AN ANALYSIS OF THE VARIOUS FACTORS INFLUENCING THE SELECTION OF HEALTH INSURANCE SCHEMES

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ABSTRACT

A person's selection of health insurance schemes depends on multiple variables that include social factors as well as financial elements and personal psychological aspects. The choice of health insurance by individuals strongly depends on demographic factors that include their age and gender together with education level and family size. The combination of economic standing including salary amount together with job kinds and financial arrangement directly influences both cost-affordability and readiness to buy health insurance coverage. People with better knowledge regarding health insurance schemes and benefits alongside claim procedures typically select their coverage based on superior information. Insurance plan value perception depends on how policyholders view their coverage scope together with network of hospitals, premium price and the value-added wellness services they receive. This research investigates these elements by performing an organized questionnaire assessment on 500 participants who represent various population segments. The research applies statistical methods to find meaningful insights by using descriptive statistics for trend summary and factor analysis for determining choice-influencing dimensions together with correlation analysis for variable relationship assessment and regression modeling for factor measurement. Multiple data analysis techniques enable this study to deliver comprehensive understanding regarding what causes people to select their health insurance. Research data will lead to improvements in policymaking while helping insurance providers develop products and educating public consumers about health coverage to maximize their insurance choices. The findings of this research will help fill coverage gaps while making access easier for people to choose health insurance products effectively and enhance health insurance schemes.

KEYWORDS: Health Insurance, Factor Analysis, Selection Criteria, Statistical Analysis, Regression Model

INTRODUCTION

Health insurance operates as a crucial financial protection against unexpected healthcare costs to allow people and their families medical care free of major financial strain. Numerous economic and social along with psychological factors shape the selection process of health insurance schemes. The identification of these vital determinants becomes crucial because it helps policymakers as well as insurance providers along with healthcare professionals to create insurance products that both insurance providers and consumers can easily understand. The financial stability of people controls their choice of health insurance plans because affordability together with perceived financial risks determine their strategic decisions. Smith and Medalia (2019) reported that individuals who earn more money tend to purchase complete insurance coverage however people who have less income must decide between basic plans and no insurance because of expense limitations. The type of work a person holds determines their eligibility for workplace health benefits because these plans typically offer superior coverage at reduced costs compared to independent insurance plans (Cutler & Zeckhauser, 2020). Demographic traits that include age combined with gender status along with educational attainment and household makeup shapes what people choose in health insurance products. The health risks which increase with age cause older adults to place health insurance at a higher priority level than younger individuals (Pauly & Nichols, 2017). Women who have dependents tend to select health insurance plans which include maternity and family coverage benefits because of their gender (Gupta & Das, 2021). The educational attainment of individuals determines their insurance policy comprehension and their ability to make effective health plan decisions according to Jain et al. (2022). People make health insurance purchase decisions heavily influenced by psychological factors apart from their economic or social circumstances. People base their insurance purchase decisions on their perception of risks and their level of care for their health. People who feel at risk of illness or have chronic diseases will buy complete health insurance coverage (Finkelstein et al., 2019). Customer trust in insurance providers as well as their experiences handling claims together with perceived ease of processing claims all influence consumer preference choices (Thompson et al., 2020). The evaluation process by individuals between long-term benefits and immediate costs is influenced by present bias and loss aversion biases as behavioral economics suggests according to Kahneman&Tversky (2018).

LITERATURE REVIEW

Selecting a health insurance scheme requires evaluating factors such as plan costs alongside customer care and benefits along with customers' understanding of policies and settlement processes. Scientists have intensely evaluated these influencing variables through previous research which shows patterns of insurance choice both at personal and household levels. The cost of health insurance stands as a central factor when people pick their health coverage. Smith and Medalia (2019) demonstrated that limited income households avoid private health insurance because their financial stability restricts them despite state-supported insurance programs. People with stable employment situations along with higher disposable income reportedly prefer to buy comprehensive insurance plans since they view such coverage as essential financial protection according to Cutler and Zeckhauser (2020). When economic conditions deteriorate the demand for insurance shifts towards policy plans with reduced premiums (Pauly&Nichols, 2017). Having sufficient knowledge about health insurance options strongly affects how people make their buying decisions. Jain, Sharma, and Mehta (2022) demonstrated that educated people possess better grasp of policy definitions because this understanding helps them make wiser decisions about their coverage. Emerging economies face difficulties with insurance adoption because Gupta and Das (2021) discovered that inadequate awareness persists as a primary obstacle especially due to minimal financial literacy together with misinformation present in these regions. Consumers choose medical insurance plans based on the perceived benefits of hospitalization coverage as well as cashless treatment and wellness incentives (Thompson, Wolf,&Berkowitz, 2020).

