

Exploring the Impact of Social Media on Consumers' Willingness to Purchase Commercial Health Insurance

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ABSTRACT

In the digital age, the rapid development of social media has become an important factor affecting consumers' decision-making. This study focuses on the impact of social media on consumers' willingness to buy commercial health insurance. This research enriches the theoretical research in the intersection of social media and insurance consumption, and provides a new perspective for understanding the decision-making behavior of consumers in the digital age; it provides a basis for commercial health insurance enterprises to formulate marketing strategies, which helps them better adapt to the development of the social media era and improve market competition. In this study, questionnaire method was used and 292 valid questionnaires were collected, in which the independent variable social media was operated as the form of social media promotion, authenticity of information in social media, and people's comments in social media, and the dependent variable was consumers' willingness to purchase commercial health insurance. For the dependent variable is ordered categorical variable. The data were analyzed using Stata 15, using ordered logistic regression models. The study found that an individual's age and family members' attitudes toward purchasing commercial health insurance, community staff's promotion of commercial health insurance, insurance companies' promotion of commercial health insurance, society's attitudes toward purchasing commercial health insurance, state policies' attitudes toward commercial health insurance, and the form of social media promotion were associated with willingness to purchase.

KEYWORDS

Commercial health insurance; Social media; Consumers; Ordered logistic regression analysis

1 Introduction

Commercial health insurance refers to insurance products provided by commercial insurance companies that aim to provide financial compensation to the insured for medical expenses and loss of income caused by illness or accidents. Although the implementation of the "Healthy China 2030" plan puts health first, this has boosted the development of commercial health insurance, its coverage still needs to be further expanded compared with the large population base.

Social media platforms not only provide insurance companies with convenient information dissemination channels, but also influence consumers' purchasing decisions through user reviews and case sharing. Therefore, further studying the impact of social media on consumers' willingness to purchase commercial health insurance is of great significance in promoting the development of commercial health insurance.

2 Literature review

The research findings of scholars such as Qi indicate that commercial health insurance has a significant positive impact on the health level of residents. They utilized data from the China Health and Retirement Longitudinal Study (CHARLS) in 2013 and 2015 and conducted an empirical analysis using the difference-in-differences propensity score matching (PSM-DID) method.

In her research, Yin Yan deeply explored the role and value of commercial health insurance in the construction of a multi-level medical security system in China. She pointed out that with the intensification of population aging in China, the payment pressure on medical insurance funds is constantly increasing. As an important component of the multi-level medical security system, commercial health insurance can effectively supplement the deficiencies of basic medical insurance and meet the diverse health security needs of the people. With the rapid development of "Internet + " technology, the insurance industry has ushered in new development opportunities. In September 2024, the State Council issued the "Several Opinions on Strengthening Regulation, Preventing Risks, and Promoting High-Quality Development of the Insurance Industry," explicitly encouraging the use of artificial intelligence, big data, and other technologies to enhance digitalization and intelligence levels. In 2018, internet health insurance experienced explosive growth, and its share in the internet health insurance business reached 10.3% for the first time.

However, nowadays there are numerous types of social media platforms, and the information on some of them is of

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mixed quality. While the content, promotional forms, and user interaction on social media positively influence consumers' perceptions, there may also be negative effects such as misleading information and reinforcing stereotypes among some consumers. The extent of both positive and negative impacts remains undetermined. Overall, the relationship between social media and consumers' willingness to purchase commercial health insurance needs to be further explored. Therefore, this study will focus on the following aspects: the impact of social media content on consumers' willingness to purchase commercial health insurance, the impact of social media promotional forms on consumers' purchasing willingness, and the impact of user interaction content on consumers' purchasing willingness.

3 Theoretical foundation

Ecological systems theory was proposed by the American psychologist Urie Bronfenbrenner, emphasizing that individual development is nested within a series of interacting environmental systems that interact with and influence the individual. (Urie Bronfenbrenner, bioecological theory, 1979; Urie Bronfenbrenner, 1986; Urie Bronfenbrenner, 1994; Bronfenbrenner & Morris, 1998) The system consists of a microscopic system, mesosystem, outer system, macrosystem, time latitude, and other information. The microsystem is the environment that is in direct contact with the individual and the patterns of interaction with the environment; the mesosystem refers to the connections or interrelationships between microsystems; the macrosystem is the culture, subculture, and social environment that exists above the microsystems, mesosystems, and outer systems. Considering that the purchase of commercial health insurance is mainly a decision made by individuals based on their own health status, economic status, and risk perception, factors in the outer system such as work environment and social policies. Although time has some influence on consumer purchasing behavior, the complexity and dynamics of time latitude are difficult to grasp when studying the influence of social media on commercial health insurance purchase willingness. Therefore, this paper focuses on the influence of social media on commercial health insurance purchase preference specifically from three perspectives: micro, meso, and macro.

