FROM AWARENESS TO ACTION: THE JOURNEY OF NON-INSURANCE POLICYHOLDERS IN MALAYSIA

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Abstract. The purpose of this study was to investigate the factors influencing the level of life insurance ownership among non-life insurance policyholders. Malaysia faces the challenge of low insurance penetration, with only 40.4% of the population covered by insurance as of 2022, which underscores the need for greater insurance ownership. A sample population of 450 respondents, who were non-life insurance policyholders, was targeted. 398 non-life insurance policyholders (88.4% of the sample) met the inclusion criteria and took part in the study. SPSS Version 27.0 was used to process the survey data. Various statistical data analyses and procedures were used. The study results indicate that the premium factor of insurance had the most significant impact, with the risk factor related to pandemics closely following, in influencing the level of life insurance ownership in Malaysia. These findings give useful insights for life insurance practitioners and researchers, as well as recommendations for future research.
Keywords: *insurance, insurance premiums, pandemic risk, ownership rates*

Introduction

In 2023, Malaysia continues to grapple with a notable challenge: a relatively low insurance penetration rate. Data from the Life Insurance Association of Malaysia's (LIAM) 2022 Annual Report indicates that there were 13.4 million active insurance policies in the country, marking a marginal growth of 0.1% from the preceding year. Compared to the estimated 2023 Malaysian population of 33.2 million (DOSM, 2023), this figure suggests that only about 40.4% of the population had insurance coverage in 2022. According to the LIAM Annual Report (2018), the insurance sector in Malaysia has recorded higher total insurance premiums, with an increase of 4.9% to RM66.6 billion compared to RM63.5 billion in 2017. Despite this positive trend, the disparity between the number of policies in force and the total population underscores the challenge of low insurance penetration in Malaysia. The Malaysian Budget 2021 highlighted the need to promote insurance ownership and prioritize the well-being of the public. According to the Department of Statistics Malaysia, the Movement Control Order (MCO) implemented in March 2020 due to COVID-19 dramatically exposed the financial vulnerability of over half of the respondents, highlighting the consequences of insufficient insurance coverage during unexpected situations. According to Sang et al. (2020), ownership levels were unusually low in 2019, with a life insurance penetration rate of just 56%, far below the targeted national rate of 75% set by Bank Negara Malaysia in 2020. Meanwhile, Fong (2023) stated that achieving a higher insurance penetration rate benefits individuals and positively affects the Malaysian economy. The insurance landscape in Malaysia, regulated under the Insurance Act 1996 by Bank Negara Malaysia since 1997, plays a significant role in the financial sector, contributing to the nation's revenue and economic growth.

Although initiatives like Perlindungan Tenang were launched in 2017, Malaysia faces challenges in ensuring adequate insurance coverage for its 33.2 million population. With only 40.4% of Malaysians insured, low insurance penetration raises concerns about financial risk and the effectiveness of government programs. A review of the Financial Report by BNM (2017) shows that financial limitations persist, even with BNM's objective of widespread insurance coverage across all income brackets. According to a report by DOSM (2022), the B40 income group earns below RM4,890, the M40 group earns below RM10,959, and the T20 group earns more than RM10,690. Rising living costs and inflation have made it increasingly difficult for individuals to afford insurance. The Perlindungan Tenang initiative aims to address this issue by providing accessible and affordable insurance products, mainly targeting the B40 income group. While these efforts aim to increase insurance awareness and utilization, the effectiveness of the Perlindungan Tenang initiative in achieving its objectives remains uncertain. Furthermore, residents in high-cost living areas need help to afford insurance even if they are not classified as low-income. The COVID-19 pandemic, starting in early 2020, significantly impacted global well-being, causing loss of life and economic damage, including in Malaysia. The pandemic also led to increased healthcare expenses and raised concerns about providing for beneficiaries after the policyholder's death. This study aims to explore the factors influencing life insurance ownership among Malaysians in the aftermath of the COVID-19 pandemic.

