The Influence of Financial Literacy, Risk Aversion, and Persuasion on Insurance Demand

Dwi Maharani, Merry Indra Cahyanti, Syahrizal Dwinata, Yuli Eni[1]
BINUS Business School, Bina Nusantara University,
Jakarta, Indonesia 11480
dwi.maharani001@binus.ac.id, merry.cahyanti@binus.ac.id, syahrizal.dwinata@binus.ac.id
Corresponding author: [1]yeni@binus.edu

Abstract

This study examines the influence of financial literacy, risk aversion, mediating effect of persuasion on insurance demand in Indonesia. A survey questionnaire was conducted among 240 respondents in the productive age range, around 18 to 45 years old. The result of hypothesis testing was conducted by Smart PLS 3.0. The result shows that financial literacy and risk aversion were directly and significantly related to persuasion. Financial literacy and risk aversion have positive influence towards insurance demand. Persuasion significantly mediates the relationship between insurance demand, financial literacy, and risk aversion. Financial literacy is directly proportional to the increasing of insurance demand. People tend to buy insurance to avoid risk when they are prone to accidents, have health issues, or to protect their wealth. Since insurance provides non-direct benefit where people will get the benefit through some conditions, consumer is needed to be educated, convinced, motivated, and advised to enroll in an insurance policy. Further research can be explored in more factors such as different age groups like Gen X, Gen Y, Millennials to see the influence of age group on insurance demand. Since this research only focus on Indonesian people, respondents from other country or region may lead to other findings. Political situation, pandemics and geographic factors also can be used to provide more explanation on what factors that influence insurance demand completely.

Keywords
Insurance Demand, Financial Literacy, Risk Aversion, Persuasion

1. Introduction
2020 is called a challenging year for some people. Since the COVID-19 case was first discovered in Indonesia in March 2020, it is estimated that around 22,138 people have died within one year due to this pandemic outbreak (CNN Indonesia, 2021). It is undeniable that the COVID-19 pandemic has slowed the wheels of the economy and changed the way we manage our finances and manage our daily needs. According to Maslow's Hierarchy of Needs by Abraham Maslow (1943), the need for security and safety is one of the needs needed for humans to survive (Djoni & Rahardjo, 2021). On that basis, some people choose insurance to fulfill a sense of security. A series of surveys were conducted with the public in the UK, USA, and Spain between March and June 2020, and they found that 30% of respondents said COVID-19 had made them more likely to consider having insurance (Low et al 2021).

Based on data from the Indonesian Life Insurance Association, in 2015, the percentage of life insurance owners was 21.57% of the total life population in Indonesia, then 17.94% in 2016, 18.78% in 2017, 17.76% in 2018, 19.91% in 2019, and 23.82% in 2020. Although the trend is increasing, this percentage is still tiny when compared to other countries in Asia, such as Singapore, Malaysia, India, and China. However, the potential for insurance development in Indonesia is still tremendous.

According to Setiadie (2019), the insurance market in Indonesia is included in the perfect competition market, which is characterized by many insurance companies that compete and do not dominate in specific segments. Insurance in Indonesia has competitiveness at a medium level below Malaysia and Singapore. It has enormous domestic potential for increasing the competitiveness of the national insurance industry. According to Warta Ekonomi (2018), public awareness of insurance is still low, and industry penetration is below 3%. Unsaturated market growth, significant growth in the middle class, and public literacy on insurance and finance are the driving factors for progress in the insurance sector in Indonesia.

Various studies show that several factors can influence the decision to have insurance. Research by He (2020) shows that three aspects can affect the demand for insurance. These factors are grouped into three aspects. First, demographic factors; second, economic and financial factors, such as income status and financial knowledge; third, subjective attitude factors, including risk attitudes, social beliefs, family attitudes, and social interactions. In addition, knowledge of finance has been proven to have a positive and significant relationship with the demand for insurance products (Djoni & Rahardjo, 2021).