Based on existing research, this study proposes the following four hypotheses:

- (1) There is no relationship between the overall system in which an individual resides and consumers' willingness to purchase commercial health insurance;
- (2) There is no relationship between meso factors and consumers' willingness to buy commercial health insurance;
- (3) There is no relationship between macro factors and consumers' willingness to purchase commercial health insurance;
- (4) There is no relationship between micro factors and consumers' willingness to purchase commercial health insurance;

4 Research method

4.1 Data sources

Based on the findings of existing studies, this study designed a questionnaire to explore the impact of social media on consumers' willingness to purchase commercial health insurance from the ecosystem theory, and entered the designed questionnaire into the online Questionnaire Star platform. The QR code generated by Questionnaire Star was diffused on the WeChat platform to collect questionnaires by snowballing. After counting, 292 valid questionnaires were finally recovered.

The questionnaire of this study includes four components: personal information (micro level), meso level, macro level, and purchase willingness.

4.2 Definition of variables

The core independent variable of this study is social media, which is operationalized as the form of social media promotion, authenticity of information in social media, and people's comments in social media. The dependent variable of this study is the willingness to purchase commercial health insurance. The question about commercial health insurance on social media is question 17, and the answers are "Very unwilling", "somewhat unwilling", "neutral", "somewhat willing", "very willing".

Here shows the values set for the core independent variables. The first core independent variable is identified as how helpful the information generated by social media is to the consumer. Five types of answers were set up in the questionnaire as: misleading, hardly helpful, generally helpful, somewhat helpful, and very helpful. The numbers 0-4 were used to allocate values to the above answers.

For whether or not agreeing that the truthfulness of information in social media affects individuals' attitudes towards

commercial health insurance, and whether or not agreeing that people's comments in social media affects individuals' attitudes towards commercial health insurance were similarly categorized into 5 sections each, including strongly disagree, relatively disagree, neutral, relatively agree, and strongly agree. Again use the numbers 0-4 to allocate values to the answers.

In addition, consumers' willingness to purchase commercial health insurance can be influenced by other independent variables like personal conditions. The values allocated to personal conditions are shown in Table 1.

Table 1 Description of independent variables.

Variable	Description of variables
Sex	0=female, 1=male
Age/years	0=below 20 years; 1=20-40 years; 2=40-60 years; 3=60 years and above
Marriage	0=unmarried; 1=divorced; 2=married
Education	0=Junior high school and below; 1=High school; 2=College (including studying, the same below); 3=Bachelor's degree; 4=Master's degree and above
Monthly income	0=3000 or less; 1=3000-6000 yuan; 2=6000-10000 yuan; 3=10000-15000 yuan; 4=15000 or above

5 Results

Because the dependent variable is a categorical variable, ordered logistic regression model was used in this study. The results of the regression analysis are shown in Table 2:

The first model analyzes the relationship between the independent variables and the dependent variable from the overall system; The second model analyzes it from the microsystems; The third model analyzes it from a mesosystemic

Table 2 Results of regression analysis.

	Model-1 attitude	Model-2 attitude	Model-3 attitude	Model-4 attitude
attitude				
gender	-0.21 (-0.73)	0.377 -1.57		
age	-0.774* (-2.00)	-0.920*** (-3.78)		
edu	-0.152 (-0.98)	-0.16 (-1.22)		
marriage	-0.168 (-0.57)	0.12 -0.55		
income	0.296* -2.01	0.261 -1.79		
family	1.542*** -5.94		1.966*** -8.86	
community	0.592** -2.78		0.663** -3.27	
company	-0.634** (-2.76)		-0.402 (-1.91)	
society	0.842*** -3.51			1.317*** -5.48
policy	0.694*** -3.85			0.746*** -3.96
forms	0.595** -3			0.692*** -3.83
information	0.0677 -0.34			-0.0517 (-0.25)
review	-0.149 (-0.60)			-0.116 (-0.51)
/				
cut1	1.07 -0.89	-3.927*** (-6.65)	-0.138 (-0.41)	2.062* -2.33
cut2	4.007*** -3.33	-2.200*** (-4.10)	2.427*** -6.16	4.397*** -4.95
cut3	7.675*** -5.85	-0.234 (-0.45)	5.617*** -9.89	7.146*** -7.51
cut4	11.47*** -8.21	1.777** -3.07	8.621*** -10.9	10.19*** -9.77
N	292	292	292	292
t statistics in parentheses ="* p<0.05	** p<0.01	*** p<0.001"		

perspective; The fourth model analyzes it from a macrosystemic perspective.

The regression analysis of all four models overturned the original hypothesis, which means that there is a correlation between social media and consumers' willingness to purchase commercial health insurance, regardless of the split of the independent variables from several perspectives: the entire-level, micro-level, meso-level, and macro-level.

