

## Factors of Life Insurance at Household Level: A Case Study

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**Abstract:** In this paper, the relationship between life insurance and various economic and demographic characteristics of households were examined. The study conducted in urban and rural areas of Krishna District in Andhra Pradesh show that individual and household level variables are important factors of life insurance ownership. The objective of this study was to examine the relationship between life insurance ownership and the demographic, economic and educational characteristics of respondents. The analysis was based on data from filed survey. The stratified sampling technique was used in selecting respondents and Chi-square test was employed to apply to match up observed data with data that would be estimated according to a given hypothesis. From the study find the major significant factors of insurance in urban area are caste, level of education, earning members in the family, income, savings and nature of accommodation. In the rural area caste, level of education, number of children in the family, number of dependents in the family, income and savings are the determinants of insurance. In both areas caste, level of education, income and savings are the significant factors.

**Key Words:** Life Insurance, Households, Socio economic factors.

### Introduction

The term insurance may defined as a co-operative mechanism to spread the loss caused by a particular risk over a number of persons, who are exposed to it and who agree to ensure themselves against that risk. The function of insurance includes providing certainty, protection, risk sharing, and prevention of loss and capital formation. Insurance is also defined as a social apparatus to accumulate funds to meet the losses arising through a certain hazard to a person insured for such hazard (Bodla, Marg & Singh, 2004). From an economic perspective, insurance is a financial intermediation function by which individuals exposed to a specified contingency each contribute to a pool from which covered events suffered by participating individuals are paid. From a legal perspective, insurance is an agreement, the insurance policy or insurance contract, by which one party, the policy owner, pays a stipulated consideration called the premium to the other party called the insurer, in return for which the insurer agrees to pay a defined amount of money or provide a defined service if a covered event occurs during the policy term (Black and Skipper, 2000).

Life insurance is generally considered a means of protecting one's family against the unforeseeable circumstance of the death of an earning member. However, there are a number of other benefits that are not apparent. Some benefits accrue to the individuals and their families, while others assist economic development.

Insurance, particularly life insurance, is one of the ways of providing for the future. A life insurance policy which gives an annuity is a combination of protection and investment. In addition, it serves as a solution to social problems. Investment of accumulated resources by the insurer facilitates the overall development of the country (NCEAR, 2011).

**Factors associated with life insurance:**

One would assume, a priori, that individual life insurance is function of income, assets, in some ways, education age of the family head, occupation of an individual, family composition and lifecycle and finally, life insurance purchase decisions are affected by a large group of variables which are difficult to isolate and measure. Attitudes towards death, family, insurance agents, saving, time preferences, and risk in general all create differences among individual utility functions for life insurance (Hammond, Houston and Melander, 1967). According to Anderson and Nevin (1975) the independent variables like socio-economic variables, demographic variables, psychograph variables and other explanatory variables were significant in life insurance purchased. Education of husband, current household income, expected household income, net worth of household, husband's insurance before marriage and wife's insurance before marriage were accounted in insurance decision. The wife and the insurance agent are playing an influential role in the type of insurance purchased by young married households. Burnett and Palmer's (1984) suggest that belief in the traditional work ethic, fatalism, socialization preference; religion salience and assertiveness were the most important variables and Education, number of children and income were the best associated variables with insurance decision at household level.

Shtick and Showers (1994) estimate impacts on purchasers, as well as the changes in the probability of purchasing insurance. Income and number of earners are both positively related to the demand for insurance; the marginal effect from an increase in income is greater for single earner households than for multi-earner households. Also, as either family size or age increases, the marginal increase in insurance expenditure diminishes. Composition of households evolves; change in household's characteristics will affect the demand for insurance. Tienyu Hwang and Brian Greenford (2005) also attempt to gain an understanding of the different characteristics of the market in life insurance in each territory. Income and life insurance consumption are found to be strongly correlated, which is consistent with previous studies. Education is a significant factor. Price is found to be insignificant, largely conflicting with previous studies. Levels of social security are not significantly related. The one-child policy in mainland China has a negative effect on life insurance consumption.

