Demand for COVID-19 Insurance

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Abstract

The objectives of this research are (1) to explore the demand for COVID-19 insurance, (2) to investigate the demographic factors that influence the demand for COVID-19 insurance, and (3) to examine the COVID-19 insurance behaviour that influences the demand for COVID-19 insurance. The study's sample group consisted of 528 participants, and the data collection tool was an online questionnaire developed using Google Forms. The statistics used in the analysis were the frequency, percentage, mean, standard deviation, and multiple regression analysis. According to the analysis of the factors influencing the purchase of COVID-19 insurance, the company's credibility was the most significant factor reported by the participants in terms of the marketing factors related to the products, while the marketing factors related to other products and the price (insurance premium) were at a high level. Furthermore, LINE was the most extensively used online communication application. According to the findings of the demand analysis for COVID-19 insurance, 283 people, or 53.6%, intended to purchase the insurance. At the statistically significant level of 0.05, the multiple regression analysis of demographic and marketing factors revealed a substantial influence on the demand for COVID-19 insurance.

Keywords: *Demand for COVID-19 insurance, Factors influencing the purchase of COVID-19 insurance*

1. Introduction

The spread of the COVID-19 infection has caused significant social and economic disruption, leading to a decline in global consumption, investments, services, and industrial activities (Wang et al., 2020). Since the beginning of 2020, the pandemic has continued to worsen in Thailand, resulting in a rise in the number of infections and fatalities, which has had a detrimental impact on the majority of the country's economic sectors. However, certain businesses have benefited from the situation, particularly the insurance industry due to the increase in coronavirus disease or COVID-19 insurance. Such businesses have grown exponentially as people have realised that insurance is a viable choice for mitigating distress when the unexpected occurs as one of the basic principles of insurance is to minimise people's risks (Wang et al., 2020). When the people are infected with the COVID-19 they will have main expenses related to medical treatment, including sample collection and laboratory analysis, medicines and medical equipment, doctor's diagnosis, and patient room. In addition, it also causes the patient to lose income due to the inability to work.

COVID-19 insurance and COVID-19 vaccine insurance are disease-specific types of insurance that were created to satisfy customers' demands in a timely manner. The insurance premium is seen as reasonable. These products may be purchased both online and offline. Many businesses additionally offer benefits such as a lump sum payment when COVID-19 is detected (a completed payment) or an actual medical expenditure reimbursement that matches the conditions and requirements of the plan that the customer has decided to acquire. The latter is highly popular since it assists the insured in reducing the concerns about medical expenditures resulting from disease caused by COVID-19, to which many people have been paying attention. The majority of people who purchase this COVID-19 insurance are first-time clients (Thai Re Knowledge Center, 2021). Siam Commercial Bank Public Company Limited anticipates that the trend of purchasing insurance via mobile phones will continue to increase since clients benefit from convenience, reduced risks, and easy coverage while insurance companies benefit from higher insurance premiums. Customers who purchase such insurance are also more likely to contract COVID-19.

As a result, the researchers are interested in exploring the demand for COVID-19 insurance, which is a kind of life and health protection designed to lessen the burden of medical expenditures associated with catastrophic epidemics. The demand for insurance will vary according to the demands of individual consumers, who can choose the pandemic insurance that meets their requirements. Furthermore, insurance businesses may employ the study's findings as a guideline for their product development and business strategy to continue to meet the demands of their target clients.

2. Objectives

1) To explore the demand for COVID-19 insurance.

2) To investigate the demographic factors influencing the demand for COVID-19 insurance.

3) To examine the COVID-19 insurance behaviour influencing the demand for COVID-19 insurance.

3. Materials and Methods

3.1 Concepts and theories

3.1.1 Demand theories

In economics, demand is defined as "effective demand", meaning traded demand. Such demand is comprised of three conditions: need or desire, willingness to pay, and ability to pay. When all three conditions are met, this demand is referred to as "effective demand", but, if one of the two latter elements is missing, this demand is considered "potential demand", which does not result in a trade. Naturally, all customers try to achieve the maximum pleasure from their purchases of products and services while staying within their budget. This indicates that customers would like to buy goods and services because they expect to be able to satisfy their desires by doing so. The amount of customer demand for any sort of product is determined by a variety of factors, including income, the price of the good or service, personal taste, and the pricing of other items relevant to that product or service, among many others.

