

Health Insurance Literacy Measurement Based On Property Measurement And Cross-Cultural Validation (Case Study: Customers Of Pt. Chubb Life Insurance, Medan Branch)

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Abstract

This study aims to determine the measurement of health insurance literacy, considering the difficulties many people face when selecting and navigating health insurance plans. Health insurance literacy (HIL) has been discussed as a critical driver for ensuring efficient choice and navigation in a choice-based health insurance system. The research method used in this study was quantitative. This research uses saturated samples, namely taking place at PT. Chubb Life Insurance, Medan Branch, with 37 active insurance customers participating in a 21-item questionnaire. The measurement properties were investigated overall and by linguistic group. Internal reliability was determined using Cronbach's alpha. Criterion validity was examined using SPSS. Construct validity was assessed using factor analysis. The measurement invariance of the HILM across groups was further evaluated using multiple-group confirmatory factor analysis. The HILM-CH results had acceptable to good reliability (alpha between 0.60 and 0.91). Validity indicates that the HILM is a good measure of HIL. Factor analysis revealed a five-factor model and demonstrated acceptable data values (CFI = 0.960; TLI = 0.955; RMSEA = 0.089; SRMR = 0.060). Using the existing five-factor model, measurement invariance was established across the Chinese, Batak, and Jawa.

Keywords : Health Insurance Literacy, Property Measurement, Cross-Cultural Validation

INTRODUCTION

In everyday life, humans are constantly faced with unpredictable events and risks that can lead to various losses. Risk is the possibility of an undesirable event occurring

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that results in a loss. In Indonesia, there is an institution that can help guarantee and/or protect against these risks: insurance (Pramudya & Rahmi, 2022) .

Specifically , insurance offers protection against health risks, specifically health insurance. Health insurance is an alternative way to finance healthcare services that will continue to grow. It can serve as a financing instrument that can help achieve the goal of universal health coverage. Essentially, health insurance can be defined as ensuring that an ill person receives healthcare regardless of their financial situation. (Khoirunnisa Ghefira Yusrani et al., 2023) .

Furthermore, health insurance literacy, also called health insurance literacy (HIL), is a form of literacy and self-efficacy that is different from health literacy that can influence the utilization of health services in different and important ways. HIL includes functional knowledge about health plan benefits, cost sharing, and other details that can empower the appropriate use of health care (Yagi et al., 2022) .

According to previous research, rural communities' understanding of the use of health insurance in Indonesia varies depending on various factors, including education level, access to information, and local culture. Villagers with higher levels of education tend to have a better understanding of the benefits of health insurance. They may be more familiar with the concept of insurance and understand the need to protect themselves and their families from health risks (Balqia & Nurdin, 2023) . This is also in accordance with research conducted by (Adepoju et al., 2019) which shows the relationship between consumers' ability to choose and navigate health insurance plans and their education level, age, financial and marital status, and healthcare experience. Research by (Qoriani, 2022) shows that students at several universities have varying insurance literacy depending on their region of origin, socioeconomic background, and parental education.

Meanwhile, research (Bardy, 2023) shows that most consumers lack a basic understanding of health insurance. This lack of understanding prevents consumers from being proficient in finding, selecting, and using health insurance plans. This results in inefficient plan selection, namely plans that do not meet consumers' health and financial needs, which in turn leads to overspending and delayed (if not neglected) services.

In the context of health insurance, literacy is crucial given the financial risks of medical care and the availability of various schemes, such as the National Health Insurance (BPJS), as well as private products with technical requirements/features (deductibles, co-pays, provider networks). Choosing the wrong policy can result in unmet benefits or high unexpected costs for the client.

Research on health insurance literacy generally adopts a general concept of financial literacy and has not yet developed a specific theoretical framework tailored to the characteristics of health insurance. Furthermore, the instruments used in previous



studies have not been fully tested for measurement properties such as construct validity, reliability, and comprehensive factor analysis. Furthermore, most literacy instruments were developed in developed countries and have not undergone adequate cross-cultural validation before being implemented in Indonesia. Empirically, research is also limited to the general population and has not been conducted directly with insurance company customers.