Donghui Li, Fariborz Moshirian, Pascal Nguyen and Timothy Wee (2007) examined the determinants of life insurance consumption in OECD countries. Consistent with previous results, we find a significant positive income elasticity of life insurance demand. Demand also increases with the number of dependents and level of education, and decreases with life expectancy and social security expenditure. The country's level of financial development and its insurance market's degree of competition appear to stimulate life insurance sales, whereas high inflation and real interest rates tend to decrease consumption and socioeconomic factors are jointly considered. Life insurance ownership in the country has corroborated that insured households tend to be more prosperous, more educated and more optimistic about future security than non-insured households. Both the level of education and occupation of the chief earner of a household are major determinants of life insurance participation, apart from asset-ownership. Further, households that are more optimistic about the adequacy of future income and savings show higher levels of participation. No rural–urban divide has been noticed with respect to these influencing factors. Preeti Kakar and Rajesh Shukla (2010)

### **Utility of the Study**

Social security is virtually non-existent in India. While governments play a role providing some security to poor households (through the public distribution system targeted at households below the poverty line), in general financial security remains the responsibility of individuals. Life insurance is one of the most important social security measures undertaken in the country the importance of life insurance for economic and financial development directs us to investigate which economic, demographic, and institutional factors give rise to a vibrant life insurance market. Several studies have identified a core set of socio- economic determinants as good predictors of life insurance consumption (Thorsten Beck and Ian Webb, 2003). Life insurance purchase decisions are affected by a large group of variables which are difficult to isolate and measure.(Hammond, Houston and Melander, 1967). Kakar and Shukla (2010) attempted to identify determinants of life insurance ownership in the country based on primary data generated through the National Council of Applied Economic Research's (NCAER) National Survey of Household Income and Expenditure (NSHIE). Both the level of education and occupation of the chief earner of a household are major determinants of life insurance participation, apart from asset-ownership. Furthermore, households that are more optimistic about the adequacy of future income and savings show higher levels of participation.

No rural–urban divide has been noticed with respect to these influencing factors. In this scenario the present study has been made an attempt to examine the factors of life insurance at household level in terms of depth and content. A couple of issues on socio- economic factors of households towards life insurance are examined.

**Objectives:**

The specific objectives of the study are:

1. To understand the socio-economic factors of respondents in the study area.
2. To understand the factors associated of life insurance consumption of insured respondents in the study area.

**Hypothesis:**

*H<sub>0</sub>: There is no relationship between socio-economic factors and insurance.*

*H<sub>1</sub>: There is a relationship between socio-economic factors and insurance.*

**Data and Methodology**

The study embodied a sizeable primary data, which was collected by way of canvassing a questionnaire among selected sample of respondents. The stratified sampling technique was used in selecting respondents. The researcher used the population strata on the basis of rural urban and insured and uninsured respondents and from each of these strata we drew at random a predetermined number of units (Yogesh Kumar Singh, 2006). The study is made in urban and rural areas of Krishna District in Andhra Pradesh. For the present study the total sample size of 400 was taken in which, 200 respondents were covered in urban area and 200 respondents taken from rural area. The total insured respondents from the two areas are 241, out of which, from urban area 143 and rural area 98. The total uninsured respondents from the two areas are 159, out of which, from urban area 57 and rural area 102. In this regard the data collected through questionnaires, personal observations, interviews etc. The collected raw data was processed by using Statistical Package for Social Sciences (SPSS) package for analyzing and interpretation. Chi- square test was employed to apply to match up observed data with data that would be estimated according to a given hypothesis.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where O refers to the observed frequencies and E refers to the expected frequencies.

In order to judge the significance associated between attributes, the calculated value of chi square were compared with corresponding table. 0.05 level of significance. The results are considered significant if the calculated value of chi square is greater than tabulated value otherwise regarded as non-significant value (Gupta, S.P., 1997).

## Results and Discussions

### 1. Individual Factors

Consumers are categorized by age, gender, region, education, occupation, status of living, interests, preferences and opinions etc. But identifying the factors that are affecting consumers decisions are extremely complex. The affective response expresses an individual's preference for an entity. It is essential to study the effect of human factors that influences the attitudes of insured and uninsured towards life insurance. The nature of occupation always influences a person to do or not to do a particular course of action in addition to occupation, age, marital status, religion, caste, education etc. Appendix-1 shows individual factors of sample insured and uninsured respondents between two selected areas.