Persuasion can be influenced by peers, culture, family, social groups, and the environment that influence their choices and behavior (Khan et al., 2020). Another factor is risk averse that influences people's decisions to buy insurance. Consumers prefer insurance policies to avoid possible risks (Ansari et al., 2019). Insurance is also purchased to protect against financial losses due to economic uncertainty (Wilfred, 2020).

1.1 Objectives

The objectives of this research are: 1) to determine the effect of financial literacy on insurance demand, 2) to determine the effect of risk aversion on insurance demand, 3) to determine the effect of financial literacy on persuasion, 4) to determine the effect of risk aversion on persuasion, 5) to determine the effect of persuasion mediation on financial literacy and risk aversion on insurance demand.

2. Literature Review

2.1. Insurance Demand

According to Mahdzan N & Sarah (2013), insurance demand is associated with a person's desire to bequeath funds to dependents and provide income for retirement. Insurance demand is the main factor in the financial system in the health sector, especially in developing countries (Wilfred, V, 2020).

Based on research conducted by Wilfred (2020), public demand for insurance is influenced by several factors such as income protection, risk attitudes, and social factors with significant influence. Insurance is in demand because it protects against financial losses due to economic uncertainty. Risk attitude as one of the factors influencing people's demand for insurance is supported by research by Low et al. (2021), which shows that risk aversion and agents link persuasion as a mediating variable in insurance demand. The persuasion factor has the most substantial relationship compared to other factors and significantly affects the demand for insurance. Individuals who process messages through persuasion tend to be attracted to the insurance offered.

Then the research conducted by Lin et al. (2017) stated that there was a significant positive effect between insurance demand, financial advisors, and sources of information with insurance demand. People with high financial literacy are more likely to buy insurance. Another study by Chung (2020) states that a significant and positive relationship exists between income levels, insurance knowledge, and risk attitudes toward insurance demand. The findings show that risk attitudes, income levels, life insurance knowledge, and income protection dominate insurance demand.

2.2. Financial Literacy

Based on the Organization for Economic and Development (2014), financial literacy is defined as a set of skills, knowledge, awareness, attitudes, and financial behavior of a person in terms of making financial decisions to achieve financial prosperity. According to Djoni & Raharjo (2021), financial literacy is the ability to handle money and other financial problems considered necessary at this time. Financial literacy skills do not only apply to professionals working in the investment sector but also to people who manage their day-to-day finances. Three fundamental concepts can measure a person's understanding of financial literacy: calculating future value savings and present value, measuring one's understanding of inflation rates such as depreciation, and measuring knowledge about risk diversification.

According to the (2020), financial knowledge has a significant positive effect on increasing public demand for insurance. Increased financial knowledge drives higher insurance purchases and increases average annual premiums. Financial knowledge education is also needed to encourage public participation in buying insurance.

According to research conducted by Kubitza et al. (2019), there is an impact between financial literacy and insurance decision-making. Under insurance or low insurance, demand is interpreted as a sign of the community's low level of

financial literacy. However, other results also prove that financial blindness may lead to excessive insurance demand because people want to increase claim payments when there is a risk of loss.

Zhang et al. (2020) also researched the effect of financial literacy on insurance demand. There is strong evidence that financial literacy plays a crucial role in insurance demand in China. This study consistently shows that financial literacy increases the probability of purchasing insurance and the premium paid. Financial literacy is one of the most important variables influencing insurance demand (Low et al., 2021). Access to financial knowledge training plays a more critical role in insurance demand for the wider community.

2.3. Risk Averse

Risk aversion is an individual's reluctance or unwillingness to deviate from the expected results (Ansari et al., 2019). In purchasing an insurance policy, consumers tend to choose a social insurance policy to avoid risk when there is a vulnerability.

According to Wilfred (2020), there are several individual risk attitudes toward purchasing insurance, namely: (1) regarding their perception of financial risk there is a health risk, (2) related to exposure to safety and environmental risks, and (3) experience of these incidents. From some of these risks, people will make decisions to avoid risk by buying more insurance compared to people who are less risk averse.