Therefore, research is needed that can test and develop a valid, reliable health insurance literacy instrument that is appropriate to the cultural context and characteristics of Indonesian society, especially for customers of PT. Chubb Life Insurance Medan Branch.

REVIEW OF LITERATURE

Health Insurance

According to Robert I. Mehr, insurance is a tool for reducing risk by combining several units facing similar risks. Health insurance is a product that covers medical expenses and other healthcare costs when the insured is sick. Medical expenses or health insurance benefits generally include inpatient care, outpatient care, and surgery. Health insurance product options offer a variety of health protection and health insurance benefits for you and your family (Handayani & Aslami, 2022).

Health insurance is a type of protection that covers the health of policyholders or consumers. This health insurance covers medications, medical expenses, both outpatient and inpatient, doctor's consultation fees, medical equipment costs, laboratory tests, and other costs, all covered by the insurance company according to the initial agreement or contract with the consumer/insurance purchaser (Qoriani, 2022).

Health Insurance Literacy

Health insurance literacy, defined as an individual's ability to seek, obtain, and use health insurance, plays a crucial role in access to health protection and care (Edward et al., 2022). According to Wiltshire et al., 2021, the ability to understand, select, and use health insurance is defined as health insurance literacy. Health insurance literacy (HIL) is an individual's ability to seek, understand, evaluate, and use information related to health insurance products in order to make informed decisions and use policies effectively (Holst et al., 2022). This literacy encompasses not only factual knowledge but also numerical skills, attitudes, and self-efficacy in dealing with insurance choices.

Recent research shows that low insurance literacy can lead consumers to choose the wrong product, not utilize benefits optimally, and incur greater financial risk (Khera et al., 2022). Therefore, measuring health insurance literacy is crucial, especially for private insurance customers, such as PT. Chubb Life Insurance, Medan Branch.



Based on the Health Insurance Literacy Measure (HILM) instrument and its cross-country adaptation (Quiroga Gutiérrez, 2023) , health insurance literacy has several main dimensions:

1. Basic Knowledge – understanding of policy technical terms, premiums, deductibles, co-pays, and benefit limits.
2. Numerical Ability – the ability to calculate premium costs, claims, and cost-benefit comparisons between policies.
3. Decision-making Ability – the ability to compare and choose products that suit your needs.
4. Ability to Use Policy – knowledge of claims procedures, hospital networks, and reimbursement rules.
5. Self-efficacy – self-confidence in managing insurance decisions, including communicating with agents.

Proverty Measurement

Psychometric properties are characteristics of a measuring instrument that indicate the extent to which the instrument can be relied upon to accurately measure a construct. According to (Petrič & Atanasova, 2024) , the main properties that need to be tested include validity, reliability, factor structure, and consistency across time.

Cross-Cultural Validation

Cross-cultural validation is the process of adapting an instrument from one language/culture to another language/culture to maintain conceptual equivalence (Beaton et al., 2000; (Cruchinho et al., 2024) . In the context of health insurance literacy, this is important because insurance terms are often technical and differ between countries.

Cross-cultural validation is necessary when an instrument is developed in a cultural/environmental context different from the one you are studying (e.g., a foreign instrument in Indonesia). Without validation, terms or concepts may be interpreted differently, leading to biased measurement results. Important aspects are conceptual, idiomatic, semantic, and experiential equivalence.

Research Indicators

Based on the above theory and empirical practice from current research, the following operational indicators can be used.