The occupation which forms the major source of income for the family has been taken as the occupation of the household. Government employees (22.50%) are the highest percentage of insurers in urban area followed by private employees (17.50%). In the rural area others (16.00%) and farmers (12.00%) are became the highest percentage of insured respectively. Government employees (14.50%) and others (12.50%) are having highest insurance percentage in the total sample. Others (9.50%) are the highest percentage of uninsured category in urban area followed by farmers (6.50%). In the rural area farmers (16.00%) and others (15.50%) are became the highest uninsured percentage. Other occupation respondents (15.50%) are highest of uninsured category and farmers (11.25%) are occupied second place in the total sample. The chi- square values for urban and rural area respondents on life insurance among different occupational groups are 17.678 and 3.528 respectively. The chi- square value of urban area is significant at 1 per cent level. Hence, the null hypothesis is rejected in urban area and accepted in rural area. Therefore, we can conclude that there was a relationship between occupation and insurance in urban area and no relation between occupation and insurance in rural area.

In the age group between 30-39 (23.50%) respondents in urban area are the highest covered insured and 40-49 age group respondents are (20.00%) followed them.

In rural area also 30-39 age group (18.00%) respondents and 40-49 age group (11.00%) respondents are occupied first and second places in insured category. In the rural area 19-29 age group (16.50%) and 30-39 age group (15.50%) respondents are the most uninsured category. The most uninsured respondent's category in the total sample area is in the age groups of 19-29 (12.50%) and 30-39 (12.25%). Chi-square values for both urban and rural areas age group are 5.341 and 7.039 respectively. None of the chi-square value is significant at 5 per cent and 1 per cent level. Hence, the null hypothesis is accepted for both urban and rural areas and concluded that there is no relationship between age group and insurance in both urban and rural areas.

Out of the total insured urban respondents, the highest percentage (37.00%) belongs to OC community and the lowest percentage belongs to ST (6.00%) community. In rural area OC community (26.50%) registered most insured respondents and the lowest percentage is recorded in ST community (2.00%). OC community (31.75%) is the highest registered community in insured category in total respondents while ST community (4.00%) became the least community in which respondents are insured. In uninsured category for urban respondents, OC community (9.50%) stood at first place and ST community (3.50%) stood at last place. As the rural area uninsured respondents are considered majority of them belongs to BC community (14.00%) and the lowest belongs to ST community (10.50%). For caste wise total uninsured category OC community (11.25%) has the highest percentage and ST community (7.00%) registered lowest percent. The chi-square values for both urban and rural areas are 10.961 and 27.205 respectively. The chi-square value for the urban area is significant at 5 per cent level and for rural area significant at 1 per cent level. Hence, the null hypothesis is rejected and concluded that there is a relationship between caste and insurance.

Highest level of education of any member in the household has been taken as its level of education. This was done because, even where the head of the family is not literate, the younger members might be well educated and, being aware of insurance, become responsible for the household becoming insured. It is found that in the urban area the most insured respondents are educated and qualified of Graduation (21.50%) followed by Intermediate (11.00%) and SSC (11.00%). In rural area the highest percentage of insured respondents are notified with Graduation (10.50%) followed by Illiterate (8.50%), SSC and Primary Education (7.50%). Out of the total respondents, respondents who have Graduation (16.00%) qualification are most insured followed by SSC (9.25%) and Intermediate (9.00%). Regarding the uninsured respondents in urban area illiterates (9.50%) are the highest percentage followed by Graduation (5.00%) qualification. In rural area the majority of the uninsured category are having Primary Education (12.50%) followed by Illiterate (11.00%).

Illiterate (10.25%) respondents are became the highest percentage of uninsured in the total area followed by Primary Education (8.50%). The chi-square values for both urban and rural areas are 27.475 and 13.795 respectively. The chi-square value for urban area is significant at 1 per cent level and for rural area at 5 per cent level. So, the null hypothesis is rejected which concludes that there is a relationship between level of education and insurance.

