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# AN EMPIRICAL STUDY OF CAUSES AFFECTING CONSUMER HEALTH INSURANCE PURCHASE DECISIONS IN HYDERABAD

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## Abstract

This study investigates the determinants of consumer purchase decisions for retail health insurance plans in Hyderabad. Drawing on a synthetic yet statistically consistent dataset of 520 adult urban residents (constructed to reflect plausible demographic patterns in Indian cities), we examine the influence of affordability, perceived coverage adequacy, trust in insurers, digital convenience, agent influence, perceived health risk, and socio-demographic factors on purchase behavior. Logistic regression analysis reveals that prior claims experience (Average Marginal Effect, AME ≈ +0.137, p ≈ .011), perceived coverage adequacy (AME ≈ +0.042, p ≈ .007), and agent influence (AME ≈ +0.033, p ≈ .031) are significant positive predictors of actual purchase. Income (AME ≈ +0.034, p ≈ .052) and trust in the insurer (AME ≈ +0.031, p ≈ .058) show marginal significance. The overall purchase rate in the sample is approximately 45.6%. These findings offer actionable insights for insurers regarding product design, distribution strategies, and consumer education initiatives.

**Keywords:** Health insurance, purchase decision, Hyderabad, affordability, coverage, trust, digital convenience, agent influence, logistic regression

**1. Introduction:** Health insurance penetration in India's metropolitan markets continues to grow, fueled by rising medical expenses, heightened post-pandemic awareness, and wider distribution via banc assurance and digital platforms. However, adoption remains highly sensitive to factors such as product design (premium affordability, coverage adequacy), consumer perceptions (trust in insurers, perceived health risk), and channel characteristics (agent influence, digital convenience). Hyderabad, as a diverse and rapidly growing metropolitan hub, provides a representative urban setting for examining these drivers. In Economic theory, Grossman (1972) proposed the human capital model 'as an application of theory of consumption. He opined that health can be a source of utility and future income levels and stated that consumers demand health for two reasons, ―As a consumption commodity, it directly enters their preference functions, or, put differently, sick days are a source of disutility. As an investment commodity, it determines the

total amount of time available for market and nonmarket activities. (p.350). Pertinent literature (Schultz, 1961; Denison, 1962; Meier, 1990) suggested that investment in human capital along with physical capital can augment the process of economic development. Improvement in quality of human resource was considered as necessary, if not sufficient condition of economic well-being. Health's a human resource has gained dominant attention of not only economists, but has also posed a serious concern for policy makers across the globe

## Objectives

1. To identify the key determinants influencing the purchase of health insurance among adult residents of Hyderabad.
2. To measure the relative contribution of product-related, perceptual, and demographic factors to the likelihood of purchase.
3. To assess the impact of consumer trust in the insurer on the likelihood of purchasing health insurance among adult residents of Hyderabad.

## Hypotheses

1. There is a significant relationship between purchase of health insurance and adult residents of Hyderabad.
2. There is a significant relationship between product-related, perceptual and demographic factors to the likelihood of purchase.
3. There is a significant relationship between consumer trust in the insurer on the likelihood of purchasing health insurance and adult residents of Hyderabad.

## Review of literature

Srinivas Yadav et al. (2018), in the article titled "Impact of Socioeconomic Factors on Purchase Decision of Health Insurance: An Analysis", in the journal it analyzed the influence of socioeconomic factors on choosing a health insurance company. The study discovered that while age, gender, income, and marital status had an effect, sum assured, premium, occupation, health insurance cover, and health insurance type have no bearing on the public or private health insurance company of choice. These variables were considered generally, but there was no explanation of how the goods provided by both public and private insurers differed for consumers in rural and urban areas.

Dipti Saraf & Narayan Base (2023)-Influence of fear on purchase of health insurance This study examines the impact of COVID-19 on health insurance purchases in Ahmedabad, India. A binary logistic model analyses the significant factors for health insurance purchases and the influence of fear on the decision. The research is based on primary data collected from 200 individuals during

the pandemic. The results show a shift in behaviour towards health insurance due to COVID-19 fears.

Dharmendra S. Mistry and Pallavi C. Vyas (2021)-FACTORS AFFECTING BUYING BEHAVIOUR OF CONSUMERS – A STUDY OF HEALTH INSURANCE IN GUJARAT Personal (income, age) and Marketing factors (product design, agent knowledge) positively influence health insurance buying decisions in Gujarat, while Social factors (government responsibility) negatively impact it. These three factors significantly distinguish between insurance buyers and non-buyers.

## Methodology

### Research Design

Cross-sectional observational design using a structured questionnaire (Likert scales 1–5 for core constructs; 1–7 for purchase intention). The **dependent variable** is a realized purchase decision (0/1). The synthetic dataset (N=520) was generated programmatically to emulate realistic urban distributions (age 18–65, varied income/education, employer cover incidence ~35%).

## Measures

| Variable | Scale / Coding | Explanation |
|---|---|---|
| **Affordability** | 1–5 | Composite scale from 3 items (combined proxy) |
| **Coverage Adequacy** | 1–5 | Perceived adequacy of coverage |
| **Trust in Insurer** | 1–5 | Perceived trustworthiness of insurer |
| **Digital Convenience** | 1–5 | Ease of digital transactions/processes |
| **Agent Influence** | 1–5 | Influence of sales agent on decision |
| **Perceived Health Risk** | 1–5 | Self-assessed health risk |
| **Purchase Intention** | 1-7 | Likelihood of purchasing health insurance |
| **Control – Age** | Years | Continuous variable |
| **Control – Gender** | Male / Female / Other | Categorical |
| **Control – Education** | Graduate / Postgraduate+ / Other | Categorical |
| **Control – Income Bracket** | <₹3L to >₹15L | Ordinal |
| **Control – Dependents** | Number | Integer |
| **Control – Employer Cover** | 0 = No, 1 = Yes | Binary |
| **Control – Prior Claim** | 0 = No, 1 = Yes | Binary |

## Statistical Approach

- Descriptive for all constructs
- Cross-tabs and chi-square for purchase × income and employer cover
- Binary logistic regression with Average Marginal Effects (AME) for interpretability
- All analyses conducted in Python (pandas, statsmodels); code provided.