According to the law of demand, "the amount of a certain product or service that customers wish to buy always has an inverse relationship to the price of that type of commodity or service". This suggests that, as the price of a product rises, people buy fewer items; conversely, when the price of a product falls, consumers buy more items.

3.1.2 Consumer behaviour theories

There is an economic theory that explains consumer behaviour based on rational assumptions: (1) consumers can decide to purchase any product or service; (2) consumers' income is limited, so they have to choose the goods or services that satisfy them the most; and (3) consumers can divide their income for spending into smaller units. Utility theory and indifference curve analysis are two theories that are often employed to examine customer behaviour.

3.2 Relevant studies

Kongjam et al. (2018) conducted a study on the influence of the COVID-19 pandemic on risk perception and the demand for insurance purchases in Trang, Thailand. The purposes of this study were (1) to investigate the impact of risk perception on people's demand for life insurance, personal accident insurance, and health insurance in the Mueang Trang District of Trang and (2) to investigate the impact of the COVID-19 pandemic on risk perception and the demand for such insurance in that area. This study's samples consisted of 400 participants, ranging in age from 18 to 80 years. The questionnaire was used to collect data. According to the results, perceived security risks, career risks, property risks, and health risks all influence the demand for personal accident insurance. The impact of the COVID-19 pandemic has had a greater influence on the perception of risks and the demand among people in Mueang Trang District for life

insurance, personal accident insurance, and health insurance since people are aware of the uncertainty and the potential impact on their and their family's security. As a result, these individuals are increasingly seeking security for themselves and their families, particularly through life and health insurance.

Chomboon (2020) studied the satisfaction of Bangkok residents in obtaining COVID-19 insurance. The objectives were (1) to examine the satisfaction in purchasing COVID-19 insurance among Bangkok residents, (2) to investigate the satisfaction in purchasing such insurance among Bangkok residents based on demographic factors, and (3) to explore the behaviour of those purchasing COVID-19 insurance that influences their satisfaction in purchasing this insurance. The data were gathered through questionnaires completed by 400 Bangkok residents. The study discovered that variances in the average monthly income resulted in a wide range of satisfaction when it came to purchasing COVID-19 insurance. However, variations in gender, age, marital status, and education did not affect people's satisfaction with COVID-19 insurance purchases. Regarding the purchasing behaviour of COVID-19 insurance, the issues of protection, image, and distribution channels influence customer satisfaction in the Bangkok population.

Hongthong (2020) investigated the factors of the marketing mix 7Ps that influence the decision to purchase insurance for the novel coronavirus disease 2019 (COVID-19) in the population of Bang Khen District, Bangkok. A questionnaire was used to obtain data from 400 individuals residing in the Bang Khen region. The study discovered that the sample group places a high value on overall decision making, comparing the information from each insurance company before making an insurance purchase ranking. When considering each aspect, the distribution channel was ranked first, followed by the price, marketing promotion, service process, product, personnel/staff, and physical characteristics and presentation, in that order. The marketing mix affects people's decisions to buy insurance for the novel coronavirus disease 2019 (COVID-19) in Bang Khen District, Bangkok, at the statistical significance level of 0.05 with a coefficient of determination (R^2) of 0.603, indicating that the independent variables were able to forecast 60.3% of the dependent variables.

Qian (2021) investigated the influence of COVID-19 on the demand for insurance in China by analysing multiple regression equations to determine whether the impact of COVID-19 on the demand for insurance was significant. According to the findings, as the number of infected people grows, so does the income from per capita insurance. Each patient will increase the average per capita insurance income of 0.896 yuan. When different types of insurance are studied, the revenue from life insurance shows the greatest rise, followed by the income from health insurance. In terms of the variances seen in each location, the impact of income from COVID-19 insurance is only evident in places with extremely bad medical conditions or severe medical loads.