Previous research conducted by Jun (2014) stated that risk attitude positively affects insurance demand. Risk-averse buyers choose more insurance and minimize losses that cause them to lose income or wealth due to unforeseen events such as illness.

According to Low et al, (2021), there is a significant relationship between risk aversion and insurance demand. Risk-averse individuals are bound to purchase insurance to protect themselves against hazards and vulnerable conditions. Another study by Ansari et al. (2019) stated that risk aversion significantly impacts insurance demand. Risk-averse consumers are willing to participate in the offered insurance program.

2.4. Persuasion as a Mediating Variable

Insurance is a type of business that relies heavily on persuasion. According to Low et al. (2021), Prospective buyers of insurance policies will delay their decision to buy insurance without the intervention of insurance agents or the influence of others. Insurance policies offer intangible benefits on sale, so consumers need to be educated, persuaded, counselled, motivated, and persuaded to act.

According to Wilfred (2020), persuasion is a factor that determines a person's purchase intention to buy insurance, including the influence of peers, family, insurance agents, and others. Social influence is positively related to purchasing insurance, allowing one person to imitate the behavior of others to do the same. Social influence is also a vital source of causing people to change their minds about insurance.

The research of Low et al. (2021) shows that persuasion significantly mediates the relationship between insurance demand and the variables studied, such as insurance demand and risk aversion. Persuasion has a strong influence on people's insurance demand. Individuals who process messages through persuasion tend to be attracted to the insurance offered. Other people can share their opinions and experiences that can influence and support someone's actions following their expectations (Ansari, 2019).

Based on research by Wilfred (2020), the influence of social persuasion is significantly, positively, and strongly associated with people's demand for insurance. When someone buys insurance, they are interested because other people are doing it too, which means that someone may have the same preferences as others, making it easier to persuade others to buy insurance.

2.5. Theoretical Framework

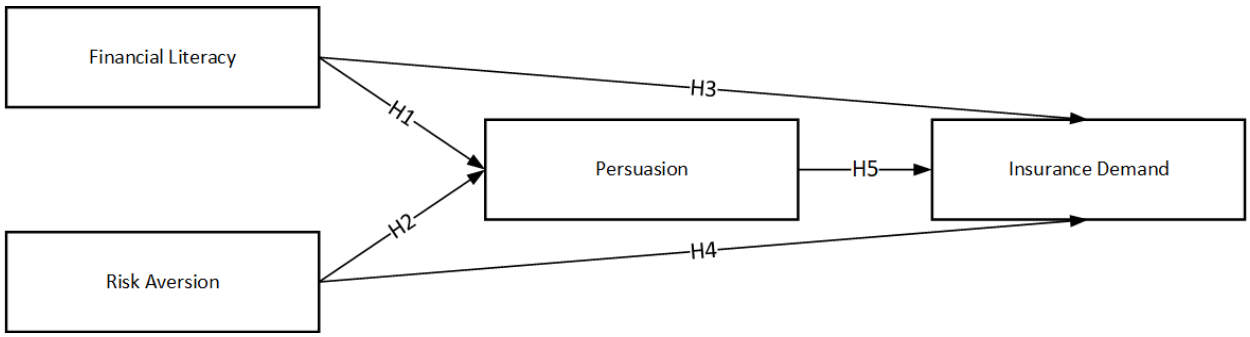

Figure 1. Theoretical Framework

Based on the discussion above, the hypotheses proposed in this study are: (Figure 1)

H1: Financial literacy has a positive influence on persuasion.
H2: Risk aversion has a positive effect on persuasion.
H3: Financial literacy has a positive influence on insurance demand.
H4: Risk aversion has a positive effect on insurance demand.
H5: Persuasion significantly mediates the relationship between insurance demand with financial literacy and risk aversion variables.