Variable	Indicator
Health insurance literacy	Basic knowledge, numerical ability, decision making, policy/claim use, self-efficacy/confidence

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Property instrument	Instrument Properties Content validity (expert CVI), construct validity (CFA/EFA, factor loadings, AVE), internal reliability (Cronbach's α , CR), test-retest (ICC), goodness-of-fit (CFI, TLI, RMSEA, SRMR)
Cross-cultural validation	Cross-Cultural Validation Forward/backward translation process , expert committee, initial testing, measurement invariance (configural, metric, scalar), equivalence (semantic, idiomatic, conceptual), adjustment of technical terms to be relevant to local and demographic contexts

RESEARCH METHOD

In this study, the author used quantitative research. According to (Rahmani, 2022), the quantitative research method is research that emphasizes the objective measurement aspect of social phenomena which are explained into problem components, variables, and indicators that produce different numerical symbols according to the related variables.

population and questionnaire can be used for all information and data collected and analyzed. All are implemented as numbers and estimates. For this study, the linkert scale is used to measure the data. The following is the level of the determination scale 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree, this scale is an odd scale that is useful for providing answers to each question given in the questionnaire to the respondents' responses. Researchers used a saturated sample, namely the population in this study were customers of PT. Chubb Life Insurance, Medan branch, totaling 37 customers. The variables used in this study are measurements on property (variable X), cross-cultural validation (variable X) and health insurance literacy (variable Y).

In this study, data collection techniques were through documentation and questionnaires. While the data analysis method was descriptive statistics, in determining the validity test, and reliability test, the researcher used the SPSS application to determine the validity and reliability of the data for research. Finally, the researcher tested EFA , CFA and group measurement invariance tests using the JASP application to determine the cultural validity grouped from customers of Chinese, Batak, and Javanese ethnicity.



RESULTS AND DISCUSSION**Respondent Demographic Overview**

The demographic description of respondents is described in the following table:

Table 1. Respondent Demographic Profile

Demographics	Category	Frequency	Percentage
gender	Man	26	70%
	Woman	11	30%
	Total	37	100%
Age	20-30 years	9	24%
	31-40 years	18	49%
	>41 years	10	27%
	Total	37	100%
Last education	High School/Equivalent	5	14%
	Diploma	0	0%
	S1	32	86%
	Masters/Doctoral Degree	0	0%
	Total	37	100%
Cultural Tribes	Batak tribe	12	32%
	Javanese ethnic	8	22%
	Malay Tribe	0	0%
	Chinese ethnic group	17	46%
	Total	37	100%
Doctor visits in the last 12 months	Yes	2	5%
	No	35	95%
	Don't know	0	0%
	Total	37	100%
Types of Health plans	Base	36	97%
	HMO	1	3%
	Telemedicine	0	0%
	Family doctor	0	0%
	Other	0	0%
	Don't know	0	0%
	Total	37	100%



Own expenses	There isn't any	17	46%
	1,000,000 - 1,900,000	11	30%
	2,000,000 - 2,900,000	9	24%
	3,000,000 - 3,900,000	0	0%
	4,000,000 - 4,900,000	0	0%
	Other	0	0%
	Total	37	100%
reduced annually	5,000,000	13	35%
	10,000,000	20	54%
	15,000,000	3	8%
	20,000,000	1	3%
	other	0	0%
	Total	37	100%

According to the table obtained from 37 respondents consisting of: 70% are male, which is greater than 30% of female respondents. Furthermore, the age of 31-40 years is the age of the largest percentage of respondents, namely 49%, meaning that at that age health insurance protection is important. As is known, the majority of respondents are S1, namely 86%, meaning that they understand that meeting the needs of themselves and their families is not difficult with health insurance protection. Furthermore, from the many cultural tribes in Indonesia, specifically in the city of Medan, there are 3 tribes of respondents, namely 46% of the Chinese tribe, 32% of the Batak tribe, and 22% of the Javanese tribe. And finally, from the health plan, the largest number of respondents, 97%, chose a basic health plan, meaning that respondents understand the importance of a basic health plan by choosing to have protection with health insurance.

Validity Test

Validity testing is conducted to determine the validity of the questions in a questionnaire. Validity testing indicates the extent to which a measuring instrument is able to measure what it is intended to measure. Validity results can be determined by considering the following provisions:

- If the calculated r value $>$ r table then the statement is declared valid.
- If the calculated r value $<$ r table then the statement is invalid.



- c) The rtable value with N=37, at 5% significance, it is known that the rtable is 0.344 so that, if rcount > 0.344 then it is declared valid.