3.3 Scope of the Study

Scope of the population: In this study, the population is the number of people in Thailand in 2020, which is 66,186,727 residents as of December 31, 2020 (World Health Organization, 2021). There were 528 participants in the sample group. The sample size was estimated using Yamane's (1973) estimates at the 95% confidence level with a 5% margin of error. The computed sample size was 399.9976, meaning that the minimum population necessary for this study was roughly 400 people; nevertheless, data were gathered from 528 samples to improve the accuracy of the data analysis.

3.4 Conceptual Framework

Having researched numerous theories and studies, the conceptual framework of this study was defined as follows:
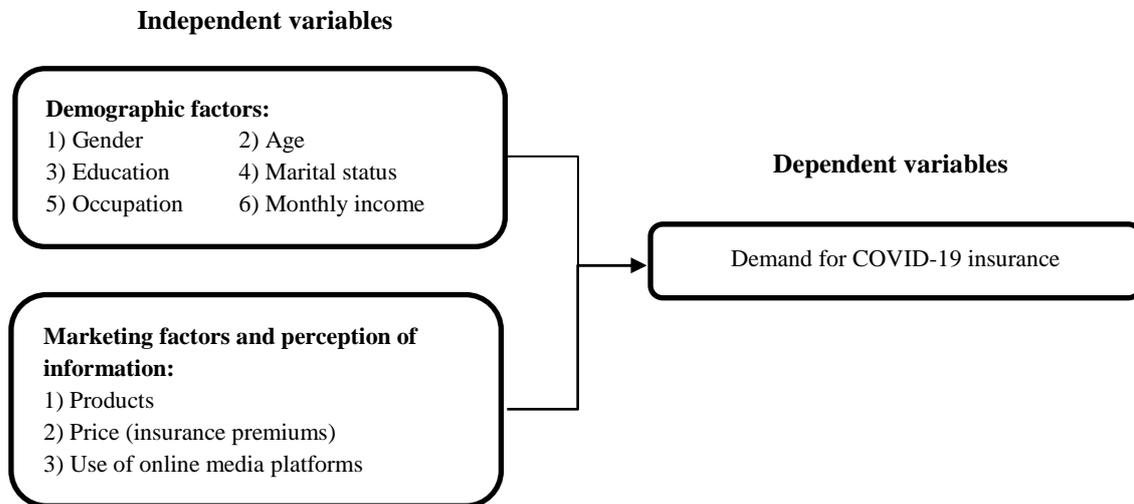
Independent variables

Demographic factors:
1) Gender 2) Age
3) Education 4) Marital status
5) Occupation 6) Monthly income

Dependent variables

Demand for COVID-19 insurance

Marketing factors and perception of information:
1) Products
2) Price (insurance premiums)
3) Use of online media platforms

Figure 1 Conceptual framework of the study

3.5 Data Collection from the Sample Group

The samples were 528 participants selected through convenience sampling, and the data were obtained via an online questionnaire from 18 May to 17 June 2021. The questionnaire was distributed through several internet channels, including LINE and Facebook. The three parts of the questionnaire are personal factors - including sex, age, marital status, education, occupation, and monthly income; demand for COVID-19 insurance is in the checklist form. And the question on marketing factors and information perception: the marketing factors consist of product factors (i.e., the credibility of an insurance agency, range of insurance products that fit customers' demands, insurance's clarity and lack of complexity, benefits of insurance coverage that have been satisfied, and appropriation and clarification of claim payment terms) and price factors or insurance premiums (i.e., balancing of insurance costs against the coverage and sum insured, and fulfilled payment term for insurance premiums), and information perception factors via online media channels (i.e., LINE, Facebook, YouTube, Twitter, and Instagram) have a scale questionnaire. The measurement scale is the Likert Scale, which rates into five levels of importance: very satisfied, satisfied, neutral, unsatisfied, and very unsatisfied.

3.6 Study Tool Design and Quality Assurance

1) Previous studies on the demand for coronavirus disease (COVID-19) insurance were examined, and then the study concept was developed to facilitate the design of an online questionnaire.

2) The questionnaire's development was broken down into smaller sections; likewise, the questionnaire's contents were considered in line with the hypothesis, objectives, and research conceptual framework.