Literature review

Life insurance ownership rate among the Malaysian population

According to Sang et al. (2020), the rates of life insurance and family takaful policies in Malaysia are relatively low compared to those in developed countries. Bakri et al. (2018) conducted a survey in Malaysia aimed at determining the variables influencing insurance purchasing among the B40 group, focusing specifically on the B40 population in Perak. Their findings underscored the importance of variables such as marital status, occupational sector, number of dependants, monthly expenditure, and savings in influencing insurance spending among Perak's B40 group. Similarly, research by Panigrahi et al. (2018) supports these findings by linking these variables to insurance ownership. In line with the conclusions of the Yakob and Abd Rahman (2017) study, there is a correlation between socio-economic and demographic traits and the ownership of family takaful or life insurance policies in the B40 market. Furthermore, Bodet (2008) notes that life insurance ownership rates significantly concern insurance management companies amid escalating industry competition. Subsequent sections of this study will offer a more in-depth analysis of each independent variable.

Relationship between the insurance premium and the life insurance ownership rate among the Malaysian population

Balqis-Ali et al. (2023) highlighted the costly nature of private health insurance premiums in Malaysia, reaching as high as RM200-RM300 per month, significantly exceeding the median monthly salary of Malaysians in 2021, according to the DOSM (2022) salaries and wages survey report. Research by Agyepong et al. (2016) stated that the affordability of insurance premiums poses a challenge for low-income individuals, influencing their ability to purchase insurance products in Ghana. Studies like Yee and Majid (2014) in Malaysia have analysed life insurance sales, noting the premium

factor's presence as an influencing factor but not the primary one. Zietz (2003) defines "premium" as the cost of an insurance policy. Sianipar and Hutagalung (2021) underscore the insurance industry's importance to a country's financial system. Uddin (2017) research emphasized the potential of micro insurance to protect the economically vulnerable in India, where 90% of the population lacked coverage. Considering these findings, this study aims to evaluate the effect of the insurance premium factor on life insurance ownership among Malaysians. The researcher aims to explore the hypothesis regarding the potential influence of insurance premiums on the dependent variable, life insurance ownership.

Hypothesis 1: There is a significant relationship between the insurance premium and the life insurance ownership rate among the Malaysian population.

Relationship between the pandemic risk and the life insurance ownership rate among the Malaysian population

Shamsuddin et al. (2022) highlighted the economic fallout of the COVID-19 outbreak, altering household spending habits towards more cautious investments. Wang et al. (2022) stated that this shift contributed to a recession, heightening insurers' price sensitivity. In research by Biagini et al. (2021) as well as Brum and De Rosa (2021), the pandemic prompted policyholders to abandon insurance policies due to financial instability, affecting various sectors and leading to increased poverty and policy terminations. El Keshky et al. (2020) compared the pandemic impact to the global financial crisis, noting its amplified effect on consumer spending, corporate inventory, and unemployment. Short (2022), examining the 1918 influenza epidemic in the United States, revealed increased insurance purchases in severely affected regions. Burnett and Palmer (1984) demonstrated the influence of risk elements on life insurance demand, with risk aversion significantly driving insurance decisions. Similarly, Ng et al. (2014), Lai (2000), and Billah (2007) stressed the role of risk coverage in insurance purchases, safeguarding against life, asset, and possession risks. Prior research outside Malaysia indicates a clear association between pandemic risk and insurance ownership, although few studies have explicitly focused on the COVID-19 pandemic. This hypothesis serves as a starting point for future studies delving into the relatively new independent variable of pandemic risk within this field.

Hypothesis 2: There is a significant relationship between the pandemic risk and the life insurance ownership rate among the Malaysian population.

Materials and Methods

The methodology section outlines the research framework, study design, sampling methods, data collection, and analysis procedures, ensuring the study reliability and appropriateness in addressing the research questions.

Theoretical background and conceptual framework

This study will adopt a quantitative research approach, focusing on analysing different relationships among the variables under investigation. The study framework, illustrated in *Figure 1*, will explain these variables and how they relate to each other.

The independent variables encompass two key insurance factors. First is the insurance premium, derived from a questionnaire adapted from Yee and Majid (2014). Second is the pandemic risk, drawn from the Yakath Ali (2018) study. The study will evaluate the life insurance ownership rate among the Malaysian population as the dependent variable, based on a questionnaire adapted from Panigrahi et al. (2018).