Table 2. Validation test

No	Variables	Item	r count	r table	information
1	Basic Knowledge	Y.1.1	0.404	0.344	valid
2		Y.1.2	0.566	0.344	valid
3		Y.1.3	0.472	0.344	valid
4		Y.1.4	0.367	0.344	valid
5	Numerical Ability	Y.2.1	0.572	0.344	valid
6		Y.2.2	0.619	0.344	valid
7		Y.2.3	0.674	0.344	valid
8	Decision-making	Y.3.1	0.610	0.344	valid
9		Y.3.2	0.689	0.344	valid
10		Y.3.3	0.618	0.344	valid
11		Y.3.4	0.621	0.344	valid
12	Ability to Use Policy	Y.4.1	0.644	0.344	valid
13		Y.4.2	0.389	0.344	valid
14		Y.4.3	0.534	0.344	valid
15		Y.4.4	0.668	0.344	valid
16		Y.4.5	0.485	0.344	valid
17	Self-Efficacy/Self-Confidence	Y.5.1	0.717	0.344	valid
18		Y.5.2	0.722	0.344	valid
19		Y.5.3	0.471	0.344	valid
20		Y.5.4	0.584	0.344	valid
21		Y.5.5	0.575	0.344	valid

From the table above, it can be seen that the validation coefficient $r_{\text{count}} > r_{\text{table}}$ variable and the significance value of the correlation results is smaller than 0.05 (5%) with $r_{\text{table}} = 0.344$, then the variable shows that variable Y is declared valid.

Reliability Test

In this study, the researchers used a reliability test using Cronbach's Alpha. A variable is declared reliable if it produces a Cronbach's Alpha value > 0.60.



Table 3. Reliability Test
Reliability Statistics

Cronbach's Alpha	N of Items
.893	21

Based on the table above, the reliability test of 37 respondents with 21 question items using the SPSS program obtained the results of the reliability test of all question items/instruments with a Croanboach Alpha value on the health insurance literacy variable (Y) of $0.908 > 0.60$, so the variables used in this study can be said to be reliable.

Table 4. Inter-ethnic reliability test

	Total N = 37		Chinese N=17		Batak N=12		Java N=8	
	Mean	α	Mean	A	Mean	A	Mean	A
Scale 1	4.27	0.76	4.22	0.79	4.31	0.78	4.34	0.69
Basic knowledge								
Scale 2	4.28	0.81	4.35	0.91	4.36	0.62	4.04	0.64
Numerical ability								
Scale 3	4.25	0.77	4.25	0.81	4.14	0.75	4.43	0.66
Decision-making								
Scale 4	4.45	0.80	4.57	0.85	4.50	0.67	4.15	0.78
Ability to use policies								
Scale 5	4.33	0.79	4.36	0.82	4.40	0.75	4.17	0.78
Self-efficacy/self-confidence								

Overall, Javanese respondents showed lower scores per scale than Chinese and Batak respondents. For example, their average self-confidence when using health insurance (Scale 5) was 4.17, while for Chinese respondents it was 4.36 and for Batak respondents it was 4.40. The results also showed that it was easier for respondents to