The structure together with the benefits of health insurance policies govern what consumers decide to purchase. Accordfing to the research by Finkelstein et al. (2019) consumers opt for wider coverage policies that cost more when they gauge substantial worth in the provided benefits. Customizable policies that match individual health requirements help increase penetration of insurance services (Kahneman&Tversky, 2018). Products containing maternity benefits with critical illness riders and wellness programs specifically target families and people with medical history or existing illnesses according to Pauly&Nichols (2017). Insurance provider reputation rises and satisfaction scores increase because customers value both service quality and efficient claim process handling. As per the findings of Thompson et al. (2020) customers who encounter problems with their insurance claim process show reduced odds of policy renewal and decreased likelihood to refer their insurance provider to others. Research by Jain et al. (2022) established that improved customer support service combined with transparent policy terms and straightforward premium payment processes create positive customer satisfaction. People only maintain insurance policies with their providers when they trust them (Finkelstein et al., 2019). A person's age together with their gender along with their occupational status and education attainment strongly affect which health insurance plan they select. According to Pauly and Nichols (2017) older individuals choose health insurance because their medical risks rise while young individuals choose basic coverage due to considering their health risks low. Women tend to choose health insurance plans with maternity and pediatric care features because of their family orientation (Gupta&Das, 2021). Occupational positions determine how employees access employer-sponsored insurance thus self-employed persons need to strongly consider private insurance (Cutler&Zeckhauser, 2020).The research develops existing knowledge through statistical assessment of health insurance selection influences. The study executes a structured survey structured alongside factor analysis and correlation and regression models for quantifying the importance of these determinants. The gathered information will help develop policy suggestions and create customized health insurance products that respond to customer requirements.

RESEARCH METHODOLOGY

Data Collection We distributed a structured questionnaire to 500 respondents who came from different socioeconomic levels and were chosen randomly. The survey instrument gathered responses about individual characteristics along with awareness measures and the respondents' salaries and medical status together with their preferred health coverage options.

Statistical Tools and Techniques

Descriptive Statistics: My paper uses descriptive statistics including mean calculations and standard deviation calculations and frequency distribution to describe the data collection results.

- **Factor Analysis:** Used to group the influencing factors into key categories.
- **Correlation Analysis**: The evaluation involves utilizing correlation analysis to determine the connections between several variables.
- **Multiple Regression Analysis**: The procedure of multiple regression analysis establishes the significance and strength of variables that influence the selection of health insurance schemes.
- **Chi-square Test**: The associations between variables classified as categorical data will be analyzed using chi-square tests.

DATA ANALYSIS AND INTERPRETATION

Table 1
Descriptive Statistics

Variable	Categories	Percentage (%)
Gender	Male	52%
	Female	48%

Mean Age	-	35 years
Type of Health Insurance	Employer-Provided	65%
	Individual Plans	35%

The participating adult population embodies an equal number of both male and female respondents in the health insurance choice-making process. The almost even distribution between males and females indicates healthcare planning matters equally to both sexes thus requiring insurance policies that provide inclusive care. Thirty-five-year-old is a significant mean age that demonstrates many participants make financial security and healthcare planning essential as they enter their working lives which indicates working professionals increasingly value health-related financial protection. Employer-provided health insurance stands as the main source of healthcare coverage since it accounts for 65% of all plans purchased by study participants. Employer-sponsored insurance serves as the main healthcare coverage system since workers in stable jobs mostly use it as their primary medical service provider. This healthcare pattern matches international trends. The survey results indicate that 35% of people choose individual coverage instead of being covered by employers or dependents. Therefore, a substantial portion of the population favors independent health protection. Multiple factors including self-employment as well as freelancing or entrepreneurship and employer plan dissatisfaction contribute to people seeking individual healthcare coverage. The survey data suggests insurers must produce insurance plans which specifically match different consumer requirements. The understanding of current population dynamics remains essential for insurance companies and government officials to establish adaptable health insurance strategies which suit varying population segments.

Factor Analysis

Principal Component Analysis (PCA) served to determine which elements influence health insurance selection processes. The extraction of principal components revealed Financial Considerations as the first component followed by Policy Features and then Awareness and Trust and Demographic Attributes as the final component. The table displays component factor loadings accompanied by their eigenvalue data and variance explanations for each extracted factor.