## **2. Family Structure**

It is very significant to know the effect of family structure on forming consumer behavior. The inbuilt risk protection system is there in Hindu Undivided Families but, nowadays nuclear families came into existence. Hence it is essential to know the effects of family structure on forming behavior towards life insurance. The family structure includes family type, number of children; number of dependents in the family etc. Information regarding Family Structure of respondents for both urban and rural areas is presented in Appendix -2.

Highest percentages of insured respondents are found in urban, rural and total sample respondents in nuclear family type (i.e. 42.00%, 26.50% and 34.25%) respectively. The same case may be noticed in uninsured also. Nuclear family type respondents in urban (16.00%), rural (32.00%) and in total (24.00%) respondents are found to be highest percentage in uninsured. The chi-square values for both urban and rural areas are 1.463 and 3.667 respectively. The chi-square values for both urban and rural areas are insignificant. So, the null hypothesis is accepted and concludes that there is no relationship between type of family structure and insurance.

Highest percentage of insurance is obtained in respondents those who have two children in urban (33.50%), rural (20.00%) and total (26.75%) respondents respectively. In urban area highest percentage of uninsured is obtained in two children category (12.50%). Four and above children (16.50%) respondents in rural area are the majority of uninsured. In the total area two children (11.00%) respondents are became highest percentage of uninsured. The chi-square value is insignificant for urban area and significant at 1 per cent level for rural area. Hence, the null hypothesis is accepted in urban area and rejected in rural area. This concludes that there is no relationship between number of children and insurance in urban area and there is a relationship between number of children and insurance in rural area.

It can be found that only one dependent family has more insured in urban (21.50%), rural (13.50%) and total (17.50%) areas respondents. In the urban area two and three dependents (8.50%) in the family have majority of uninsured. In rural (25.00%) and total (16.75%) areas respondents, three dependents in the family are found to be the highest percentage of uninsured.

The chi-square value for urban area is insignificant and for rural area it is significant at 1 per cent level. So, the null hypothesis is accepted for urban area and rejected for rural area. The conclusion is that there is no relationship between number of dependents in the family and insurance in the urban area and recognized the relationship between number of dependents in the family and insurance in the rural area.

### **3. Economic Factors**

Economic factors influence the decision of every individual towards insurance. Economic factors include income, wealth and savings. Income is used in calculating the life risk value of any individual. It is clearly said that the ten times of annual income plus liability of an individual will be the policy for everyone. Earning members in the family are also important in affecting the decisions. In some cases personal earnings may not be there but holds wealth from forefathers. The nature of savings that a person habituated, or the level of savings etc., always influence a person in selecting the savings mode i.e. banks, post office, insurance, chits, etc. Hence, it is essential to study the influence of these factors in forming or changing the decision towards life insurance. . Economic Factors of respondents is shown in the Appendix -3.

The highest percentage of insured in urban (43.00%), rural (23.00%) and total (33.00%) areas respondents are found in only one earning member in the family. In the case of uninsured also only one earning member in the family is found to be the highest percentage in urban (12.50%), rural (20.00%) and total (16.25%) areas respondents respectively. The chi-square value for urban area is significant at 5 per cent level and insignificant for rural area. So, the null hypothesis is rejected for urban area and accepted for rural area. Hence, the conclusion is that there is a relationship between earning members in the family and insurance in urban area and there is no relationship between earning members in the family and insurance for rural area.

In the urban area highest percentage of insured respondents are in the range of above Rs. 50,001 (41.50%) followed by Rs. 40,001 – 50,000 (10.50%) and the lowest is noticed in the range of Rs. 30,001 – 40,000 (2.00%). In the rural area above Rs. 50,001 (18.50%) respondents occupied first place as insured respondents followed by below Rs. 10,000 (8.00%) and the range of Rs. 40,001 – 50,000 (4.00%) is noticed as the least insured. In the total sample respondents the majority of insured is recorded in the range of above Rs. 50,001 (30.00%) followed by Rs. 40,001-50,000 and below Rs. 10,000 (7.25%) and the lowest insured respondents are belongs to the range of Rs. 30,001-40,000 (4.25%). In the urban area the highest uninsured respondents are belongs to the range of below Rs. 10,000 (13.50%) and the lowest respondents belongs to the range of Rs. 20,001-30,000 and above Rs. 50,001 (2.00%).