3. Methods

3.1 Elements of Research Design

This study aims to determine the factors that affect insurance demand in the community. This study uses quantitative research that emphasizes objective measurement and numerical analysis. Research is carried out quantitatively through descriptive studies that aim to interfere with the phenomenon under study (Sekaran, 2019). Sugiyono (2010) explained that descriptive study or explanatory research is a research method that intends to explain the position of the variables studied and the influence between one variable and another. In this case, it explains the effect of the independent variables, insurance demand, risk aversion, and persuasion, on the dependent variable, insurance demand.

Data collection in this study was carried out by collecting primary data through the distribution of surveys and questionnaires to several respondents. The study setting used is non-contrived, namely a field study of several respondents where the researcher does not regulate the situation of this research. Researcher moderate to excess interference or the involvement of researchers in this study is minimal because it does not intervene related to the data used in the study.

In this study, the unit of analysis was carried out on several respondents in the form of individuals spread across all cities in Indonesia. Cross-sectional studies were adopted as the time horizon in this research design based on observations that analyzed the data collected from the sample group using the questionnaire instruments that had been created.

3.2 Proposed Sampling Method/ Procedures and Sample Size

The sample is part of several populations studied (Sugiyono, 2010). The population studied in this study included all cities in Indonesia, which describe the variation of the research target locations based on geographic locations representing Indonesia's western, central, and eastern regions. In this case, the research targeted individuals, namely men and women of productive age ranging from 18 to 45 years. This target was chosen because individuals can decide to have insurance for themselves at a productive age. Furthermore, one type of non-probability sampling, namely purposive sampling, was chosen as a sampling technique by considering specific criteria, such as demographics and age, and the study's objectives easier to fulfill. The sample being more relevant to the research design. Furthermore,

sampling was carried out to determine the key factors that affect insurance demand by the people in Indonesia, such as insurance demand, risk aversion, and persuasion.

In determining the number of sample sizes to be studied, this study used the Roscoe rule, where the sample size should be between 30 to 500 samples; if there are less than 30 samples, it is not sufficient for the sub-sample variations to be used such as gender and age range. In addition, samples that exceed 500 pieces allow Type II Errors to occur (Sekaran, 2019). In addition, using the Cochran (1977) formula with the following formula:

$$n = \frac{p(1-p)z^2}{e^2}$$

$$n = \frac{(0.1)(1-0.1)(2.58)^2}{(0.05)^2} = 240$$

Where, n = number of samples, p = population proportion (p = 0.1), e = error deviation agreed (e = 0.05) z = level of reliability, where if the level of reliability to be achieved is 99%, it is equivalent to 2.58. So, from the calculation above, the sample that must be collected was 240 respondents.

3.3 Method of Data Collection and the Technique of Data Collection

The data collection approach was carried out using primary data from respondents using a questionnaire distributed to respondents in several cities in Indonesia to know public demand for insurance. The questionnaire used survey techniques in Indonesian because most people use Indonesian in their daily activities by giving questions to respondents.

4. Data Collection

The research data was collected by distributing questionnaires through online forms. The distribution of the questionnaires was carried out for one week, and the questionnaires were distributed to people who are never having insurance other than National Healthcare and Social Security Agency from May 04, 2022, to May 11, 2022.

The data processing technique used Smart PLS. Partial Least Squares (PLS) were used to analyze survey data and test hypotheses and proposed models (Jöreskog & Wold, 1982). PLS is an excellent alternative to multiple regression analysis methods and principal component regression because these methods are more robust or immune. Robust means that the model parameters do not change much when a new sample is taken from the total population (Geladi & Kowalski, 1986). PLS is a predictive technique that can handle many independent variables, even if there is multicollinearity between these variables (Ramzan & Khan, 2010). The analysis of PLS was carried out in three stages: analysis of the outer model, inner model, and hypothesis testing (Hussein, 2015). The validity and reliability were tested using the outer model analysis seen from several indicators: convergent validity, discriminant validity, and one-dimensionality. Convergent validity is assessed by three indicators, namely Cronbach's alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE).

