Age Factor– A Basic Parameter for Health Insurance- A Study with Special Reference to Chennai City among Standalone Health Insurers

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Abstract: Age is a basic factor for any kind of insurance. and the premiums that are to be paid are based on Age. In India, the premiums are low for Health Insurance if the age of the proposer is less whereas the same is on the converse in case of United States including the Medic Aid or Obamacare. In case of Life Insurance, the age is the longevity factor whereas the same is the factor for Health Insurance in determining the cost and coverage. Hence to analyse the fact of Age with reference to insurance a research study was taken up and data were collected from 531 samples from salaried and business class relating to Banking, IT & IT enabled Services, Manufacturing sector in the city of Chennai relating to Standalone Health Insurers. The collected data were analysed with statistical tools and the results show that majority of the respondents were males and they are between 31-40 years of age.

Keywords: RSBY - Rashtriya Swasthiya Bhima Yojana, BPL – Below Poverty Line, BPO – Business Process Outsourcing, IT – Information Technology.

I.INTRODUCTION

Insurance is defined as sharing of the losses of a few who are unfortunate to suffer losses amongst those who are exposed to similar risks. The Asset may lose its value on occurrence of event is called as risk. The event which may cause risk due to accident or illness is known as a Peril. The collections of contributions towards premium are called as Pooling. In this modern world humans suffer due to various diseases and suddenly it spreads quickly resulting to death. Dr V Mohan, Diabetologist has highlighted the cardio vascular and diabetes are prone in India due to poor health awareness. Indian population of at least three –fourths have abnormal levels of cholesterol or triglycerides a condition which is called dyslipidemia which results in increased risks of cardiovascular diseases according to a study conducted by the Indian Council of Medical Research. He had also quoted that there has been an alarming increase in the heart diseases in India in the past two years. According to government statistics one-fourth of all deaths among people in the 25-69 years age group is due to cardiovascular diseases. Studies have shown that Indians are affected by heart diseases at a much younger age when compared to the people in the western countries.

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Hence, medical insurance becomes inevitable and therefore underinsurance and non-insurance will certainly have impact on hard earnings of the Insured resulting in huge medical spend without any savings for retirement life since the medical exigencies in life are unpredictable and do not allow the Insured to think while in panic.

The medical insurance is covered for every individual on employment through a group policy for the employee and his family. If the said Insured opts for early retirement or resignation or change of employment would not be able to obtain the same cover or similar cover and the age will be on the higher side of entry for individual policy with high cost of premium. Every individual is suggested to have a separate insurance cover apart from the Group policy of employer in order to protect the Insured and his family irrespective of the age and health conditions. The Individual health Insurance policy covers the age of 18 to 65 years and if no coverage is available beyond that is a burden to human life. Even if covered beyond 65 years with many exclusions and waiting period of 4 years, the cost of insurance will be very high at entry level at that age. The quality is achieved by meeting the customer's expectation in a way that the customer's perception of the experience exceeds the expectation (Parasuraman, Berry and Zeithaml, 1985). Thus, satisfied customers perceived the quality of product or service that they experience is superior.

II.LITERATURE REVIEW

Sayak Horiuchi ,et.al [e] *(2018)* in their research article titled *"Study Protocol of a Cluster randomised controlled trial to evaluate effectiveness of a system for maintaining high quality early essential new born care in Lao People's Democratic Republic"* have revealed that Global mortality rate of children under the age of 5 years in the past two decades had a dramatic reduction. They found that Neonatal deaths were approximately 7000 per day in 2015 due to premature birth, birth asphyxia and neonatal sepsis. They further found that Neonatal Resuscitation Programs and educational programs provide for baby breathe and in **Lao (PDR)** had highest neonatal deaths of 27.2 per thousand in 2012. They concluded that the supervision of medical professionals pushes heavy burden on health system and maintaining quality of new born to prevent neonatal deaths. They further concluded that cost effectiveness can be achieved through self- managed monitoring continuously. They also concluded that **Lao (PDR)** has to extrapolate to district level and beyond the Early Essential New Born Care.

The study finally concluded that this could not focus much due to non-availability of resources and focus on service care takers.