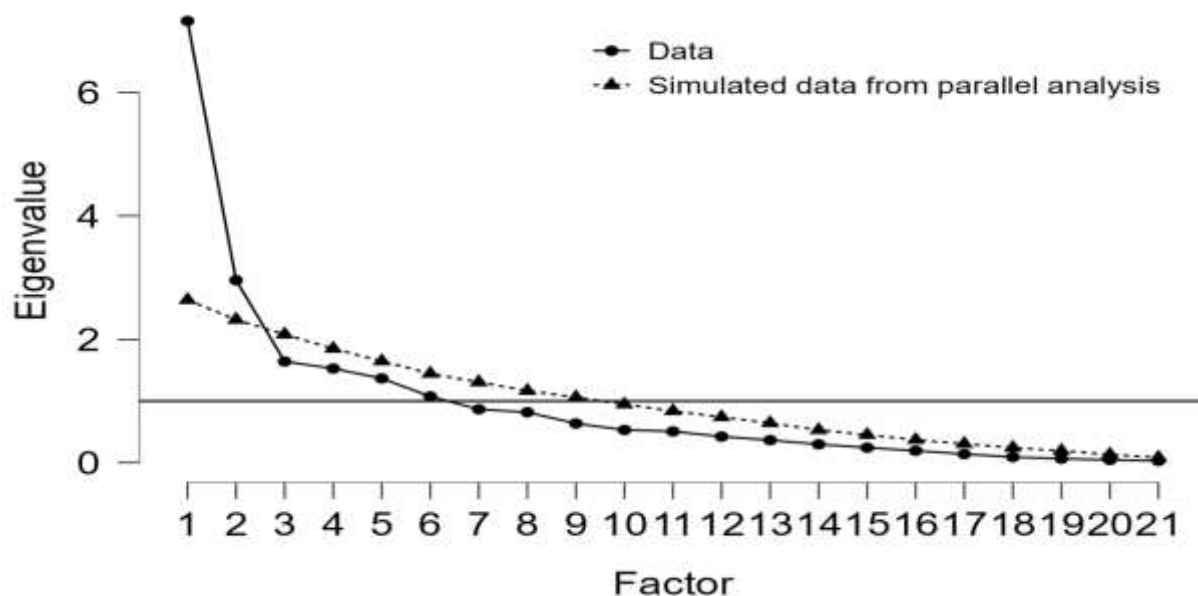
be more decision-making when they already had a health plan and sought information/assistance compared to when they had to navigate plans to choose one (as suggested by Paez et al. Finally, post hoc weighted pairwise comparisons ANOVA using Tukey's honestly significant difference (HSD) illustrated significant cultural differences between ethnicities.

Reliability measurement properties

Table 4 shows the Cronbach's alphas per scale for the total sample and the three linguistic regions. Scale 1 had alphas ranging from 0.69 to 0.79, scale 2 from 0.62 to 0.91, scale 3 from 0.66 to 0.81, scale 4 from 0.67 to 0.85, and scale 5 from 0.75 to 0.82. These values indicate acceptable to good reliability of the HILM.

Table 5 summarizes the EFA results. Correlations between factors after CFA are reported in this table and will be discussed next. Using a cutoff value of 0.4, each item loaded on a single factor. No cross-loadings were reported, indicating that each variable represents the factor it loads on. Except for items 2 and 5, the uniqueness values were lower than 0.5, emphasizing that all four factors explain the factor model well.

Scree plot



To examine the improvement of the fit model, CFA was run without items 2 and 5 and did not show a significant improvement in the fit model (CFI = 0.956, TLI = 0.949, RMSEA = 0.080, SRMR = 0.050), so the initial model was retained. Following Paez et al.

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and consistent with each item, factors 1 and 2 were labeled after the domains in choosing health insurance, “ability to use the policy” and “decision making”, respectively. Factors 3 and 4 were labeled after the domains of health insurance use, “confidence” and “numerical ability”, respectively. Factor 5 was labeled “basic knowledge”.

As part of the CFA to test the five-factor model, the fit index confirmed the model (CFI = 0.960; TLI = 0.955; RMSEA = 0.08; SRMR = 0.06). The correlation coefficients between the five factors are reported in Table 5. The factor correlations ranged from $\rho = 0.60$ between “decision making” and “self-efficacy” to $\rho = 0.80$ for “numerical ability” and “basic knowledge,” which illustrates good performance. positive relationships between factors.