5. Results and Discussion

Respondents who were collected were 240 people with the following profile.

Table 1. Respondent Profile

Demographic Variables		Count	%
Gender	Male	132	55
	Female	108	45
Age	18 - 45	240	100
Marital Status	Single	94	39,2
	Married	144	60,0
Education	Senior High School	13	5,4
	S1	162	67,5
	S2	65	27,1
Income per	< 500.000	3	1,3

month	500.000 - 5.000.000	36	15,0
	5.000.000 - 10.000.000	92	38,3
	10.000.000 - 30.000.000	97	40,4
	>30.000.000	12	5,0

Table 1 above shows the gender demographic. The percentage of men participating in the survey is higher than women, with 132 male respondents (55%) and 108 female respondents (45%). Most respondents are in the age range of 18-45 years. Based on marital status, most respondents were married, with a total of 144 respondents (60%), while the single remaining status was 94 respondents (39.2%). From educational demographics, respondents with bachelor's degree as their latest educational background are the majority in this study, with a total of 162 respondents (67.5%), followed by 13 respondents (5.4%) with high school education/equivalent, and 65 respondents (27.1%) with master's degree.

Henseler et al. (2015) states that the following things must be fulfilled to determine convergent validity: the loading factor for each indicator must be significant with a value greater than 0.60; the mean extracted variance (AVE) for each loading factor must be greater than 0.50; the minimum value of Cronbach Alpha is 0.7; the composite reliability for each loading factor must be greater than 0.60. Table 2 shows that all items from each variable meet convergent validity and reliability.

Table 2. Convergent Validity and Reliability

Variable	Item	Outer Loading	Cronbach's Alpha	Composite Reliability	Variance Extracted (AVE)
Financial Literacy	LK1	0.762	0.840	0.886	0.609
	LK3	0.756			
	LK4	0.805			
	LK5	0.774			
	LK6	0.805			
Risk Aversion	RA1	0.752	0.848	0.892	0.623
	RA2	0.805			
	RA3	0.829			
	RA4	0.737			
	RA5	0.819			
Persuasion	PE1	0.828	0.851	0.899	0.691
	PE2	0.815			
	PE3	0.845			
	PE4	0.837			
Insurance Demand	DM1	0.823	0.860	0.905	0.705
	DM2	0.836			
	DM3	0.855			
	DM4	0.845			

Discriminant validity was assessed using Fornell's Larcker criteria and the cross-loading test. The Fornell-Larcker criterion postulates that the AVE construct must be higher than all its squared correlations (Henseler et al, 2015). Table 3 shows that the model has proven discriminant validity. The Financial Literacy AVE variable (0.847) is higher than the squared correlations (0.781, 0.811, and 0.830). Insurance Demand variable AVE (0.866) is higher than squared correlations (0.811, 0.840 and 0.835). The persuasion variable AVE (0.8701) is higher than the squared correlations (0.830, 0.840, and 0.831). Finally, the Risk Aversion AVE variable (0.789) is higher than the squared correlations (0.781, 0.835, and 0.831). (Table 3)

Table 3. Discriminant Validity Fornell-Larcker Criterion

	Financial Literacy	**Insurance Demand**	**Persuasion**	**Risk Aversion**
Financial Literacy	**0.847**			
Insurance Demand	0.811	**0.866**		
Persuasion	0.830	0.840	**0.870**	
Risk Aversion	0.781	0.835	0.831	**0.789**

Next is the coefficient of determination test. The coefficient of determination test was conducted to determine how much the endogenous variables were simultaneously able to explain the exogenous variables. The higher the R-Square value, the better the prediction model of the proposed research model. The coefficient of determination (R2) test is carried out to determine and predict how enormous or essential the contribution of the independent variables' influence is to the dependent variable. The value of the coefficient of determination is between 0 and 1. If the value is close to 1, the independent variable provides almost all the information needed to predict the dependent variable. However, suppose the R-Square value is getting smaller. In that case, it means that the ability of the independent variables to explain the dependent variable is quite limited (Ghozali, 2016).