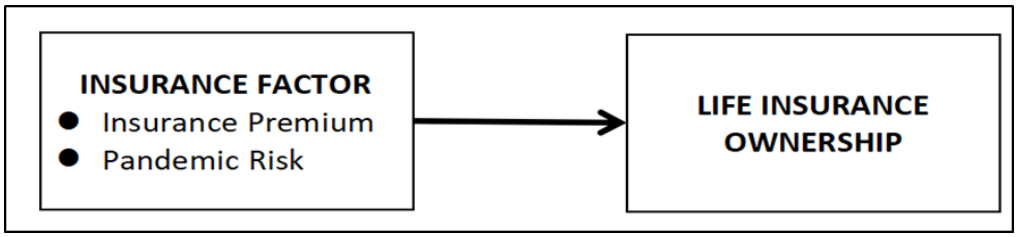

Figure 1. *Conceptual framework.*

Research design

The study investigates life insurance, incorporating both Islamic and non-Islamic principles, with a focus on traditional life insurance and medical/health insurance. It excludes general insurance to ensure diverse respondent data. Prior research has predominantly focused on takaful insurance (Che Mohd Salleh and Megat Laksana, 2018; Che Mohd Salleh et al., 2017; Md Husin and Ab Rahman, 2016), agriculture insurance (Alam et al., 2020; Afroz et al., 2017), or health insurance (Mamun et al., 2021; Aziz et al., 2019; Cheah and Goh, 2017; Loewenstein et al., 2013). In contrast, this study adopts a macro-scale approach, targeting respondents from the entire Malaysian population and encompassing diverse backgrounds. Therefore, individuals already holding life insurance policies are excluded from this study.

Population, sample and unit of analysis

In this survey, the Malaysian population is the target focus group. However, surveying the entire population of 32.7 million is impractical. Hence, a sample will be used to collect the necessary information. Establishing a sufficient sample size, as highlighted by Chua (2009), is crucial for dependable and diverse data. Initially aiming for a sample size of 384, based on Krejcie and Morgan (1970) recommendations relative to the population size, 450 questionnaires were distributed. From the responses, 52 individuals were found to already possess life insurance, leaving 398 eligible respondents without life insurance.

Measurement of variables

In this section, the researcher outlines the design of the research questions employed in collecting data via a Google online survey questionnaire. The study centres around one dependent variable, the rate of life insurance ownership among the Malaysian population, and examines two independent variables: insurance premiums and pandemic risk factors. The questionnaire comprises six sections. Section A addresses respondent eligibility, inquiring whether participants hold a life insurance policy. Only respondents answering "no" proceed to the subsequent sections, while those responding "yes" are excluded from further participation. Section B gathers essential demographic data, including gender, marital status, age range, employment status, and monthly income, based on empirical studies. Section C, focusing on the insurance premium factor, adapts

questionnaires from Yee and Majid (2014) with reliability coefficient of 0.716. Section D uses questions from Yakath Ali (2018) with a dependability coefficient of 0.700. The customized questionnaires on the dependent variable, life insurance ownership, are provided by Panigrahi et al. (2018) SERVQUAL model study, which shows a reliability coefficient of 0.835 in Section E. All questionnaires from Sections C to E employ the Likert scale developed by Likert (1932), utilizing a five-point scale from 'strongly disagree' to 'strongly agree' to gauge respondent agreement with the presented statements, detailed in *Table 1*.

Table 1. *Five-point likert scale.*

Statement	Scale
Strongly disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly agree	5

Results and Discussion

Demographic profiles

According to Sekaran (2016), a good survey should have a response rate of at least 75% from respondents, and this study recorded 88.4% of completed questionnaires. Therefore, we can utilize the data collected from survey questionnaires for analysis and hypothesis testing. 170 (42.7%) were male, and 228 (57.3%) were female from 398 respondents. The 14.6% gender difference is unlikely to impact data analysis, consistent with Liu et al. (2021) research, which found no correlation between gender and insurance ownership. In terms of marital status, 113 respondents (28.4%) were single, 151 respondents (37.9%) were married without children, and 134 respondents (33.7%) were married with children. The 71.6% difference between unmarried and married respondents is unlikely to significantly influence the analysis, as research by Dzaja (2013) indicates that marital status and family size do not statistically affect insurance ownership rates. 113 respondents (28.4%) fell below 18 years old, 111 respondents (27.9%) ranged between 19 and 30 years old, 126 respondents (31.7%) were between 31 and 59 years old, and 48 respondents (12.1%) were 60 years or older. Employment status showed that 149 respondents (37.4%) were employed full-time, 158 (39.7%) were employed part-time, and 91 (22.9%) were unemployed. In terms of monthly household income, 170 individuals (42.7%) had an income below RM4,890, categorized as the Bottom 40 (B40) group according to DOSM (2022). Additionally, 128 respondents (32.2%) had an income ranging from RM4,891 to RM10,959, classified as the Middle 40 (M40) group, and 9 respondents (2.3%) had an income exceeding RM10,960, categorized as the Top 20 (T20) group. Furthermore, 91 respondents (22.9%) reported having no income. *Table 2* presents the summary of the frequency analysis.