3) The development of the questionnaire draft was assisted by an adviser to enhance the quality, such as the content, format, correction, and appropriation, thereby increasing the questionnaire's accuracy.

4) Before gathering real data, the questionnaire was pre-tested to verify that it addresses all the study's objectives, uses appropriate language, and conveys the same meaning to the participants as intended by the researchers. Subsequently, the questionnaire was tested on a group of 30 respondents who were comparable to the study's samples. The reliability of the rating scale section of the questionnaire was then

[273]

determined by calculating the Cronbach's alpha. The Cronbach's alpha coefficient was calculated to be 0.835, indicating that this questionnaire could be employed for data gathering.

3.7 Data analysis and statistics used in the study

Demographic factors were analysed with percentages, while the significance of the factors influencing the demand for COVID-19 insurance was analysed using the mean, standard deviation (SD), F-test, and multiple regression analysis**.**

4. Results and Discussion

4.1 Results

According to the demographic analysis, the majority of COVID-19 insurance purchasers were female (67.0%), were aged 31–40 years (26.3%), were single (69.3%), had a bachelor's degree (61.2%), worked for a private company (51.1%), and had an average monthly income of 20,001–30,000 baht or 30,001–40,000 baht (18.8%).

The results of the analysis of the factors influencing the purchase of COVID-19 insurance are as follows.

1)Marketing factors: Products

The most important criterion for acquiring COVID-19 insurance was the perceived credibility of an insurance agency, with a mean of 4.24, while the range of insurance products that fit customers' demands was deemed to be a highly significant aspect, with a mean of 4.07. With a mean of 4.19, the insurance's clarity and lack of complexity were rated as extremely noteworthy. With an average score of 4.20, the benefits gained from an insurance coverage that fulfilled the demands of consumers were viewed as the most important aspect. The appropriation and clarification of claim payment terms were highly significant, with a mean of 4.16.

2)Marketing factors: Price (Insurance Premiums)

With a mean of 4.17, the balancing of insurance costs against the coverage and sum insured was deemed to be a highly significant consideration when acquiring COVID-19 insurance. The allotment of insurance premium payment conditions obtained a score of 4.15, indicating a high-level factor. Regarding social media platforms, LINE was the most significant, with a mean of 4.26, followed by Facebook and YouTube, with means of 4.08 and 3.81, respectively, and Instagram and Twitter, with means of 3.37 and 2.89, respectively.

Table 1 Demand for COVID-19 insurance

Purchases of the insurance	Amount (people)	Percentage
Purchase	283	53.6
Do not purchase	245	46.4
Total	528	100.0

Table 1 represents the study of the demand for COVID-19 insurance, showing that 283 individuals, or 53.6% of the participants, intended to acquire insurance, whereas 245 people, or 46.4% of the participants, were not interested in obtaining insurance.

Table 2 Summary of the multiple regression analysis

R	R^2	Adjusted R^2	Std error of the estimate
0.365	0.133	0.125	0.465

[274]

With a coefficient of determination (R^2) of 0.133, demographic and marketing factors, which are independent variables, can only explain 13.3% of the COVID-19 insurance demand. The remaining 86.7% can be accounted for by other factors. The standard error of estimation is 0.465, showing a 0.465 difference in the association between demographic factors and market factors.

Table 3 ANOVA results from the F test statistical program

Model	Sum of squares	df.	Mean square	F	Sig.[*]
Regression	29.052	8	3.632	16.770	0.000
Residual	189.049	873	0.217		
Total	218.101	881			

Note: [*] Statistically significant at the 0.01 level

Table 4 Linear relationship between the demand for COVID-19 insurance and the demographic factors, marketing factors, and information perception