According to Chin (1998), the R-Square value is categorized as vital if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. Table 4 below shows that the coefficient of determination (R-Square) on the endogenous Persuasion variable is 0.786. All independent variables influence 78.6% of Insurance Demand (dependent variable). At the same time, the remaining 22% is influenced by other variables not tested in the study. (Table 4)

Table 4. Results of R2 of Endogenous Variables

Latent Constructs	***R-Square Value***	***Evaluation Criteria by Chin (1998)***
Insurance Demand	*0.785*	*Strong*
Persuasion	*0.786*	*Strong*

Hypothesis Testing

We used a nonparametric bootstrapping technique to perform hypothesis testing. Table 5 presents the results of the direct effect hypothesized in this study. The results of the PLS-SEM bootstrap output confirm that there is a significant positive relationship between Financial Literacy and Insurance Demand Using (β = 0.204, t = 2.094, p<0.018) and between Financial Literacy and Persuasion (β = 0.328, t = 4.402, p <0,05). These results lead us to accept hypotheses H1 and H2. There is also a significant positive relationship between Persuasion and Insurance Demand (β = 0.500, t = 5.194, p<0,05), and between Risk Aversion and Insurance Demand (β = 0.227, t =2.214, p<0.014). This result leads us to accept H3 and H4. Then, there is also a significant positive relationship between Risk Aversion and Persuasion (β = 0.593, t = 8.514, p<0,05). This result also leads us to accept H5. (Table 5)

Table 5. Summary of the Direct Effect

Hypothesis	**Relationship**	**Path Coefficient**	**Standard Deviation**	**T - Statistic**	**P Value**	**Result**
H1	Financial Literacy → Insurance Demand	0.204	0.097	2.094	0.018	Supported
H2	Financial Literacy → Persuasion	0.328	0.074	4.402	0.000	Supported
H3	Persuasion → Insurance Demand	0.500	0.096	5.194	0.000	Supported
H4	Risk Aversion → Insurance Demand	0.227	0.102	2.214	0.014	Supported
H5	Risk Aversion → Persuasion	0.593	0.070	8.514	0.000	Supported

Table 6 presents the results of the indirect influence (mediation) contained in this research model. Financial Literacy has no direct effect on Insurance Demand ($\beta = 0.164$, $t = 3.382$, $p<0.05$). Risk Aversion also has no direct effect on Insurance Demand ($\beta = 0.296$, $t = 4.367$, $p<0.05$).

Table 6. Summary of the In-Direct Effect

Relationship	Path Coefficient	Standard Deviation	T - Statistic	P Value	Result
Financial Literacy ⟶ Insurance Demand	0.164	0.048	3.382	0.000	Mediating
Risk Aversion ⟶ Insurance Demand	0.296	0.068	4.367	0.000	Mediating

6. Conclusion and Future Research

Based on the data analysis results and the formulated hypothesis, it can be concluded that Financial Literacy has a direct positive impact on Insurance Demand. It is in line with He (2020), which states that financial knowledge has a significant positive effect on increasing public demand for insurance. Increased financial knowledge drives higher insurance purchases and increases average annual premiums. Financial knowledge education is also needed to encourage public participation in buying insurance.

Risk Aversion directly to Insurance Demand. In purchasing an insurance policy, consumers tend to choose a social insurance policy to avoid risk when there is a vulnerability. These findings are supported by the study of Wilfred (2020), which emphasizes that several individual risk attitudes towards purchasing insurance are (1) regarding their perception of financial risk as health risks, (2) related to exposure to safety and environmental risks, and (3) experience of these incidents. From some of these risks, people will make decisions to avoid risk by buying more insurance compared to people who are less risk averse.