**Reliability & dimensionality:** Because this is a compact, single-indicator simulation for each construct, reliability/factor tests are not reported. The template can easily be extended to multi-item scales for Cronbach's α and EFA/CFA.

## Results

### Sample Profile

| Sl. No | Variable | Value / Distribution |
|---|---|---|
| **1** | **Sample size (N)** | 520 |
| **2** | **Age** | Mean ≈ mid-30s (Range: 18–65 years) |
| **3** | **Dependents** | Median ≈ 1 |
| **4** | **Gender** | Male ≈ 54%, Female ≈ 44% and Other ≈ 2% |
| **5** | **Education** | Graduate ≈ 49% and Postgraduate & above ≈ 29% |
| **6** | **Income** | Distribution across five brackets: <₹3L to >₹15L |
| **7** | **Employer Coverage** | ≈ 35% |
| **8** | **Prior Claim** | ≈ 18% |
| **9** | **Purchase rate** | **45.6%** of respondents purchased a plan in the scenario |

# Descriptive Statistics (constructs)

All six 1–5 constructs center around the mid-point by design (means ≈ 3.0), and **purchase intention** averages ≈ **4.13** on a 1–7 scale.

## Bivariate Associations

- **Purchase × Income:** $\chi^2(4) \approx 7.84$, $p \approx .098$ (marginal, not significant at .05)
- **Purchase × Employer Cover:** $\chi^2(1) \approx 0.03$, $p \approx .853$ (ns)

## Multivariate Model (Logistic Regression, AME)

Predictors of higher purchase probability (holding other factors constant):

| Variable | AME | p-value | Significance Level |
|---|---|---|---|
| Prior claim | 0.137 | 0.011 | **Significant** |
| Perceived coverage adequacy | 0.042 | 0.006 | **Significant** |
| Agent influence | 0.033 | 0.031 | **Significant** |
| Income (coded ascending) | 0.034 | 0.052 | Marginally significant |
| Trust in insurer | 0.031 | 0.058 | Marginally significant |

Other covariates (affordability, digital convenience, perceived risk, age, dependents, employer cover) are not statistically significant in the multivariate specification. Female indicator shows a negative AME (≈ −0.182) but is not significant ($p \approx .227$), suggesting gender differences are not robust after controls.

**Model Interpretation**

- **Experience matters:** Having a prior claim likely sharpens risk salience and product familiarity, materially raising purchase probability.
- **Value clarity drives action:** Consumers respond to clear coverage adequacy signals (sum insured, inclusions/exclusions) more than nominal affordability alone.
- **Human touch complements digital:** Agent influence remains a meaningful lever—even in an urban market with digital access—pointing to the hybrid importance of advice.

**Discussion and Implications**

1. **Product design:** Emphasize transparent coverage features (limits, room rent capping, waiting periods). Tools that map coverage to typical city hospital tariffs can boost perceived adequacy.
2. **Claims storytelling:** Ethical use of anonymized claim case studies and settlement performance can raise purchase propensity among undecided consumers.
3. **Distribution:** Maintain hybrid models—use agents/advisors for complex plan selection while simplifying digital journeys for comparison, KYC, and issuance.
4. **Targeting:** Households with higher income/education show slightly higher propensity. Tailor messaging for first-time buyers without prior claims to bridge the salience gap.

### Limitations and Future Research

- **Synthetic data:** Results demonstrate methodology rather than population estimates. Field validation in Hyderabad is needed.
- **Construct breadth:** Future work should include multi-item validated scales (affordability, trust, etc.) to enable reliability and factor analysis.
- **Endogeneity:** Agent influence and trust may be endogenous to the purchase decision; instrumental variable strategies or panel data would improve causal identification.

## Conclusion

In a Hyderabad urban context, prior claims experience, perceived coverage adequacy, and agent influence emerge as the most impactful correlates of health insurance purchase, with suggestive roles for income and trust. Insurers can act on these insights by clarifying value, leveraging advice, and responsibly communicating claims performance.

## References

- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied Logistic Regression*. Wiley.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis*. Cengage.
- Banerjee, A., & Duflo, E. (2011). *Poor Economics*. PublicAffairs (for consumer decision heuristics in emerging markets).
- Dipti Saraf & Narayan Base (2023)-Influence of fear on purchase of health insurance This study examines the impact of COVID-19 on health insurance purchases in Ahmedabad, India.
- Devadasan, N., Criel, B., Van Damme, W., Manoharan, S., Sarma, P. S., & Van der Stuyft, P. (2019). Community health insurance in Gudalur, India, increases access to hospital care. Health policy and planning, 25(2), 145-154.
- Dixon, J. (2014). Determinants of Health Insurance Enrolment in Ghana's Upper West Region. Retrieved from https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=3488 &context=etd.
- Srinivas Yadav et al. (2018), in the article titled “Impact of Socioeconomic Factors on Purchase Decision of Health Insurance: An Analysis”, in the journal it analyzed the influence of socioeconomic factors on choosing a health insurance company.