Independent variables	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	S.E.	Beta		
Constant	-0.246	0.124		-1.982	0.048
Gender (X_1)	0.084	0.027	0.101	3.148	0.002
Marital status (X_2)	-0.027	0.011	-0.091	-2.513	0.012
Education (X_3)	-0.043	0.019	-0.088	-2.267	0.024
Occupation (X_4)	0.016	0.007	0.101	2.310	0.021
Monthly income (X_5)	0.015	0.003	0.220	4.297	0.000
Credibility of an insurance agency (X_6)	0.067	0.029	0.109	2.289	0.022
Benefits of insurance coverage that have been satisfied (X_7)	0.148	0.029	0.254	5.158	0.000
Fulfilled payment term for insurance premiums (X_8)	-0.104	0.029	-0.173	-3.580	0.000

Table 4 shows the results of the multiple regression analysis of the demographic factors (gender, marital status, education, occupation, and monthly income) and marketing factors (credibility of an insurance agency, benefits gained from insurance coverage, and allotment of insurance premium payment conditions) that affect the demand for COVID-19 insurance at the statistically significant level of 0.05.

The equations of the purchase demand for COVID-19 insurance ($\hat{y}$) in multiple linear regression form are shown below:

Unstandardized $\hat{y}$ = - 0.246 + 0.084X_1 - 0.027X_2 - 0.043X_3 + 0.016X_4 + 0.015X_5 + 0.067X_6 + 0.148X_7 - 0.104X_8

Standardized $\hat{y}$ = 0.101X_1 - 0.091X_2 - 0.088X_3 + 0.101X_4 + 0.220X_5 + 0.109X_6 + 0.254X_7 - 0.173X_8

4.2 Discussion

The study found that gender, marital status, education, occupation, and monthly income influence the purchase of COVID-19 insurance. Which income affects purchasing COVID-19 insurance is consistent with the Chomboon (2020). Who studied satisfaction in purchasing insurance for COVID-19 of the population in Bangkok? The results showed that Bangkok residents had different average monthly incomes. That made their satisfaction in purchasing COVID-19 insurance differently, while Bangkok

residents who had different personal factors in terms of gender, age, marital status, and education made their satisfaction in purchasing COVID-19 insurance no different.

According to the study of the factors influencing the purchase of COVID-19 insurance, concerning the aspect of marketing factors related to products, an insurance company's credibility is the most significant factor, while high significance was also found for the marketing factors associated with other products, including the price factor (insurance premiums). Focusing on the marketing factors related to products that influence the purchase of COVID-19 insurance, people paid the most attention to reliable company products, followed by the range of insurance products that fit their demands, the insurance's clarity and lack of complexity, and the benefits of the insurance coverage. These findings are in line with Hongthong (2020), who studied the factors affecting purchasing decisions for COVID-19 insurance among the population in Bang Khen, Bangkok. The results showed that the pricing factor is the most significant factor.

5. Conclusion

The analysis of the data obtained from the research questionnaire is summarized below:

1) According to the demographic factor analysis, the majority of people who purchased COVID-19 insurance were female (67.0%), were aged 31–40 years (26.3%), were single (69.3%), held a bachelor's degree (61.2%), worked in a private company (51.1%), and had an average monthly income of 20,001–30,000 baht or 30,001–40,000 baht (18.8%).

2) According to the examination of the marketing elements connected to products, the insurance company's credibility is the most significant factor, while marketing factors related to other products, including the pricing factor (insurance premiums), are extremely significant. Furthermore, when considering online communication tools, it was found that LINE is the most significant online communication tool.

3) According to an analysis of the demand for COVID-19 insurance, 283 individuals, or 53.6%, had a need to purchase insurance.

4) According to the multiple regression analysis, the demographic factors that show statistical significance regarding the purchase of COVID-19 insurance at the statistically significant level of 0.05 are gender, marital status, education, occupation, and monthly income, whereas the marketing factors that show statistical significance at the level of 0.05 regarding the purchase of COVID-19 insurance are insurance agency credibility, benefits gained from the insurance, and allotment of insurance premium payment conditions.

6. Recommendations

1) Other independent variables that may influence purchasing decisions for COVID-19 insurance, such as groups of people with varying risk levels, factors of coverage in various fields, and so on, should be investigated further to obtain useful information for the development of insurance businesses that are more compatible with the requirements of customers.

2) To acquire a range of different analysis outcomes, other statistics should be employed in the analysis in addition to those used in this study. The research will become more engaging and helpful as a result.

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