Persuasion as a direct mediating variable on Insurance Demand. Insurance is one type of business that is very dependent on persuasion. Prospective buyers of insurance policies will delay their decision to buy insurance without the intervention of insurance agents or influence from others. Insurance policies offer an intangible benefit to their sales. Hence, consumers need to be educated, persuaded, counseled, motivated, and persuaded to act. Low et al. (2021).

Meanwhile, Financial Literacy mediates the indirect relationship between Insurance Demand, Risk Aversion, and Insurance Demand. Thus, persuasion will positively impact the relationship between Financial Literacy, Risk Aversion, and Insurance Demand.

There are several significant findings from our study. The salient result is that Persuasion is the primary determinant of Insurance Demand. Thus, the influence or recommendations of the people around can increase the demand for insurance. Our results confirm that individuals' expectations of insurance benefits significantly influence insurance desirability or demand.

The results obtained from the hypothesis prove that financial literacy, Risk Aversion, and Persuasion affect Insurance Demand. However, in this study, the hypothesis submitted is fulfilled, and each variable has a significant relationship. There are several inputs for improvement and further research. For example, changing the object of research from people of productive age to people in the age range of the millennial, Gen Z, Gen Y, and Baby Boomer categories to see the relationship between age groups and insurance demand. In addition, research on respondents in other areas will undoubtedly be more exciting and produce more varied results.

Furthermore, further research is recommended to examine other factors that can affect insurance demand, such as internal factors (gender, educational background, income, age, and type of work) and external factors (macroeconomics, pandemics, politics, and geographical location). This will undoubtedly contribute a lot to businesspeople in the economic industry in sharpening analysis and strategies to create opportunities and attract as many new insurance owners as possible in Indonesia and globally.

References

Ansari, Z., Tabash, M. I., Akhtar, A., Khan, S.H. and Al-Matari, E.M., Identifying and ranking the driving forces of social insurance by analytical hierarchy process: evidence from India, *Heliyon*, vol. 5, 2019.

Chin, W. W., *The Partial Least Squares Aproach to Structural Equation Modeling,* Modern Methods for Business Research, pp. 295 - 336, 1998.

Chung, J. F., The demand for life insurance: a quantitative study among generation y in the Klang Value, Malaysia, *Religacion. Revista de Ciencias Sociales y Humanidadaes,* vol. 5, no. 25, pp. 302-314, 2020.

Djoni, K. and Rahardjo, D., Analysis of financial literacy, income and premium on millennials purchase intention of life insurance product., *Budapest International Research and Critics Institute-Journal*, vol. 4, no. 4, pp. 11523-11535, 2021.

Geladi, P., and Kowalski, B.P., Partial least-squares regression: A tutorial, *Analytica Chimica Acta*, 185(1), 1-17, 1986.

Ghozali., *Aplikasi Analisis Multivariete Dengan Program IBM SPSS*, Semarang: Badan Penerbit Universitas Diponegoro, 2016.

He, J., Risk Attitude, Financial Knowledge and Commercial Life Insurance Needs. *Modern Economy*, 11, 185- 199, 2020.

Henseler, J., Ringle, C. M. and Sarstedt, M., A new criterion for assessing discriminant validity in variance-based structural equation modeling, *Journal of the Academy of Marketing Science*, vol. 43, no. 1, pp. 115–135, 2015.

Hussein, A.S., *Penelitian Bisnis dan Manajemen Menggunakan Partial Least Square (PLS) dengan smartPLS 3.0*, Fakultas Ekonomi dan Bisnis Universitas Brawijaya, 2015.

Jöreskog, K. G., & Wold, H. O., Systems under indirect observation: causality, structure, prediction, North Holland, 1982.

Khan, A., Rashid, H., Yaqud, R. M. and Abbas, S., Determinants of customer perception about adoption of Islamic insurance (takaful) in Pakistan, *Journal of Business and Social Review in Emerging Economies*, vol. 6. No. 4, 2020.

Kubitza, C., Hofmann, A., & Steinort, P., Financial Literacy and Precautionary Insurance. *International Center for Insurance Regulation*, vol. 4, no. 19, 2019.