Table 2. *Summary of respondents' demographic profile.*

Category	Frequency (N)	Percentage (%)
Have a life insurance policy		
Yes	52	11.6
No	398	88.4

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Gender		
Male	170	42.7
Female	228	57.3
Marriage status		
Single	113	28.4
Married, No kids	151	37.9
Married with kids	134	33.7
Age		
<18 years old	113	28.4
19-30 years old	111	27.9
31-59 years old	126	31.7
>60 years old	48	12.1
Work status		
Working full time	149	37.4
Working part time	158	39.7
Unemployed	91	22.9
Monthly income		
<RM 4890	170	42.7
RM 4891-RM10959	128	32.2
>RM10960	9	2.3
No income	91	22.9

The survey question reliability was enhanced using Cronbach's alpha, which was assessed based on data from 398 respondents. Before the analysis, the researcher performed reverse coding on six negatively worded items: PI2 and PI5. Reverse coding was done by assigning the opposite values of the Likert scale responses, changing 1, 2, 3, 4, and 5 to 5, 4, 3, 2, and 1, respectively. The reliability of the research questions was determined based on Cronbach's alpha values, following the guidelines introduced by Neff (2003) in the Self-Compassion Scale (SCS), as shown in *Table 3*. The overall analysis showed good internal consistency for the variables examined in the study. One item, RP5 from section E, was removed as its removal improved Cronbach's alpha values, ensuring better reliability and internal consistency. The Cronbach's alpha values for the independent variables-insurance premium factor and pandemic risk factor-and the dependent variable of ownership rate were 0.985, 0.870, and 0.942 respectively. These values exceeded the initially established thresholds of 0.716, 0.700, and 0.835 respectively.

Table 3*. Self-Compassion Scale (SCS).*

Alpha value	Strength of relationship
<0.600	Weak
0.600 to 0.700	Simple
0.700 to 0.800	Good
0.800 to 0.900	Very good
>0.900	Excellent

The relationship between variables

Pearson correlation coefficient analysis was conducted to assess the linear relationship between the variables. Insurance premium factor (PI) showed a strong positive linear relationship with the dependent variable life insurance ownership rate (KP), with a correlative coefficient of 0.611 ($p<0.01$). The variable pandemic risk factor

(RP) demonstrated a moderately positive linear relationship with KP, with a correlative coefficient of 0.514 ($p<0.01$). PI and RP showed a moderately positive linear relationship, with a correlative coefficient of 0.571 ($p<0.01$). In summary, all independent variables (PI and RP) showed significant positive linear relationships with the dependent variable (KP). These findings are given in *Table 4*. Multiple regression analysis was used to study the relationships among the variables. The correlation coefficient (R) between the observed and predicted values of the dependent variable, the life insurance ownership rate (KP), is 0.644. The R-squared value of 0.415 indicates that 41.5% of the variance in the life insurance ownership rate can be explained by the independent variables (PI and RP). Considering the number of predictors, the adjusted R-squared value is 0.411, indicating that the two independent variables in the study explained 41.1% of the variation in the life insurance ownership rate.

***Table 4**. Analysis of Pearson Correlation coefficient.*

Variables	KP	PI	RP
Life insurance ownership rate (KP)	1		
Insurance premium factor (PI)	0.611**	1	
Pandemic risk factor (RP)	0.514**	0.571**	1

*Note: ** Correlation is significant at the 0.01 level (2-tailed).*

The hypothesis testing

The F-value of 93.260 with a significance level (p-value) of 0.000 (<0.01) indicates that the model is statistically significant. This suggests that the independent variables have a significant influence on the dependent variable. The Durbin-Watson value of 1.756 falls within the normal range, indicating the absence of autocorrelation. Additionally, the independent variables showed positive linear relationships with each other, with the strongest relationship observed between PI and RP. The study used t-values and p-values to test hypotheses, with a significance level of 0.05. This approach is commonly practice and strikes a balance between being too strict and too lenient. The t-values were compared using references such as Beyer (2017). Overall, the study followed standard practices in hypothesis testing. With a df (degrees of freedom) of 397 and a significance level (α) of 0.05, unidirectional, the critical value for this study is 1.649. Therefore, decisions regarding the hypotheses in this study are based on the condition ($t>1.649$, $p<0.05$).