Sampurna Bhuyan (2016) in her research thesis titled "*Enhancing Health Security in Assam; Exploring the Efficacy of Health Insurance*" Thesis submitted to Guwahati University analysed on income, savings, borrowing, expenditure pattern of organized sectors in the city of Guwahati. Further the study focuses on income and expenditure on health insurance schemes in both public and private sector in Assam. Inability to pay for health insurance should not tantamount to deprival of needed medical attention. Further the study found that Insurance has a moral hazard where it instigates increased consumption of medical care. She concluded that labour force are still in search of jobs in Guwahati city as Service sector is not able to absorb them even though construction activity is highest in informal or unorganized sector. She found that the average family size is 3 to 4 person and the population mean age is 43 years from the samples size of 360 no's of which 234 belong to unorganized sector and 126 belong to organized sector. She further concluded that 93% of unorganized sector are in self-insurance which means that most of the underprivileged are in unorganized sector which suggest for Universal Health Insurance plan. Affordable policies have to be designed by the Government for urban, semi-urban and rural population and the State Governments have to revive the public sector hospitals and Health Centre's thereby addressing the scarcity of medical and Para-medical staff requirement. She found that the Infant mortality rate is highest in Assam in the entire country due to no logistic support, non-availability of costly medicines, medical equipment's, vaccines etc. She finally concluded that Community Based Health Insurance (CBHI) only can solve the issue of Universal Insurance coverage in unorganized sector and insisted that every Indian should be made mandatory for a health cover on time and especially on life threatening diseases. The methods of copayment shall have to be streamlined to avoid moral hazard and the pollution control mechanism by the State Govt of Assam. The creation of financial mechanism to protect the poor from financial disaster due to sickness is the need of the hour which is prone in unorganized sector as there is very low purchasing power. CBHI integration is multifaceted and should be integrated between all stake holders and Willingness to pay were the focus of the study.

Venkatesan R (2015) in his article "Jan Dhan vs Jan Suraksha" in IRDAI Journal Vol XIV revealed that Pradhan Mantri Suraksha Bhima Yojana (PMSBY) with an accident insurance cover of Rs. 2 lakhs at a premium of Rs. 12/- per annum which is applicable to all Bank Account holders in age group of 18-70 years and covers Death and Permanent Disability due to accident. The Pradhan Mantri Jeevan Jyoti Bhima Yojana (PMJJBY) covers with life insurance of Rupees 2 lakhs for a premium of Rs. 330/- per annum. The Pradhan Mantri JanDhan Yojana (PMJDY) who have bank accounts will have coverage in 18-50 years age group and the coverage is Rs. 30,000/- which can be extended up to Rs. 55 years on payment of premium. The Atal Pension Yojana (APY) covers age group of 18-40 years and monthly pension will be based on contribution of Rs. 42/- - Rs. 210/- per month and can avail a monthly pension of Rs. 1000/- to Rs. 5000/- from the age of 60 years. The premium will be debited from Savings Bank account of customers. He found

that Jan Dhan to Jan Suraksha is a natural transition of Government on completion of first stage. These schemes are useful to poor people and accidental death will financially support their family. He finally concluded that Integration of PSU Banks and Insurers will further lead to strong and integrated financial system and better mobilisation of savings.

Jayanthi L N (2014) titled *"Evaluation of the Service Quality of Life Insurance Corporation of India in Chennai City – A Study on Policy holders"* analysed that Service Quality is crucial for both the customer and the Service Provider. She further found that Comparison Expectations and Performance is nothing but Service Quality. SERVPERF has 22 item survey instruments and to assess Non-electronic Service Quality based on perceptions of actual service quality. The factors of Service Quality identified by the Researcher are Tangibles, Assurance, Competence, Personalised Financial handling, Corporate Image and Technology. Identification of problem systematically and quickly, understanding the problem, improving operational processes, measuring customer satisfaction and reliable service performance. The difference between the Expected Service and the Perceived Service is the Gap. She found that LIC is leading a top position in Public sector insurers and trust over financial stability. She found that female insured are less satisfied than males, Most Policy holders invested in LIC are male, Policy holders are in the age group of 28-37 years, 38.95% of the policy holders are Graduates, 70.4% of the policy holders are living single , 37.70% of policy holders in Chennai are salaried, Annual Income range from 2.40 lakhs to 3.60 lakhs per annum , 53% of policy holders Live in Joint family. She concluded that NAV and gaining market share can be achieved through Service Quality and further concluded that Customer needs have to be viewed seriously in order to achieve customer satisfaction.

Byju K P M (2014) titled *"Service Quality in Health Care - A comparative study of private and public sector health care services"* analysed in Pondicherry, Villupuram & Cuddalore towns in Tamilnadu. The researcher found that Search Qualities are attribute and includes colour, smell, style, feel, price, fit & feel like Refrigerators, Television etc. The Experience Qualities are Goods & Services like food, repairing, entertainment etc. The Credence Qualities are difficult to evaluate even after consumption like financial services, health care, education. Good Health is universally accepted as an integral element of economic development.