Jun, B., Harn, F., Theng, G., Yee, T. and Choon, T., The determinants on health and life insurance demand among Malaysia, Faculty of Business and Finance Universiti Tunku Abdul Rahman, 2014.

Lin, C., Hsiao, Y., & Yeh, C., Financial Literacy, Financial Advisor, and Information Sources on Demand for Life Insurance, *Pasific-Basin Finance Journal,* 2017.

Low, D., Nathan, R. J., Gorgenyi-Hegyes, E., & Fekete-Farkas, M., The Demand for Life Insurance in a Developing Country and The Mediating Role of Persuasion. *Journal of International Studies*, vol. 14, no. 3, pp. 138-154, 2021.

Mahdzan, N. S., & Victorian, S. M.,The determinants of life insurance demand: A focus on saving motives and financial literacy. *Canadian Center of Science and Education*, vol. 9, no. 5, 2013.

Ramzan, S. and Khan, I. M., Dimension reduction and remedy of multicollinearity using latent variable regression methods, *World Applied Science Journal*, vol. 8, no. 4, pp.404-410, 2010.

Sekaran, U., & Bougie, R., *Research methods for business: A skill-building approach*, 8th Edition, Wiley, 2019.

Setiadie, H., Analisis Kompetisi dan Prospek Industri Asuransi di Indonesia: Studi pada Industri Asuransi Jiwa dan Asuransi Umum di Indonesia, Tesis: Universitas Gadjah Mada, 2019.

Sugiyono, *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung, Alfabeta, 2010.

Wilfred, V., Factors Influencing the Purchase Intention of Health Insurance in Kota Kinabalu Sabah, *Malaysian Journal of Business and Economic*, vol. 7, no. 2, pp. 99-121, December 31, 2020.

Zhang, D., Wang, H., Guariglia, A., & Fan, G., Growing Out of The Growing Pain: Financial Literacy and Life Insurance Demand in China. *Pasific-Basin Finance Journal*, 66. Available: https://www.sciencedirect.com/science/article/pii/S0927538X20306715, February 12, 2020.

Biography

Dr. Yuli Eni, S.E., S.Kom., M.M successfully completed the double degree undergraduate program majoring in Information Systems-Management (2007 – 2012) at Binus University. Then she continued her postgraduate program with a major in Management Financial Analysis (2012 – 2014). She took her doctoral education in (2016 – 2019) and received a Cum laude predicate and best graduate in 2019. Started her career as an accounting and financial controller at the Global Music Course (2007). In 2008 she took a part time job as marketing general support corporate marketing communication. Then in 2009 she became Assistant management laboratory. In 2012, she worked as a teaching & assistant coordinator, in 2013-2021 she became Head of Business Management Laboratory and in 2021 – now she

became Academic assurance and recognition manager. In 2014 she started as a lecturer at the Faculty Binus Business School Undergraduate Program and master's degree Program in 2020 after she completed his doctoral studies.

Dwi Maharani is a Master of Management Student at Binus Business School, Binus University, Kebayoran Baru, Jakarta, Indonesia. She graduated with a Bachelor of Informatics Engineering from Sriwijaya University in 2016. She has been working professionally at state-owned corporation, Taspen, specializing as Programmer in Information and Technology Division for more than five years.

Merry Indra Cahyanti is a Master of Management Student at Binus Business School, Binus University, Kebayoran Baru, Jakarta, Indonesia. She graduated from Sekolah Tinggi Ilmu Ekonomi Jakarta in economic and management in 2009. She has been working professionally at state-owned corporation, Taspen as Pension Development Sub.Dept Head in the Actuary Division since 2006.

Syahrizal Dwinata is a Master of Management Student at Binus Business School, Binus University, Kebayoran Baru, Jakarta, Indonesia. He graduated Bachelor of Information and System from Sriwijaya University in 2016. He has been working professionally at state-owned corporation, Taspen, specializing as Programmer in Information and Technology Division for more than five years.