Influence of insurance premium on the life insurance ownership rate

The independent variable insurance premium has a significant positive relationship with the life insurance ownership rate. The t-value (2.460) and p-value (0.01) meet the desired criteria ($t>1.649$, $p<0.05$). Therefore, the first hypothesis, stating a significant relationship between insurance premiums and the life insurance ownership rate among the Malaysian population, is accepted. This indicates that insurance premiums can positively influence the life insurance ownership rate. In other words, the insurance premium has the biggest influence on the life insurance ownership rate compared to the other two factors

Influence of pandemic risk on the life insurance ownership rate

The independent variable pandemic risk has a significant positive relationship with the life insurance ownership rate. The t-value (5.333) and p-value (0.00) meet the desired criteria ($t>1.649$, $p<0.05$). Therefore, the third hypothesis, stating a significant relationship between pandemic risk and the life insurance ownership rate among the Malaysian population, is accepted. This indicates that pandemic risk can positively influence the life insurance ownership rate. *Table 5* provides a summary of the hypothesis testing results based on the t-values and p-values.

Table 5. *Mutiple regression coefficient parameter estimates*.

Variables	Unstandardized coefficients		Standardized coefficients	t-value	p-value
	β	Std. Error	Beta		
Constant	0.504	0.805		5.913	0.000
Insurance premium (PI)	0.539	0.219	0.899	2.460	0.014
Pandemic risk (RP)	0.191	0.036	0.253	5.333	0.000

Insurance provides financial security during difficult times, ensuring that individuals and their loved ones are supported. Concerns have been raised, even in Malaysia, about how the COVID-19 pandemic effects on life insurance ownership have affected the world economy. The researcher looked back at earlier research to determine what factors affected ownership in order to get a more in-depth understanding. This study aims to examine insurance factors that could impact Malaysia's rate of ownership of life insurance policies. The primary goal is to comprehend the variables that affect ownership, such as the effect of premium insurance and the possibility of a pandemic. The goals are based on previous research and are intended to provide new perspectives. Insurance is essential for long-term financial planning, providing a safety net, and reducing financial burdens. However, individuals often need to pay more attention to life insurance, prioritizing coverage for cars and homes instead. They need to realize the importance of protecting their lives, which enables them to sustain their livelihoods. Life is unpredictable, and unexpected events can lead to financial hardships, such as medical expenses and debts, after the loss of a family member.

Influence of insurance premium on the life insurance ownership rate

The first question addressed in this study is whether the premium insurance factor still influences the life insurance ownership rate among the Malaysian population. The answer to this question is undoubtedly yes. This is supported by the findings of the study in the correlative analysis and multiple regression analysis sections. The study found that the premium insurance factor has a strong positive linear relationship with the life insurance ownership rate. This relationship is statistically significant and positively correlated ($r=0.611$, $p<0.01$). These findings indicate a mutually positive influence between the two variables. The first hypothesis of the study was also accepted based on the final analysis results. This supports previous studies by Beenstock et al. (1988), which found that premium insurance plays a significant role in insurance purchasing decisions. Supporting this statement, a study by Yazid et al. (2012) focused on insurance premium payments and found a positive relationship with family takaful demand. Researchers such as Crosby and Stephens (1987) as well as Auxier (1976) have described the challenges faced by buyers in comparing insurance policies due to complex premium structures. Therefore, the study provides evidence that the premium

insurance factor indeed influences the life insurance ownership rate among the Malaysian population.