In Indian Health care, it was a mixed development in the past few decades due to liberalisation of economy created more opportunities to generate income and reduction of poverty. People are ready to spend more on availability of quality health care services due to increasing awareness and consciousness. SERVPERF instrument showed un dimensionality and strong internal consistency was highlighted by Burch, Louisana, Rogers and Underwood (1995). GAP Model of Parsuraman, Zeithmal & Berry (1995) on 5 dimensions were consistent. This researcher found that BRICS Nations viz., Brazil, Russia, India, China & South Africa will be more than half of G6 economies in terms of GDP and the Percapita GDP of India is 1500$

whereas the other BRICS Nation are above 6000$ which is due to high Out of Pocket expenses and lowest GDP among BRICS Nation. He found that Infant mortality rate is 15 per mile (thousand) in China, Russia & Brazil whereas it is 56 per mille in India. He further found that Population beyond 65 years of age in India & China is 5.2% and the other nations like Brazil, Russia & South Africa have more than 6%. The Child immunisation has eradicated measles in BRICS Nations through 100% immunization whereas India has 74% are covered with vaccination for measles. He concluded that majority of the respondents are from Pondicherry and having monthly income of less than Rs. 10,000/- and were farmers or daily wage earners and prefer public sector health care services. He further concluded that Customer Satisfaction differs from Public Sector and Private Sector and also between respondents. Further the Service Quality may not be sufficient conditions to alter satisfaction levels but a positive condition to develop satisfaction. He concluded that multiple regressions showed varied effect of Service Quality on Customer Satisfaction with respect to patients, their attendants in public sector and private sector health care services. The study revealed that People with poor satisfaction levels are owing to poor perception of Service Quality.

Rukmi Basu (2014) in her article titled *"Rashtriya Swasthiya Bhima Yojana: Pioneering Public-Private Partnership in Health Insurance* had revealed that India is decreasing in fertility and mortality and is in a demographic transition resulting in population in age group of 15-25 years with around 500 million. She further found that we have the largest young population in working age group in the world. RSBY has enrolled more than one-third of its population who are in the Below Poverty Line. She further found that National Health accounts to 20% of health expenditure for (Central Government, State Government and Local) and 78% towards Out of pocket expenses which are highest in the world. Rashtriya Swasthiya Bhima Yojana (RSBY) had the target of over 300 million work forces for the year 2012-13 in unorganized sector who does not have access to any kind of health care and it will be 360 million for the year 2013-14**.** This helps as an incentive to hospitals to treat large patients and paid per patient. Insurers monitor the participating hospitals in order to prevent frauds resulting in excessive claims. Non-Governmental Organisations (NGO's) are involved more to reach the Below Poverty Line (BPL) families and paid for their services. The Central Government and the State Government bear the premiums jointly. IT enabled scheme to create competition among public and private health. RSBY is considered to be one successful private and public partnership model in terms of their reach and sustainability. She concluded that poverty is the main reason as one-third of population is in lower income groups. In the absence of risk pooling, the severe indebtedness pushes them for self-financing of risk. She further concluded that National Health mission which provides the salary to the medical and Para-medical staff in Govt Hospitals and Medical College hospitals. She also concluded that lack of data regarding BPL by many of the States in India is also, but public-private protection in India is more achieved through RSBY than any other schemes.

Akila (2013) in her Research article titled *"Penetration of Health Insurance Sector in Indian Market"* had examined that India is lagging far behind China, Vietnam and Srilanka in Healthcare Indicators. The Demand for Health Insurance is largely from Middle Income Group. The Country is facing the problems of Communicable and Non-Communicable diseases coupled with spiraling high cost of medical expenses and financial burden on the poor resulting in erosion of their incomes. The Cardio Vascular diseases were the main causes for death and disability. Their target audience throughout India was 100 samples of which 85 are men and 15 are women. The reasons for taking Health Insurance was 19% towards tax benefit, 43% for safety and 38% for both. The said Researcher made a comparison and found that 64% of patients are above 35 years and 36% of patients are below 35 years. She concluded that there is enough opportunity for Health Insurance in India rather than Western countries. She further concluded that Health Insurance and Micro Insurance for BPL families for growth in Insurance Industry. She finally concluded that Health Care Providers and TPA's have penetration of Health Insurance in India.