Table 5. 5-Factor EFA Solution and Correlation Between Factors After CFA

HLM	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	uniqueness
Scale 1; Basic knowledge						
I understand the meaning of the term *premium* in health insurance.						0.626
I know what is meant by *deductible* (costs that must be borne by yourself).		0.630				0.550
I understand the meaning of the term *benefit ceiling* in health insurance policies.					0.931	0.005
I can explain the difference between *inpatient* and *outpatient* in insurance policies.		0.541			0.604	0.325
Scale 2; Numerical ability						
I can calculate the total cost I have to pay if my policy has a *co-pay* system (shared costs)			0.434	0.525		0.428
I can compare the premiums and benefits of two different policies.				0.831		0.191
I am able to estimate the personal costs that may arise even though I have health insurance.				0.746		0.252
Scale 3; Decision Making						



I can compare two health insurance products to determine which one suits my needs.		0.852				0.237
I pay attention to the hospital network when choosing a health insurance policy.		0.747				0.345
I am able to assess whether additional benefits (riders/add-ons) on the policy are really necessary.			0.406			0.592
I always read the policy details carefully before purchasing.		0.421	0.421			0.567
Scale 4; Ability to use the policy						
I am aware of the procedure for *submitting an inpatient claim*	0.768					0.301
I know what documents are required to file a claim.	0.536					0.680
I can find a list of partner hospitals from my policy.	0.525					0.499
I understand the *reimburse* process in my policy.	0.621	0.488				0.281
I know who to contact if I have any problems with my claim.	0.742					0.391
Scale 5; Self-Efficacy/self-confidence						
I am confident in making decisions regarding health insurance.	0.666					0.299
I am comfortable discussing with an insurance agent the details of the policy.	0.519	0.408				0.454
I feel able to understand the policy documents given to me	0.424		0.463			0.598
I am confident I can explain the benefits of my policy to others.			0.926			0.005
I believe that my decision regarding health insurance was the right one.	0.697					0.278

Correlation between factors after CFA

Factor 1	1.00	
Ability to use policies		
Factor 2	0.60	1.00
Decision-making		
Factor 3	0.80	0.751.00
Self-confidence		
Factor 4	0.58	0.550.611.00
Numerical ability		
Factor 5	0.50	0,480,530,591.00
Basic knowledge		

Measurement Invariance

The fit indices for JASP are reported in **Table 6**. Three baseline models were estimated separately for the three ethnic groups (Chinese, Batak, and Javanese) and the fit well model and the JASP nested model were run to test for configural, metric, and scalar invariance across the three language groups.

Configural invariance was confirmed (model 1) with a good amount of data when the factor patterns were the same across groups. This result was particularly good when constraining the factor loadings to be the same across groups (model 2).

Compared with model 1, the fit of model 2 is better than the configural model, as evidenced by the increase in CFI and the decrease in RMSEA and SRMR. Thus, metric invariance across the three linguistic groups can be demonstrated. In model 3, where the same intercept constraint is added, the fit is still good with changes in CFI $\Delta 0.010$, RMSEA $\Delta -0.015$, and SRMR $\Delta -0.016$, confirming scalar invariance. Therefore, HIL can be measured across different cultural groups with HILM, thus ensuring cross-cultural validation.

Table 6 Invariance Test

Model	Matches index									
	X2	Df	P value	CFI	RMS EA	SRMR	Model comparison	Δ CFI	Δ RMSEA	Δ SRMR
Baseline										
All	439,099	136	<0.001	0.960	0.089	0.060				
Chinese	245,321	136	<0.001	0.969	0.070	0.042				
Batak	105,436	136	<0.001	0.954	0.083	0.053				
Java	45,402	136	<0.001	0.970	0.062	0.071				



Model 1	478,454	469	<0.001	0.972	0.085	0.063				
Configurable										
Model 2	354,264	473	<0.001	0.980	0.075	0.062	2 vs 1	0.006	-0.021	-0.002
Metric										
Model 3	553,392	537	<0.001	0.974	0.082	0.061	3 vs 2	-0.008	0.02	-0.004
Scalar										

DISCUSSION

This study informs the properties and measurement invariance of HILM to measure self-perceived HIL among different populations and ethno-cultural groups among customers.

First, the validity of the HILM criteria was investigated by correlating it with additional information from the survey data. Validity was examined using subjective statements about respondents' perceptions of their knowledge of the health insurance system. Validity was analyzed using scores on a series of objective questions about the health insurance system. Both showed positive correlations with instrument scores, indicating that the HILM measures what it purports to measure: HIL.