Influence of pandemic risk on the life insurance ownership rate

Another objective of the study was to determine whether the pandemic risk factor has an impact on the life insurance ownership rate among the Malaysian population. The findings of the study support this hypothesis. The analysis of Pearson correlation and multiple regression reveals a significant positive linear relationship between the independent variable of pandemic risk and the dependent variable of life insurance ownership rate ($r=0.514$, $p<0.01$). This finding indicates a strong positive correlation between the two variables. The acceptance of the third hypothesis aligns with previous research, such as the study conducted by Short (2022), which found that pandemic risks, such as the previous influenza outbreak, played a crucial role in increasing insurance purchases. Many Americans bought insurance policies after their country was hit by the influenza pandemic. Their study can support the current hypothesis because the COVID-19 pandemic also brings similar risks. Loss of life due to the virus and income disruption caused by lock down measures can have a profound impact on the population. Therefore, the study provides evidence that the pandemic risk factor indeed influences the life insurance ownership rate among the Malaysian population.

Contribution, limitations and directions for future research

The findings of this study offer insights for the government to craft policies promoting insurance ownership. For instance, reducing monthly premiums could make insurance more affordable for the B40 and M40 groups. Additionally, implementing temporary premium waivers for policyholders facing sudden job loss due to the COVID-19 pandemic could alleviate financial burdens, including insurance expenses. Future research should expand on these findings to foster improvements, ensuring that all Malaysians can access life insurance policies that safeguard their well-being and financial security. The study had several limitations. Firstly, the sample size of 398 individuals may have limited the breadth of findings. In future research, larger samples could improve the resulting robustness. Secondly, there was a significant disparity in respondent characteristics, particularly with the under-representation of elderly individuals and those in the T20 category. Thirdly, the study chosen independent variables explained only 41.08% of the variance in the dependent variable. Future researchers should consider including more independent variables to gain a more comprehensive understanding of research outcomes. Addressing these gaps is crucial to enhancing the quality and breadth of future studies in this field.

Conclusion

The first question individuals often ask themselves when considering life insurance is whether they need it or not. The answer depends on whether one could suffer significant financial loss due to death or disability. If the answer is yes, then the answer to the ownership question should also be yes. This study has identified two decisive factors that can influence the life insurance ownership rate: premiums and pandemic risk. The implications of this study are significant for insurance companies. The topic of life insurance is complex and requires insurers' attention to each consumer. Insurers must

play a role in determining affordable monthly premiums. They should seize the opportunity presented by the low penetration rate of insurance in Malaysia as a business opportunity or investment. Additionally, the government should play a role in promoting the purchase of insurance policies for self-protection. The government's initiatives to offer lower premium schemes, such as Perlindungan Tenang, have had little effect on increasing life insurance ownership in Malaysia. According to LIAM (2018), the number of insurance policies sold explicitly to the B40 population was only around 29,000 until 2018. The low penetration rate of life insurance policies among the B40 population further supports this conclusion. This research contributes valuable insights for insurance companies and policy-makers to enhance policies and initiatives, emphasizing the importance of addressing premium costs, pandemic risks, and targeted promotional strategies to increase life insurance penetration among Malaysians.

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Conflict of interest

The authors declare no conflict of interest with respect to the research, authorship and/or publication of this article.

REFERENCES

[1] Afroz, R., Akhtar, R., Farhana, P. (2017): Willingness to pay for crop insurance to adapt flood risk by Malaysian farmers: An empirical investigation of Kedah. – International Journal of Economics and Financial Issues 7(4): 1-9.

[2] Agyepong, I.A., Abankwah, D.N.Y., Abroso, A., Chun, C., Dodoo, J.N.O., Lee, S., Mensah, S.A., Musah, M., Twum, A., Oh, J., Park, J. (2016): The “Universal” in UHC and Ghana’s National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle income country. – BMC Health Services Research 16: 1-14.

[3] Alam, A.F., Begum, H., Masud, M.M., Al-Amin, A.Q., Leal Filho, W. (2020): Agriculture insurance for disaster risk reduction: A case study of Malaysia. – International Journal of Disaster Risk Reduction 47: 9p.

[4] Auxier, A.L. (1976): A test of the usefulness of policy information in ranking life insurance alternatives. – Journal of Risk and Insurance 43(1): 87-98.

[5] Aziz, S., Md Husin, M., Hussin, N., Afaq, Z. (2019): Factors that influence individuals’ intentions to purchase family takaful mediating role of perceived trust. – Asia Pacific Journal of Marketing and Logistics 31(1): 81-104.