III.RESEARCH GAP

There is no research done so far on the Age and the Service Quality factors, Core factors &, Purchase Decision factors done in Chennai City relating to Health Insurance among Standalone Health Insurers. Hence this study was made. With following objectives

1. To examine the core factors for selection of health insurance policies.
2. To study the impact of selected demographic profile characters on the Expectations, Experience and Satisfaction on the Services offered by the selected insurance companies.
3. To provide appropriate suggestion and recommend new model for Health Insurance Sector.

IV.HYPOTHESIS:

1. There is no significant influence of personal and socio-economic variables on Purchase decision of Health insurance.
2. There is no significant influence of personal and socio-economic variables on Branding of Health insurance companies.
3. There is no significant variation between expected and experience service quality.
4. There is no significant influence of personal and socio-economic variables on satisfaction towards service quality of Health insurance companies.

V.PROPOSED METHODOLOGY

The methodology adopted for this research is through Scheduling and Questionnaire method. The Standalone Health Insurers have sold 24,96,496 numbers of policies in the year 2016-17 in India of which the number of policies sold in the State of Tamilnadu is 10,25,288 numbers for the same period.

The number of policies sold in Chennai city is 6,37,539 numbers of which Star Health Insurance Company Limited has sold the majority of policies as the said company is based out at Chennai. This identified research gap is between "Expectations and Experiences" of customers on service dimensions specifically on Standalone Health Insurers. The first part of the questionnaire will cover the information related to demographic factors like income, age, educational qualification, nature of employment or business and the nature of industry are collected.

The data was collected for 531 samples though the required samples are 384 using. Non-probability Purposive or Judgment sampling technique.

VI. RESULT ANALYSIS

CORE FACTORS INFLUENCING THE NEED TO PURCHASE THE HEALTH INSURANCE

6.1 Core factors that need to purchase Health Insurance

Data reduction process is adopted to reduce the variables into factors with good mathematical concepts. Factors constitute the variables of better relationship between them. This is established through Exploratory Factor Analysis by Principal Component Method. It reduces any number of variables into different factors; each factor contains likely variables with close co-variance and correlation. Based on the composition of the variables inside the factors, the factors are named. In this section core factors that need to purchase Health Insurance among the respondents is identified. Core factors that need to purchase Health insurance contain 19 variables. Based on the responses given by the respondents, factor analysis with principal component method using vari-max rotation is adopted to reduce the variables in to factors.

Table 4.1: Initial Eigen values of Core factors that need to purchase Health Insurance

Factors	Initial Eigen values		
	Eigen Value	Percentage of Variance	Cumulative Percentage
1	10.918	41.54	41.54
2	6.687	10.33	51.87
3	4.151	8.25	60.12
4	2.105	6.11	66.23
5	1.021	5.02	71.25

Nineteen variables are condensed into factors by analyzing the relationship between the variables (factors that need to purchase Health Insurance). Here 19 variables are condensed in to 5 factors which explain much of the original response. Cumulative percentage of 71.25 % of the total variance is extracted (information contained in 19 variables). Five factors along with their components and factor scores are displayed in the Table 4.2.

Table 4.2: Factor scores of Core factors that need to purchase Health Insurance

Factor	Components	Factor Scores
Factor1:	Dependents coverage beyond 60 yrs	0.801
Policy variants	No of days limit - Pre and Post hospitalisation	0.768
	Waiting period for coverage	0.741
	No pre-medical check-up	0.621
Factor 2: Service variants	Increase in cost of Treatments	0.725
	Emergency Medical needs	0.701
	Specialised Services availability	0.608
	Domiciliary Hospitalisation	0.551
Factor 3: Financial variants	Tax Concessions	0.752
	Discounts in Premium	0.711
	Cash Less Facility	0.672
Factor 4: Claim variants	Low Copayment on Claims	0.821
	Room Rent of Attendants per day	0.715
	Transparency of Policy conditions	0.621
	Add on covers like Ambulance / Stretchers	0.524
Factor 5: Market variants	Adequate network of Hospitals	0.765
	Adequate Doctors & Nurses	0.671
	Well Connected with TPA & Hospital	0.601
	Higher Sum Insured	0.531

From Table 4.2, it is noted that factor 1 is a grouping of 4 variables such as "Dependents coverage beyond 60 years", "Number of days limit - Pre and Post hospitalisation", "Waiting period for coverage" and "No pre-medical check-up" which is named as **Policy variants** factor.