The implications of the validity results are noteworthy: the correlation between HILM scores and responses to subjective statements about respondents' general perceptions of their knowledge of the health insurance system showed a strong, positive correlation (between 25% and 75%). Assessing multidimensional instruments is time-consuming and presents other challenges. Ideally, interesting insights can be captured using a smaller set of questions. In our case, validity revealed that using a single subjective statement in the survey could capture some of these insights. While less precise than 21 items, this item is useful in situations where financial or time constraints exist for assessing HIL in a population.

Second, the reliability of the HILM is indicated by internal consistency which underscores acceptable to good reliability, overall and across the three groups of terms. Internal consistency is slightly lower on the "decision making" scale, possibly due to the smaller number of items and their lower relevance due to higher overall uniqueness.

Third, construct validity assessment using EFA revealed a five-factor structure. The five-factor model solution demonstrated how well HILM could measure HIL through the HIL dimensions of "basic knowledge," "numerical ability," "decision making," "policy use ability," and "self-confidence." Indeed, each factor had a high loading on one factor, indicating that each HILM item participated in explaining HIL. The CFA fit index underscored acceptable absolute model fit and good incremental fit.

Finally, the last part of this study used JASP to test the measurement invariance of the HILM. Variation across Chinese, Batak, and Javanese respondents was



investigated based on the five-factor model established in factor analysis. Despite cultural differences between the ethnicities, configural, metric, and scalar invariance was demonstrated across the three groups. Therefore, the measure maintained measurement equivalence/invariance across groups, indicating that the HILM measures meaningful constructs across cultures and languages.

CONCLUSIONS

Although the literature indicates that consumers experience difficulties in selecting and navigating health insurance, there is little evidence that the mechanisms that hinder people from efficiently selecting and navigating health insurance plans remain poorly understood. HIL has been emphasized in the literature as a way to explain these barriers, thus emphasizing the need for more valid and reliable measurement tools.

Establishing the validity, reliability, and measurement invariance of the HILM, with minor adaptations compared to the HILM originally developed in the context and with an eye toward the US health insurance market, opens the door for researchers to examine the challenges of choice-based health insurance systems more broadly in other contexts. In the US, the demonstrated relationship between levels of HIL and individual characteristics has led to the creation of tailored programs, such as workshops or web-based tools. These programs improve consumers' navigation of health insurance and increase their HIL. They have greater confidence in selecting and using health plans than consumers who lack access to such programs. As a result, they are less likely to delay or forgo care due to financial burden. The HILM-CH provides a promising measurement tool with five domains for assessing HIL across consumer populations and across diverse ethnicities. Providing a reliable and valid HIL measurement tool opens the door for future research to measure HIL across consumer populations and identify potential relationships with consumer characteristics and their ability to choose and navigate the health insurance system. Hopefully, this will inspire similar research within choice-based health insurance systems and strengthen the common ground around HIL.

REFERENCES

- Adepoju, O., Mask, A., & McLeod, A. (2019). Factors Associated with Health Insurance Literacy: Proficiency in Finding, Selecting, and Making Appropriate Decisions. *Journal of Healthcare Management*, 64(2), 79–89. <https://doi.org/10.1097/JHM-D-18-00021>
- Balqia, P., & Nurdin, A. (2023). Pemahaman Masyarakat Pedesaan Terhadap Manfaat Asuransi Kesehatan Di Banda Aceh. Publisher: Teewan Journal Solutions, 0(0), 14–18. <http://teewanjournal.com/index.php/teekes>
- Bardy, T. L. C. (2023). The Swiss Health Insurance Literacy Measure (HILM-CH):