[6] Bakri, S.M., Rambeli, N., Hashim, E., Romli, N., Karim, N.A.H.A., Sulaiman, N.A. (2018): Faktor Penyertaan Perbelanjaan Insurans dalam Kalangan Isi Rumah Berpendapatan Terendah (B40): Factor of participation Lower Income Households (B40) in Insurance Expenditure. – Management Research Journal 7: 59-74.

[7] Balqis-Ali, N.Z., Jailani, A.S., Fun, W.H., Jawahir, S., Sararaks, S., Lee, G.H. (2023): Effect of supplementary private health insurance on inpatient utilisation: Evidence from Malaysia. – Heliyon 9(3): 11p.

[8] Bank Negara Malaysia (BNM) (2017): Laporan Kestabilan Kewangan dan Sistem Pembayaran. – BNM 10p.
[9] Beenstock, M., Dickinson, G., Khajuria, S. (1988): The relationship between property-liability insurance premiums and income: An international analysis. – Journal of risk and Insurance 13p.
[10] Beyer, W.H. (2019): Handbook of tables for probability and statistics. – CRC Press 656p.
[11] Billah, M.M.S. (2007): Applied Takaful and Modern Insurance: law and practice. – Sweet & Maxwell Asia 350p.
[12] Biagini, F., Huber, T., Jaspersen, J.G., Mazzon, A. (2021): Estimating extreme cancellation rates in life insurance. – Journal of Risk and Insurance 88(4): 971-1000.
[13] Brum, M., De Rosa, M. (2021): Too little but not too late: nowcasting poverty and cash transfers' incidence during COVID-19's crisis. – World Development 140: 12p.
[14] Bodet, G. (2008): Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. – Journal of Retailing and Consumer Services 15(3): 156-162.
[15] Burnett, J.J., Palmer, B.A. (1984): Examining life insurance ownership through demographic and psychographic characteristics. – Journal of Risk and Insurance 14p.
[16] Che Mohd Salleh, M., Kassim, S., Mustapha Kamil, B.A., Razali, S.S., Che Embi, N.A. (2017): A preliminary analysis on the impact of flood and the awareness of the flood victims towards Takaful protection: A study of eastcoast Malaysia's flood victims. – Journal of Islamic, Social, Economics and Development (JISED) 2(6): 29-45.
[17] Che Mohd Salleh, M., Megat Laksana, N.N. (2018): Awareness of flood victims in the East-Coast region of Malaysia towards the takaful flood policy: a crosstabulation analysis based on demographic variables. – Management & Accounting Review (MAR) 17(1): 63-78.
[18] Chua, Y.P. (2009): Statistik penyelidikan lanjutan: Ujian regresi, analisis faktor dan analisis SEM II. – McGraw-Hill (M), Buku 5 405p.
[19] Cheah, Y.K., Goh, K.L. (2017): Determinants of the demand for health screening in Malaysia: The case of the aged population. – The Social Science Journal 54(3): 305-313.
[20] Crosby, L.A., Stephens, N. (1987): Effects of relationship marketing on satisfaction, retention, and prices in the life insurance industry. – Journal of Marketing Research 24(4): 404-411.
[21] Dzaja, I. (2013): The effect of social and demographic factors on life insurance demand in Croatia. – International Journal of Business and Social Science 4(9): 8p.
[22] Department of Statistics Malaysia (DOSM) (2023): Demographic statistics Malaysia first quarter 2023. – DOSM 2p.
[23] Department of Statistics Malaysia (DOSM) (2022): Salaries & wages survey report, Malaysia, 2021. – DOSM 5p.
[24] El Keshky, M.E.S., Basyouni, S.S., Al Sabban, A.M. (2020): Getting through COVID-19: The pandemic's impact on the psychology of sustainability, quality of life, and the global economy-A systematic review. – Frontiers in Psychology 11: 12p.
[25] Fong, P.H.Y. (2023): Feasibility of artificial intelligence in improving sales and service of insurance agents in the life insurance industry of Malaysia. – UTAR 291p.
[26] Krejcie, R.V., Morgan, D.W. (1970): Determining Sample Size for Research Activities. – Educational and Psychological Measurement 30: 607-610.
[27] Lai, T.L. (2000): Factors affecting individual life insurance ownership, a study of Penang residents. – Universiti Sains Malaysia 44p.
[28] Life Insurance Association of Malaysia (LIAM) (2018): Annual Report 2017. – LIAM 55p.
[29] Likert, R. (1932): A technique for the measurement of attitudes. – Archives of Psychology 53p.