In Model 1, the coefficient of community outreach is 0.592, which indicates that assuming that all other variables remain constant, every one unit increase in community outreach increases the value of consumer preference for purchasing commercial health insurance by 0.592 units, and this result is significant at the 5% level of significance, which implies that community outreach has a positive impact on the dependent variable, consumer preference for purchasing commercial health insurance.

In Model 2, the coefficient of age is -0.920, which means that assuming that other variables remain constant, the value of consumer preference for purchasing commercial health insurance increases by -0.920 units for every one unit increase in age, and this result is significant at the 5% level of significance, which implies that the older the consumer, the lower the preference for purchasing commercial health insurance.

In Model 3, the coefficient of family members' attitude toward commercial health insurance is 1.966, which means that assuming that other variables remain unchanged, every one unit increase in family members' attitude toward commercial health insurance increases the value of consumers' preference for commercial health insurance by 1.966 units, and this result is significant at 5% significance level, which implies that the attitude of family members toward commercial health insurance has a positive effect on the dependent variable of consumers' preference for the purchase of commercial health insurance.

6 Discussion

6.1 Impact of social media on commercial health insurance willingness

This study examines the impact of social media on consumers' preferences for purchasing commercial health insurance. The findings indicate that social media plays a significant role in information dissemination, knowledge dissemination, and enhancing purchase intent.

At the micro level, family members exhibit divergent attitudes toward purchasing commercial health insurance. Those unwilling to purchase (including relatively unwilling and very unwilling, same below) and those willing to purchase are roughly equal in proportion, both around 30%. However, the number of undecided or neutral individuals is higher, approaching 40%. It is evident that most people have not yet fully understood commercial health insurance.

At the meso level, China's insurance promotion efforts lag behind those of some developed countries, relying on traditional methods with insufficient innovation. Survey data indicates that most respondents' communities have little to no commercial health insurance promotion. Less than 10% of the sample regularly encounters related promotions, while over 60% have had no or minimal exposure to such information.

At the macro level, there are obvious differences in citizens' insurance awareness and insurance density in different regions. Insurance awareness and insurance density are relatively high in economically developed regions and cities, while they are low in central and western regions and rural areas. Meanwhile, the younger generation has relatively higher awareness and acceptance of insurance, and they are more inclined to protect themselves against risks through insurance. In addition, highly educated and high-income groups have stronger insurance awareness and are more willing to purchase commercial insurance. It can be clearly observed that most people have a neutral attitude towards the purchase of commercial health insurance, and most of them are cognizant of relevant national policies. However, it should be noted that there are still some consumers who do not have a good understanding of the complexity and terms of insurance products, which leads to misunderstanding and mistrust of insurance.

Compared with existing research, this study further refines the mechanism of social media's role in commercial health insurance purchase preferences. It is found that the content and promotional forms of social media have a significant impact on consumers' purchase willingness.

6.2 Negative relationship between insurance company promotions and purchase willingness

It is also important to separately note that consumers' preference for purchasing commercial health insurance is negatively correlated with the promotional efforts of insurance companies. The reasons for this may be as follows:

Intense competition in the market: consumers may feel confused and distrustful in the face of numerous insurance companies' publicity, thus reducing their willingness to purchase.

Problems of insurance company services: some insurance companies have cumbersome procedures and inefficiency in the claims process, and this bad claims experience will reduce consumers' satisfaction and trust in the insurance company, which in turn will affect their willingness to purchase commercial health insurance.

6.3 Policy recommendations

In view of the problems and influencing factors identified in the study, the following countermeasures are proposed: first, insurance companies should optimize their social media marketing strategies, focusing on the quality of content and innovation of form, and avoiding excessive publicity. Second, the professional training of insurance sales staff should be strengthened to improve their business level and service quality, reduce misleading behavior, and enhance consumers' trust in insurance products.

7 Conclusion

This study found that there is a correlation between social media and consumers' willingness to purchase commercial health insurance through ordered logistic regression analysis of the data collected from the questionnaire survey. Among them, the correlation between the form of social media promotion and consumers' willingness to purchase commercial health insurance is significant. Based on this, this study proposes countermeasures such as optimizing social media content and enhancing social media interactivity. In addition, this study also found significant differences in purchase preferences across age and income groups, with higher income and higher education groups tending to have a stronger willingness to purchase commercial health insurance. Of course, this study has a limitation. The study does not explore in depth the differences between social media platforms, for example, the specific impact of different social media platforms (e.g., WeChat, Weibo, Jitterbug, etc.) on consumer preferences may vary.

Future research direction can focus on the following aspects: first, with the diversified development of social media platforms, in-depth investigation into the differentiated influence mechanism of different platforms on consumers' willingness to purchase commercial health insurance.

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