Factor 2 is a grouping of 4 variables such as "Increase in cost of Treatments", "Emergency Medical needs", "Specialised Services availability" and "Domiciliary Hospitalisation" which is named as **Service variants** factor.

Factor 3 is a combination of three variables such as "Tax Concessions", "Discounts in Premium" and "Cash Less Facility" which is named as **Financial variants** factor.

Factor 4 is a grouping of four variables such as "Low Copayment on Claims", "Room Rent of Attendants per day", "Transparency of Policy conditions" and "Add on covers like Ambulance / Stretchers" which is named as **Claim variants** factor.

Factor 5 is a grouping of four variables such as "Adequate network of Hospitals", "Adequate Doctors and Nurses", "Well Connected

with TPA and Hospital" and "Higher Sum Insured" which is named as **Market variants** factor. Dependents coverage beyond 60 years, increase in treatment cost, concession in tax, low copayment on Claims, adequate Hospitals network are considered as the important for purchasing Health Insurance.

6.2.2 Perception about Core factors

The perception of the respondents with regard to Core factors of Health Insurance companies in Chennai are recorded in this section. Core factors such as (i) Policy variant (ii) Service variants (iii) Financial variants (iv) Claim variants and (v) Market variants.

6.2.2.1 Perception about Policy variants

Descriptive statistics for Policy variants in Health insurance companies are recorded by four variables. (i) Dependents coverage beyond 60 years, (ii) No of days limit - Pre and Post hospitalization, (iii) Waiting period for coverage and (iv) No pre-medical check-up. Respondents' perceptions about Policy variants are recorded through descriptive measures such as mean and standard deviation in the table 4.10.

Table 4.10: Descriptive statistics for Policy variants

Statements	Mean	SD
Dependents coverage beyond 60 years	2.59	1.002
Number of days limit - Pre and Post hospitalization	4.12	0.907
Waiting period for coverage	3.44	0.836
No pre-medical check-up	3.60	0.958

Source: Primary data

Respondents of Health insurance companies have expressed their perceptions towards Policy variants. Totally four variables have persisted on different aspects of Policy variants: The mean perception of the respondents towards Dependents coverage beyond 60 years is 2.59, Number of days limit - Pre and Post hospitalization is 4.12, Waiting period for coverage is 3.44 and No pre-medical check-up is 3.60. Respondents are more pleased with particular about number of days limit during pre to post hospitalization. No pre-medical check-up and waiting period for coverage are the other aspects that bring satisfaction among the policy variants. However, the respondents expressed disagreement towards dependents coverage beyond 60 years.
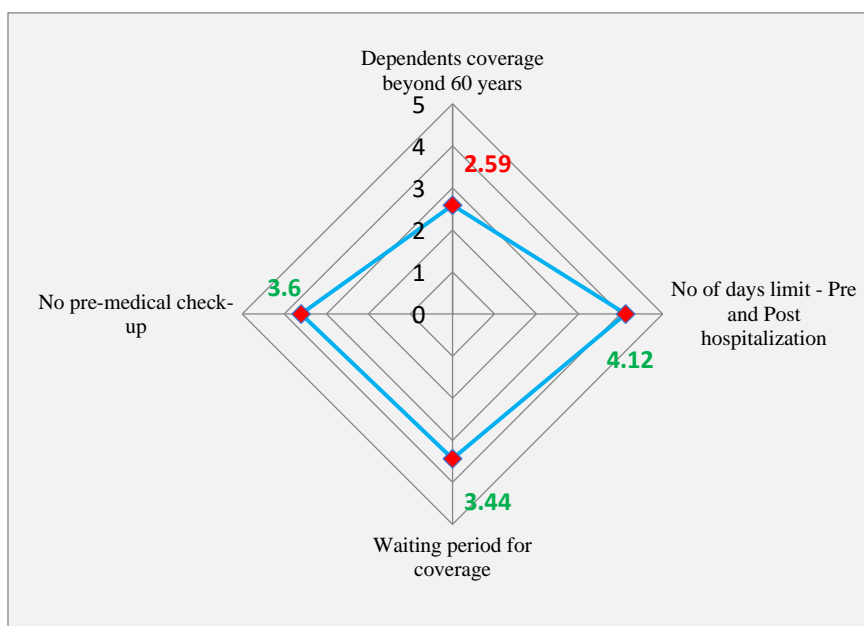

Figure 4.3: Radar diagram showing mean response for Policy variants

VII. DECISION FOR PURCHASE OF HEALTH INSURANCE POLICY

7.1 Factors influencing the purchase decision of Health Insurance policy

Factors of purchase decision of Health Insurance policy are identified. Making decision about purchase contains 15 variables. Based on the responses given by the selected respondents, Factor analysis with principal component method using vari-max rotation is applied to group the variables in to different factors.