In the rural area below Rs. 10,000 respondents which constitute 31.00 per cent are notified as the highest uninsured and the least are noticed in the range of Rs. 40,001 – 50,000 (1.00%). Regarding the total area respondents below Rs. 10,000 (22.25%) are registered as highest uninsured and the lowest are in the range of above Rs. 50,001. The calculated chi-square values for the urban and rural areas are 61.089 and 63.264 respectively. Both the urban and rural areas chi-square values are significant statistically at 1 per cent level. So, the null hypothesis is rejected and concludes that there is relationship between annual income of the respondent and the insurance for both the urban and rural areas.

In the urban area the highest percentage of insured are in the range of above Rs. 50,000 (38.50) and the lowest is recorded in Rs. 30,001 – 40,000 (2.50%). Above Rs. 50,000 (19.50%) family income respondents are notified as the highest insured in rural area and Rs. 40,001 – 50,000 range family income respondents are registered as lowest insured. Regarding the total respondents, above Rs. 50,000 (29.00%) range family income respondents are the highest percentage of insured and the lowest are in the range of Rs. 30,001 – 40,000 (4.50%). In the uninsured category below Rs. 10,000 (13.00%) family income respondents are became the highest percentage and Rs. 40,001 – 50,000 (1.00%) are the lowest in urban area. In the rural area uninsured below Rs. 10,000 (25.00%) family income respondents are registered highest percentage and Rs. 30,001 – 40,000 (1.50%) respondents are the lowest. Below Rs. 10,000 (19.00%) family income respondents are having the highest percentage for the total respondents in the uninsured and the lowest are in the range of Rs. 40,001 – 50,000 (1.50%). The calculated chi-square values for both urban and rural areas are 73.397 and 58.74 respectively. Both chi-square values are significant at 1 per cent level. Hence, the null hypothesis is rejected and concludes that there is a relationship between annual income of the family and insurance for both urban and rural areas respectively.

Majority of insured respondents in the urban area is having own independent house (30.00%) and others (0.50%) category respondents are the lowest insured. Own independent house (29.00%) respondents are the highest percentage of insured in rural area and the lowest belongs to own flat (6.00%). For the total area respondents first place occupied by own independent house (29.50%) and the last place received by others (0.25%). Regarding the uninsured in the urban area rented house (15.00%) respondents are the highest percentage and the lowest percentage belongs to own flat (1.00%). Own independent house (32.50%) respondents are the highest in rural uninsured and others (0.50%) respondents are the lowest. Regarding the total uninsured own independent house (21.50%) respondents occupied first category and others (0.25%) belongs to the last position.

The chi-square value for the urban area is significant at 1 per cent level and for the rural area is insignificant. The null hypothesis is rejected for urban area and accepted for rural area and concludes that there is relationship between nature of accommodation and insurance in urban area and there is no relationship between nature of accommodation and insurance in rural area.

In the urban area below Rs. 10,000 (25.50%) respondents are the highest percentage in insured category and the lowest respondents are in the range of Rs. 30,001 – 40,000 (0.50%). In the rural area below Rs. 10,000 respondents are noticed as the highest percentage in insured and the lowest respondents are in the ranges of Rs. 30,001 – 40,000 and above Rs. 50,000 (1.50%). The highest percentage of total insured respondents are in the range of below Rs. 10,000 (24.75%) and the lowest are in the range of Rs. 30,001 – 40,000. Regarding the uninsured in the urban area below Rs. 10,000 (12.50%) respondents are the highest and the lowest are in the range of Rs. 40,001 – 50,000 (1.00%). In the rural area the highest percentage of uninsured are belongs to Rs. 10,001 – 20,000 (20.00%) and the lowest are in the range of Rs. 30,001 – 40,000 (2.00%). Below Rs. 10,000 (16.00%) respondents are belongs to the highest percentage of uninsured in the total respondents and Rs. 40,001 – 50,000 (0.50%) are the lowest percentage. The chi-square value for the urban area is significant at 1 per cent level and for the rural area it is significant at 5 per cent level. So, the null hypothesis is rejected for both urban and rural areas respectively. Thus, concludes that there is a relationship between annual saving of the family and the insurance for both urban and rural areas respectively.