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- Measurement Properties and Cross-Cultural Validation. BMC Health Services Research, 23(1), 1–13. <https://doi.org/10.1186/s12913-022-08986-0>
- Cruchinho, P., López-Franco, M. D., Capelas, M. L., Almeida, S., Bennett, P. M., da Silva, M. M., Teixeira, G., Nunes, E., Lucas, P., & Gaspar, F. (2024). Translation, Cross-Cultural Adaptation, and Validation of Measurement Instruments: A Practical Guideline for Novice Researchers. Journal of Multidisciplinary Healthcare, 17(May 2023), 2701–2728. <https://doi.org/10.2147/JMDH.S419714>
- Edward, J., Thompson, R. A., & Wiggins, A. (2022). Health Insurance Literacy Levels of Information Intermediaries: How Prepared Are They to Address the Growing Health Insurance Access Needs of Consumers? Health Literacy Research and Practice, 6(1), e30–e36. <https://doi.org/10.3928/24748307-20220201-01>
- Handayani, S., & Aslami, N. (2022). Faktor-Faktor yang Mempengaruhi Keputusan Konsumen Dalam Membeli Polis Asuransi Kesehatan. Mimbar Kampus: Jurnal Pendidikan Dan Agama Islam, 21(1), 74–79. <https://doi.org/10.47467/mk.v21i1.881>
- Holst, L., Victoor, A., Brabers, A., Rademakers, J., & de Jong, J. D. (2022). Health insurance literacy in the Netherlands: The translation and validation of the United States' Health Insurance Literacy Measure (HILM). PLoS ONE, 17(9 September), 1–10. <https://doi.org/10.1371/journal.pone.0273996>
- Khera, N., Zhang, N., Hilal, T., Durani, U., Lee, M., Padman, R., Voleti, S., Warsame, R. M., Borah, B. J., Yabroff, K. R., & Griffin, J. M. (2022). Association of Health Insurance Literacy With Financial Hardship in Patients With Cancer. JAMA Network Open, 5(7), e2223141. <https://doi.org/10.1001/jamanetworkopen.2022.23141>
- Khoirunnisa Ghefira Yusrani, Cahya Arbitera, Putri Andini Novianti, Rossa Shafira Nur Sabrina, Syalisa Syabil, & Umami Rahma. (2023). Studi Literatur : Faktor-faktor yang Mempengaruhi Keputusan Masyarakat dalam Memilih Asuransi Kesehatan. Jurnal Medika Husada, 3(1), 37–50. <https://doi.org/10.59744/jumeha.v3i1.39>
- Petrič, G., & Atanasova, S. (2024). Validation of the extended e-health literacy scale: structural validity, construct validity and measurement invariance. BMC Public Health, 24(1), 1–11. <https://doi.org/10.1186/s12889-024-19431-8>
- Pramudya, R. M., & Rahmi, M. (2022). Pengaruh Literasi Asuransi, Religiusitas, dan Kualitas Pelayanan terhadap Minat Generasi Milenial Menggunakan Asuransi Syariah. Journal of Islamic Economics and Finance Studies, 3(1), 70. <https://doi.org/10.47700/jiefes.v3i1.4350>
- Qoriani, H. F. (2022). Faktor-Faktor Yang Berpengaruh Dalam Keputusan Pembelian Asuransi Kesehatan Allisya Care Sidoarjo. Tijarah: Jurnal Ekonomi Syariah, 1(3), 8–14.



- Quiroga Gutiérrez, A. C. (2023). Health insurance literacy assessment tools: a systematic literature review. *Journal of Public Health (Germany)*, 31(7), 1137–1150. <https://doi.org/10.1007/s10389-021-01634-7>
- Rahmani, N. A. B. (2022). *Metodologi Penelitian Kualitatif dan Kuantitatif*. Rahmani Percetakan.
- Wiltshire, J., Liu, E., Dean, C. A., Colato, E. G., & Elder, K. (2021). Health Insurance Literacy and Medical Debt in Middle-Age Americans. *Health Literacy Research and Practice*, 5(4), e319–e332. <https://doi.org/10.3928/24748307-20211102-01>
- Yagi, B. F., Luster, J. E., Scherer, A. M., Farron, M. R., Smith, J. E., & Tipirneni, R. (2022). Association of Health Insurance Literacy with Health Care Utilization: a Systematic Review. *Journal of General Internal Medicine*, 37(2), 375–389. <https://doi.org/10.1007/s11606-021-06819-0>