7.2 Influence of personal /socio economic variables on Purchase decision of Health insurance

This section is prepared to assess the influence of personal /socio economic variables on Purchase decision of Health insurance in Chennai. To assess the influence of personal /socio economic variables (gender, age, employee status, nature of industry, qualification, marital status and annual income) on Purchase decision of Health insurance, one-way ANOVA is applied.

Null hypothesis H_01 : There is no significant influence of (a) gender (b) age (c) employee status (d) nature of industry (e) qualification (f) marital status (g) annual income on Purchase decision of Health insurance

Table 4.21 displays the results of influence of personal /socio economic variables on Purchase decision of Health insurance.

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Table 4.21 : Influence of demographic variables on purchase decision

	Category	N	Mean	S D	F-value
Gender	Male	372	3.83	0.452	**0.883 (p=.348)**
	Female	159	3.79	0.468	
Age	21 - 30 years	151	3.82	0.478	**10.214** (p<.001)
	31- 40 years	185	3.91	0.395	
	41- 50 years	107	3.86	0.448	
	51- 60 years	46	3.64	0.479	
	Above 60 years	42	3.48	0.441	
Employee status	Salaried	396	3.87	0.437	**23.458** (p<.001)
	Business	135	3.66	0.476	
Nature of industry	Manufacturing	55	3.42	0.351	**13.882** (p<.001)
	Banking	266	3.89	0.443	
	IT / ITES	105	3.86	0.422	
	Construction / Real Estate	54	3.84	0.448	
	FMCG	51	3.75	0.495	
Qualification	SSLC/HSC/Diploma	15	3.7	0.485	**4.927** (p=.002)
	Graduate	161	3.8	0.427	
	Post Graduate	217	3.9	0.439	
	Professional	138	3.72	0.494	
Marital status	Single	151	3.88	0.468	**4.651*** (p=.031)
	Married	380	3.79	0.45	
Annual income	Less than Rs 5 lakhs	142	3.65	0.499	**4.141*** (p=.042)
	Rs. 5 - 10 lakhs	185	3.57	0.444	
	Rs. 10 - 15 lakhs	86	3.27	0.456	
	Rs. 15 - 20 lakhs	57	3.45	0.432	
	Above Rs.20 lakhs	61	3.20	0.397	

*Significant at 5% level   ** Significant at 1% level

Age

From the table 4.21 the ''F' value **10.214** is significant at 1% level. The null hypothesis $H_01(b)$ is rejected. Respondents in the age group of 31-40 years have scored highest mean value of **3.91** and the lowest mean value is scored by respondents of above 60 years (**3.48**). Hence the respondents in the age group of 31-40 years are making better purchase decision about health insurance and respondents of above 60 years of age are lacking in taking decision about health insurance.

7.3 Influence of personal /socio economic variables on Branding

This section is prepared to assess the influence of personal /socio economic variables on Branding of Health insurance companies. To assess the influence of personal /socio economic variables (gender, age, employee status, nature of industry, qualification, marital status and annual income) on Branding of Health insurance companies, one-way ANOVA is applied.

Null hypothesis H_0 2: There is no significant influence of (a) gender (b) age (c) employee status (d) nature of industry (e) qualification (f) marital status (g) annual income on Branding of Health insurance companies

Table 4.23 displays the results of influence of personal /socio economic variables on Branding of Health insurance companies.

Table 4.23: Influence of demographic variables on branding

	Category	N	Mean	S D	F-value
Gender	Male	372	3.95	0.543	**1.221 (p=.270)**
	Female	159	3.89	0.59	
Age	21 - 30 years	151	3.87	0.559	**10.702** (p<.001)
	31- 40 years	185	4.02	0.5	
	41- 50 years	107	4.06	0.544	
	51- 60 years	46	3.8	0.594	
	Above 60 years	42	3.5	0.545	