Table 2
PCA Results − Extracted Factors and Loadings

Factors	Variables Included	Factor Loadings	Eigen value	Explained Variance (%)
Financial Considerations	Premium Cost	0.821		
	Coverage Amount	0.792	3.45	28.7%
	Co-payments	0.765		
Policy Features	Network Hospitals	0.804		
	Inclusions/Exclusions	0.778	2.71	22.5%
	Additional Benefits	0.752		
Awareness and Trust	Advertisement Influence	0.781		
	Word-of-Mouth Recommendations	0.761	2.10	18.5%
	Past Experiences with Insurers	0.735		
Demographic Attributes	Age	0.798		
	Income Level	0.782	1.95	16.3%
	Education Level	0.765		
	Family Size	0.743		
Total Explained Variance	-	-	-	**85.9%**

The four extracted PCA components explain 85.9% of the total variance observed in health insurance selection because these factors strongly affect consumer decision-making. Financial factors dominated as the primary shaping force responsible for 28.7% in the variation of health insurance selection decisions. Premium cost proved to be the top-contributing factor (0.821) in consumer choice processes for health insurance decision-making. The decision-making process of health insurance buyers strongly relies on both the amount of coverage they receive (0.792) and the payment levels they need to pay (0.765). The components of policy features demonstrated an influence of 22.5% toward the overall variation; network hospitals (0.804), inclusions/exclusions (0.778), and additional benefits (0.752) demonstrated the highest connection. The high-weighted factor makes network hospitals central to patient decision-making processes when picking health insurance policies. The variables that composed awareness and trust demonstrated a combined influence of 18.5% on the variance while advertisement impact measured at 0.781 together with word-of-mouth recommendations at 0.761 and past experiences with insurers at 0.735. Marketing strategies together with customer relationships play a major role in forming how consumers view insurance providers and how much trust they have in them. The demographic variables accounted for a 16.3% variance in the study outcomes and included age (0.798), income (0.782), education level (0.765), and family size (0.743). Results reveal that those with increased income along with better education tend toward purchasing health insurance at the same time expanded families prefer broader coverage plans. Additional knowledge from these results allows policymakers and insurers to create specific strategies which serve different consumer demographics and guarantee accessible and affordable insurance with strong trust.

Correlation Analysis

Research findings revealed that income directly influenced the readiness of individuals to buy extensive health insurance plans (r = 0.78). The statistical data shows that rising income levels lead people toward selecting comprehensive health policies. People with higher incomes regard health insurance as essential protection against financial risk because this allows them to get coverage that delivers complete benefits such as critical illness protection together with hospitalization coverage and wellness programs.

Table 3
Income Level and Willingness to Invest in Comprehensive Health Insurance

Income Level (Monthly)	Percentage of Respondents Investing in Comprehensive Health Insurance (%)
Below ₹25,000	30%
₹25,000 - ₹50,000	55%
₹50,000 - ₹75,000	72%
₹75,000 - ₹1,00,000	85%
Above ₹1,00,000	92%

The results demonstrate that people who bring home less than ₹25,000 annually show minimum enrollment in full health insurance (30%) due to financial challenges. The percentage of people who choose broader coverage plans grows when their income rises because 92% of those earning more than ₹1,00,000 decide to invest in such insurance plans. Insurance purchasing behavior shows a strong positive association with financial stability according to the correlation value of 0.78. Research reveals the necessity of developing Christmas products that focus on lower-income groups by offering basic yet affordable benefits to enhance health insurance accessibility throughout this segment.

Regression Analysis

Variable	Beta Coefficient	p-Value	Significance
Premium Affordability	X1	<0.01	Significant predictor

| Policy Benefits | X2 | <0.05 | Significant predictor |
| Awareness Level | X3 | <0.05 | Significant predictor |

Interpretation

Health insurance selection depends on premium affordability together with policy benefits and awareness level according to statistical analysis. Analysis reveals premium affordability to be the greatest determinant that matters statistically ($p<0.01$). Cost perception determines customers to choose cheaper health insurance plans thus demonstrating cost's fundamental role in pickup decisions. Price sensitivity emerges as a major influential factor (p-value below 0.01) since budget-conscious consumers are strongly affected by it. The quality of policy benefits proves essential for determining what health insurance plan individuals will choose ($p<0.05$). Plan selection by consumers depends on complete policy coverage and extra services and quick and advantageous claims processing. The statistical significance (p-value<0.05) points to policy benefits' importance but shows they affect selection less powerfully than affordable premiums do. The variable of awareness level demonstrates statistical significance ($p<0.05$) in proving the essential role of understanding health insurance policies. People who understand various health plans better make better choices regarding their healthcare coverage. The significance of awareness measured by the p-value appears lower than affordability and policy benefit factors based on their comparison. This regression model demonstrates how primary elements affecting health insurance selection decisions become comprehensible to researchers. Premium affordability takes precedence as the main deciding factor which policy benefits and awareness levels follow. The discovery enables insurers and policymakers to allocate resources toward lowering costs and upgrading coverages and spreading information which helps potential policyholders.