[30] Liu, M., Luo, Z., Zhou, D., Ji, L., Zhang, H., Ghose, B., Tang, S., Wang, R., Feng, D. (2021): Determinants of health insurance ownership in Jordan: a cross-sectional study of population and family health survey 2017-2018. – BMJ Open 11(3): 8p.
[31] Loewenstein, G., Friedman, J.Y., McGill, B., Ahmad, S., Linck, S., Sinkula, S., Beshears, J., Choi, J.J., Kolstad, J., Laibson, D., Madrian, B.C. (2013): Consumers' misunderstanding of health insurance. – Journal of Health Economics 32(5): 850-862.
[32] Mamun, A.A., Rahman, M.K., Munikrishnan, U.T., Permarupan, P.Y. (2021): Predicting the intention and purchase of health insurance among Malaysian working adults. – Sage Open 11(4): 18p.
[33] Md Husin, M., Ab Rahman, A. (2016): Do Muslims intend to participate in Islamic insurance? Analysis from theory of planned behaviour. – Journal of Islamic Accounting and Business Research 7(1): 42-58.
[34] Neff, K.D. (2003): The development and validation of a scale to measure self-compassion. – Self and Identity 2(3): 223-250.
[35] Ng, B.W.J., Fong, L.H., Goon, L.T., Tan, Y.C., Tan, X.Y. (2014): The determinants on health and life insurance demand among Malaysian. – UTAR 115p.
[36] Panigrahi, S., Azizan, N.A., Waris, M. (2018): Investigating the empirical relationship between service quality, trust, satisfaction, and intention of customers purchasing life insurance products. – Indian Journal of Marketing 19p.
[37] Sang, L.T., Mohidin, R., Budin, D.S.A. (2020): The role of financial knowledge on life insurance and family takaful awareness. – Malaysian Journal of Business and Economics (MJBE) 7(1): 131-131.
[38] Sekaran, U. (2016): Research methods for business: A skill building approach. – Wiley 448p.
[39] Shamsuddin, S.N., Ismail, N., Roslan, N.F. (2022): What we know about research on life insurance lapse: A bibliometric analysis. – Risks 10(5): 19p.
[40] Short, J. (2022): The effect of the 1918 influenza pandemic on US life insurance holdings. – In Standard of Living: Essays on Economics, History, and Religion in Honor of John E. Murray, Cham: Springer International Publishing 25p.
[41] Sianipar, A.S., Hutagalung, A.Q. (2021): The Determinants of Life Insurance Ownership. – Jurnal Keuangan dan Perbankan 25(1): 93-103.
[42] Uddin, M.A. (2017): Microinsurance in India: Insurance literacy and demand. – Business and Economic Horizons 13(2): 182-191.
[43] Wang, F., Zhang, R., Ahmed, F., Muhammed Shah, S.M. (2022): Impact of investment behaviour on financial markets during COVID-19: A case of UK. – Economic Research-Ekonomska Istraživanja 35(1): 2273-2291.
[44] Yakath Ali, N.S. (2018): Faktor-Faktor Yang Mempengaruhi Pembelian Takaful Keluarga Dalam Kalangan Penduduk Di Luar Bandar: Kajian Kes Di Kuala Ketil, Kedah. – Universiti Sains Malaysia 108p.
[45] Yakob, R., Abd Rahman, N.H. (2017): Analisis pemilikan takaful keluarga atau insurans hayat dalam kalangan B40. – Journal of Quality Measurement and Analysis JQMA 13(2): 29-38.
[46] Yazid, A.S., Arifin, J., Hussin, M.R., Daud, W.N.W. (2012): Determinants of family takaful (Islamic life insurance) demand: a conceptual framework for a Malaysian study. – International Journal of Business and Management 7(6): 115-127.
[47] Yee, L.M., Majid, N. (2014): Faktor yang mempengaruhi pembelian insurans perubatan dan kesihatan di Kuala Lumpur. – Journal of Quality Measurement and Analysis 10(1): 49-58.
[48] Zietz, E.N. (2003): An examination of the demand for life insurance. – Risk Management and Insurance Review 6(2): 159-191.