Employee status	Salaried	396	3.98	0.533	**14.787** (p<.001)
	Business	135	3.77	0.598	
Nature of industry	Manufacturing	55	3.44	0.548	**13.661** (p<.001)
	Banking	266	4.02	0.536	
	IT / ITES	105	3.94	0.514	
	Construction / Real Estate	54	3.97	0.446	
	FMCG	51	3.91	0.615	
Qualification	SSLC/HSC/Diploma	15	3.87	0.522	**4.596** (p=.003)
	Graduate	161	3.95	0.537	
	Post Graduate	217	4	0.546	
	Professional	138	3.79	0.58	
Marital status	Single	151	3.96	0.534	**0.842** (p=.359)
	Married	380	3.91	0.567	
Annual income	Less than Rs 5 lakhs	142	3.69	0.567	**3.664*** (p=.038)
	Rs. 5 - 10 lakhs	185	3.48	0.522	
	Rs. 10 - 15 lakhs	86	3.29	0.565	
	Rs. 15 - 20 lakhs	57	3.84	0.628	
	Above Rs.20 lakhs	61	3.57	0.567	

*Significant at 5% level   **Significant at 1% level

Age

From the table 4.23, ''F' value **10.702** is significant at 1% level. The null hypothesis $H_02(b)$ is rejected. Respondents with the age group of 41-50 years have scored highest mean value of **4.06** and the lowest mean value is scored by respondents of above 60 years (**3.50**). This shows that the respondents in the age group of 41-50 years are more concentrating on branding of health insurance companies and respondents having above 60 years of age are less concentrating on branding of health insurance companies.

7.4 Influence of age on satisfaction towards Service quality dimensions of Health insurance companies

This section is prepared to assess the influence of age on satisfaction towards Service quality dimensions of Health insurance companies in Chennai. To assess the influence of age on Service quality dimensions of Health insurance companies, one way ANOVA is applied.

Null hypothesis H_0 4: There is no significant influence of age on satisfaction towards (a) Tangibles (b) Reliability (c) Commitment (d) Empathy (e) Assurance (f) Premium price (g) Know-How Quality (d) Responsiveness of Health insurance companies

Table 4.34 displays the results of influence of age on satisfaction towards Service quality dimensions of Health insurance companies in Chennai.

Table 4.34: Influence of age on Service quality dimensions

	Category	N	Mean	S D	F-value
Tangibles	21 - 30 years	151	3.63	.538	**6.990** (p<.001)
	31- 40 years	185	3.79	.540	
	41- 50 years	107	3.83	.588	
	51- 60 years	46	3.56	.685	
	Above 60 years	42	3.39	.666	
Reliability	21 - 30 years	151	3.65	.506	**7.552** (p=.000)
	31- 40 years	185	3.82	.492	
	41- 50 years	107	3.79	.554	
	51- 60 years	46	3.59	.656	
	Above 60 years	42	3.37	.733	

Commitment	21 - 30 years	151	3.65	.513	**4.276** (p=.002)**
	31- 40 years	185	3.69	.529	
	41- 50 years	107	3.88	.509	
	51- 60 years	46	3.62	.591	
	Above 60 years	42	3.60	.551	
Empathy	21 - 30 years	151	3.73	.509	**5.220 ** (p<.001)**
	31- 40 years	185	3.74	.478	
	41- 50 years	107	3.83	.512	
	51- 60 years	46	3.66	.467	
	Above 60 years	42	3.42	.685	
Assurance	21 - 30 years	151	3.70	.505	**1.208 (p=.306)**
	31- 40 years	185	3.69	.476	
	41- 50 years	107	3.80	.582	
	51- 60 years	46	3.66	.625	
	Above 60 years	42	3.64	.540	
Premium price	21 - 30 years	151	4.11	.572	**3.552* (p=.018)**
	31- 40 years	185	3.64	.512	
	41- 50 years	107	3.41	.593	
	51- 60 years	46	3.01	.583	
	Above 60 years	42	2.78	.557	
Know-How Quality	21 - 30 years	151	3.76	.537	**0.982 (p=.417)**
	31- 40 years	185	3.74	.537	
	41- 50 years	107	3.83	.628	
	51- 60 years	46	3.69	.656	
	Above 60 years	42	3.66	.578	
Responsiveness	21 - 30 years	151	3.63	.541	**6.067** (p<.001)**
	31- 40 years	185	3.69	.468	
	41- 50 years	107	3.60	.674	
	51- 60 years	46	3.57	.634	
	Above 60 years	42	3.21	.740	

**Significant at 1% level

Tangible

F value **6.990** in Table 4.34 indicates that it is significant at 1% level, the null hypothesis H_0 4(a) is rejected. Respondents with the age group of 41-50 years have scored highest mean value of **3.83** and the lowest mean value is scored by respondents of above 60 years (**3.39**). Hence the respondents in the age group of 41-50 years are more pleased with the tangibility of the health insurance companies and respondents with above 60 years are less pleased with the health insurance companies.