Chi-Square Test

Age Group	Employer-Provided Health Insurance (%)	Individual Health Insurance (%)	Total (%)
18-25 years	55%	45%	100%
26-35 years	60%	40%	100%
36-45 years	70%	30%	100%
46-55 years	80%	20%	100%
56+ years	85%	15%	100%
Overall	65%	35%	100%

The Chi-square analysis ($\chi^2 = 24.56$) shows that age groups influence what type of health insurance people should get and it proves this link statistically significant because the p-value is below 0.05. The age of a person becomes a key factor in their selection between health insurance plans which come from their employer or through an individual plan. People aged 18 to 25 demonstrate equal interests between individual health plans (45%) and those provided through employment (55%). The demographic of 18-25 year-olds includes students, new career professionals and individuals who lack full employer benefits or financial stability probably makes them choose flexible and affordable health insurance options. The 26-35 years old population stands slightly differently from their predecessors through employer-provided insurance (60%) as their individual choice plan becomes less prevalent (40%). The demographic at the beginning and middle stages of their professions uses both work-sponsored health plans and personal insurance coverage since their financial condition improves during this time. People in the 36-45 years age bracket show the most enthusiasm for employer-provided coverage where seventy percent of them select this option since they are at career maturity with family needs requiring the comprehensive benefits provided by employer plans including dependent coverage and diverse healthcare benefits. A substantial 80% of individuals within the 46-55 years age bracket choose their insurance coverage through their employers. People in this age group demonstrate a preference for employer-based insurance because such

plans offer both consistency and broad coverage options at a time when dependents and superior healthcare requirements make full reliable coverage essential. The 56+ years age group demonstrates the strongest preference for employer-provided insurance since 85% of them choose this option. People in this age range probably choose employer-based plans due to their impending retirement status and their need to depend on employer benefits until they qualify for Medicare because it guarantees healthcare accessibility.Young adults choose individual health insurance more than older adults who mostly select employer-based plans because of family demands and retirement approaches. Health insurance providers along with policy leaders need to create products which address unique needs of various age groups in order to suit diverse preferences in the population.

DISCUSSION

The descriptive statistical analysis reveals important information regarding the population traits alongside preferences that affect health insurance choice behaviors. The decision-making process for health planning includes equally distributed participation from males and females (52% male and 48% female) demonstrating universal healthcare concerns between genders. Health insurance needs to strike a balance by developing coverage that satisfies the different needs between both genders because men and women equally contribute to healthcare decisions. Most participants who responded aged 35 years demonstrate a need for both financial protection and healthcare planning given their present life stage. Presumably adult life introduces family obligations that make people seek long-term health protection because medical costs become rapidly apparent in their budgets. Workplace benefits from employers represent the primary (65%) method of health insurance provision that demonstrates the crucial role business-provided healthcare plays in stable employment settings. The majority of individuals obtain their health insurance through employer-sponsored plans because employee coverage stands as a dominant global pattern for healthcare benefits. A significant portion of the population represented by 35% takes individual health insurance demonstrating their belief in independent medical coverage potentially because they work independently or dislike employer-based benefits. Health insurance providers along with policymakers need to develop products which address the whole spectrum of consumer health care requirements. Providing insurance products which adapt to varying financial situations and employment types as well as preference needs enhances insurance accessibility while providing increased insurance coverage to several sections of the general population.

CONCLUSION AND RECOMMENDATIONS

Multiple variables shape health insurance scheme choices for individuals based on research findings. The collected descriptive data shows health insurance decision concern exists equally between male and female participants. Healthcare and financial security matter the most to individuals aged thirty-five years who made up most of the research participants. Workplace benefits as health coverage play a major role since employer-provided insurance accounts for 65% of total coverage according to data. Individual plans have gained favor among 35% of survey participants possibly because they seek independent healthcare coverage through self-employment or as freelancers or because they dislike their current employer-sponsored insurance. The factor analysis revealed four main components which shape the decision process for selecting health insurance coverage consisting of financial aspects and policy benefits alongside awareness of care providers and trust levels and demographic characteristics. Premium costs proved to be the top consideration among all factors that influence health insurance selection followed by policy characteristics then awareness level and trust and age and income demographics. Analytical findings through correlation methods strengthen evidence demonstrating how greater household income leads people to purchase advanced health insurance coverage.

Policymakers along with insurers need to consider several recommendations for healthcare.

1. **Affordability and Accessibility**: Health insurers should dedicate efforts to reduce health insurance premium costs specifically for disadvantaged income brackets to improve healthcare availability.
2. **Customized Plans**: Health insurers must develop plan structures which adapt to different age-based population segments including young professionals alongside those in retirement age.
3. **Awareness Campaigns:** Proper advertising alongside personal recommendations and open communication between insurers and the public will provide people with reliable information to make clear decisions about health insurance.
4. **Employer-Provided Options**: Enterprise healthcare options should expand their benefit packages to attract and maintain staff members especially among youth-oriented and multicultural workforces.
5. Surely these strategies lead to health insurance plans which serve customers of distinct segments to boost insurance coverage and enhance financial protection.

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