management Sciences*, **13(5)**, pp.17-30, DOI: 10.33168/JSMS.2023.0502.

[10] R. Brahmana, R.K. Brahmana, G. Memarista (2018), "Planned behavior in purchasing health insurance", *The South East Asian Journal of Management*, **12(1)**, pp.43-64.

[11] E. Chimedtseren, M. Safari (2016), "Service quality factors affecting purchase intention of life insurance products", *Journal of Insurance Financial Management*, **1(1)**, pp.1-12.

[12] P.G. Lim, H.M.Y. Dayang, R.A.G. Mohd (2020), "Factors influencing customer purchase intention towards insurance products", *International Journal of Business and Management*, **4(5)**, pp.70-79, DOI: 10.26666/rmp.ijbm.2020.5.9.

[13] S.M. Nurul, M.P.V. Sarah (2014), "The determinants of life insurance demand: A focus on saving motives and financial literacy", *Asian Social Science*, **9(5)**, pp.1911-2025, DOI: 10.5539/ass.v9n5p274.

[14] T. Musasa, T. Tlapana (2023), "Assessing the significance of retail service quality on shopping frequency: An adaptation of retail service quality (RSQS) model", *European Journal of Management Studies*, **28(2)**, pp.135-147.

[15] P.T. Loan, P.T. Dung (2016), "Factors influencing the decision to buy Manulife life insurance in Khanh Hoa province", *Journal of Fisheries Science and Technology*, **2**, pp.133-140 (in Vietnamese).

[16] N.T.B. Minh, K.D. Nam, T.T.T. Thuan (2021), "Factors influencing the decision to buy life insurance for individual customers in Ho Chi Minh city", *HCMCOUJS - Economics and Business Administration*, **16(2)**, pp.156-169, DOI: 10.46223/HCMCOUJS.econ.vi.16.2.961.2021 (in Vietnamese).

[17] L.Q. Hieu (2022), "Factors affecting the decision to buy life insurance for individual customers in Thanh Hoa province", *Journal of Economics & Development*, **298**, pp.65-75 (in Vietnamese).

[18] L.M. Tseng, C.L. Kuo (2014), "Customers' attitudes toward insurance frauds: An application of Adams' equity theory", *International Journal of Social Economics*, **41(11)**, pp.1038-1054, DOI: 10.1108/IJSE-08-2012-0142.

[19] H.T. Nguyen, H. Nguyen, N.D. Nguyen, et al. (2018), "Determinants of customer satisfaction and loyalty in Vietnamese life-insurance setting", *Sustainability*, **10(4)**, DOI: 10.3390/su10041151.

[20] L.C.B. Tho, T.T.T. Tam, V.V. Tuan (2017), "Factors affecting the decision to buy voluntary health insurance for people in Can Tho city", *Can Tho University Journal of Science*, **48**, pp.20-25, DOI: 10.22144/ctu.jvn.2017.626 (in Vietnamese).

[21] R.J. Sabhaya, M.M. Panwala (2020), "A study on factors affecting to buying decision of life insurance policy", *Global Journal of Arts and Management*, **1(3)**, pp.6-10.

[22] H. Ahmad, H. Halim (2017), "Determining sample size for research activities", *Selangor Business Review*, **2(1)**, pp.20-34.

[23] A. Althubaiti (2023), "Sample size determination: A practical guide for health researchers", *Journal of General and Family Medicine*, **24(2)**, pp.72-78, DOI: 10.1002/jgf2.600.