Reliability

F value **7.552** in Table 4.34 indicates that it is significant at 1% level, the null hypothesis $H_04(b)$ is rejected. Respondents with the age group of 31-40 years have scored highest mean value of **3.82** and the lowest mean value is scored by respondents of above 60 years (**3.37**). Hence the respondents in the age group of 31-40 years are more satisfied with the reliability of health insurance companies and respondents with above 60 years are less satisfied with the reliability of health insurance companies.

Commitment

F value **4.276** in Table 4.34 indicates that it is significant at 1% level, the null hypothesis $H_0\ 4(c)$ is rejected. Respondents with the age group of 41-50 years have scored highest mean value of **3.88** and the lowest mean value is scored by respondents of above 60 years (**3.60**). Hence the respondents in the age group of 41-50 years are more committed with health insurance companies and respondents with above 60 years are less committed with health insurance companies.

Empathy

F value **5.220** in Table 4.34 indicates that it is significant at 1% level, the null hypothesis $H_0\ 4(d)$ is rejected. Respondents with the age group of 41-50 years have scored highest mean value of **3.83** and the lowest mean value is scored by respondents of above 60 years (**3.42**). Hence the respondents in the age group of 41-50 years are having more empathy towards health insurance companies and respondents with above 60 years are less empathized with the health insurances companies.

Assurance

F value 1.**208** in Table 4.34 indicates that it is insignificant at 5% level, the null hypothesis $H_04(e)$ is accepted. Hence significant influence of age on satisfaction towards assurance of health insurance companies is not observed.

Premium price

F value **3.552** in Table 4.34 indicates that it is significant at 5% level, the null hypothesis $H_0\ 4(f)$ is rejected. Respondents with the age group of 21-30 years have scored highest mean value of **4.11** and the lowest mean value is scored by respondents with above 60 years of age (**2.78**). Hence the respondents in the age group of 21-30 years are satisfied with premium price of health insurance companies and above 60 years are less satisfied with premium price.

Know-How quality

F value **0.982** in Table 4.34 indicates that it is not significant at 5% level, the null hypothesis $H_04(g)$ is accepted. Hence significant influence of age on satisfaction towards know-how quality of health insurance companies is not observed.

Responsiveness

F value **6.067** in Table 4.34 indicates that it is significant at 1% level, the null hypothesis $H_0\ 4(h)$ is rejected. Respondents with age group of 31-40 years have scored highest mean value of **3.69** and the lowest mean value is scored by respondents of above 60 years (**3.21**). Hence the respondents in the age group of 31-40 years are more satisfied with responsiveness of health insurance companies and respondents with above 60 years are less satisfied with responsiveness of health insurance companies.

VIII. SUMMARY OF FINDINGS

8.1.1 Personal profile of the respondents

8.1.1.1 Most of the respondents (70.1%) owning health insurance policies in Chennai are male and the remaining respondents (29.9%) are female.

8.1.1.2 In the selected 531 respondents, 34.8% of the respondents are in the age group of 31-40 years, 28.4% of them falls in the age group of 21-30 years, 20.2% are 41-50 years old, 8.7% of the respondents are in the age group of 51-60 years and 7.9% of them belong to above 60 years of age.

IX. CONCLUSIONS

Influence of age on all the service quality dimensions is observed significantly except Assurance and Know how quality. Respondents in the age group of 41-50 years are more pleased with the tangibility of the health insurance companies and respondents with above 60 years are less pleased with the health insurance companies. Respondents in the age group of 31-40 years are more satisfied with the reliability of health insurance companies and respondents with above 60 years are less satisfied with the reliability of health insurance companies. Respondents in the age group of 41-50 years are more committed with health insurance companies and respondents with above 60 years are less committed with health insurance companies. Respondents in the age group of 41-50 years are having more empathy towards health insurance companies and respondents with above 60 years are less empathized with the health insurances companies. Respondents in the age group of 21-30 years are satisfied with premium price of health insurance companies and above 60 years are less satisfied with premium price. Respondents in the age group of 31-40 years are more satisfied with responsiveness of health insurance companies and respondents with above 60 years are less satisfied with responsiveness of health insurance companies.

SUGGESTIONS

The Premium price should be very minimal for the aged dependents and the insured in the senior citizen age group as there is no income or meager income through pension and interest on small savings accrued resulting in non-insurance or under insurance due to sky rocketing of premiums.

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