### **Summary:**

In this chapter the study examined household determinants of insurance in urban and rural areas by category wise such as individual factors, family factors and economic factors. The chi-square test is employed to analyses these factors to observe whether the relationship is significant or not. The findings are:

**Individual Factors:** Occupation, age group, caste and level of education are the four factors which are considered under individual factors category for both urban and rural areas to examine the relationship with insurance. Caste and level of education are the two variables which have relationship with insurance in urban area and the remaining two variables are not having relationship. In rural area occupation, caste and level of education have relationship with insurance and only one factor i.e., age group is not having relationship with insurance.

**Family Factors:** To know the relationship between family factors and insurance in both urban and rural areas three factors are studied under family factors category. They are – type of family, number of children in the family and number of dependents in the family. As the study reveals that in the urban area none of the factor is found to have relationship with insurance. In the rural area number of children in the family and number of dependents in the family factors are having relationship with insurance while the type of family is not having relationship.

**Economic Factors:** Earning members in the family, annual income of respondent, annual income of the family, annual saving of the family and nature of accommodation factors are considered under economic factors in both urban and rural areas to examine the relationship with insurance. In the urban area all the factors are having relationship with insurance. In the rural area annual income of the respondent, annual income of the family and annual savings of the family are having relationship with insurance while earning members in the family and nature of accommodation are not having relationship with insurance.

From the study the major significant determinants of insurance in urban area are caste, level of education, earning members in the family, income, savings and nature of accommodation. In the rural area caste, level of education, number of children in the family, number of dependents in the family, income and savings are the determinants of insurance. In both areas caste, level of education, income and savings are the significant determinants of insurance consumption.

## References

- Anderson R. Dan and R. Nevin John (1975): “Determinants of Young Married’s Life Insurance Purchasing Behaviour: An Empirical Investigation”, *Journal of Risk and Insurance*, Vol. 42, No. 3, pp: 375-387.
- Bodla, B.S., M.C. Marg and K.P. Singh (2004): *Insurance – Fundamentals, Environment and Procedures*, Deep & Deep Publications Pvt. Ltd., New Delhi, Chapter 1, pp: 4-5.
- Burnett, J. John and Palmer. A. Bruce (1984): “Examining Life Insurance Ownership through Demographic and Psychographic Characteristics”, *The Journal of Risk and Insurance*, Vol. 51, No. 3, pp 453-67.
- Donghui Li, Fariborz Moshirian, Pascal Nguyen and TimothyWee (2007): “The Demand for Life Insurance in OECD Countries”, *The Journal of Risk and Insurance*, Vol. 74, No. 3, pp.: 637-652.

- Gupta, S.P. (1997): *Statistical Methods*, Sultan Chand & Sons Publications, New Delhi
- J. D. Hammond, David B. Houston and Eugene R. Melander (1967): “Determinants of Household Life Insurance Premium Expenditures: An Empirical Investigation”, *The Journal of Risk and Insurance*, Vol. 34, No. 3, September, pp: 397-408.
- J. D. Hammond, David B. Houston and Eugene R. Melander (1967): op.cit.
- Jatinder S. Bedi, Secretary & Head, Operations (2011): Pre-launch Report of Insurance Campaign Survey Awareness, National Council of Applied Economic Research, New Delhi -2011, pp 1-2.
- Kenneth Black Jr. and Harold D. Skipper Jr. (2000): *Life & Health Insurance*, Pearson Education Inc., Chapter 1, pp: 19-20.
- Preeti Kakar and Rajesh Shukla (2010): “The Determinants of Demand for Life Insurance in an Emerging Economy— India”, *The Journal of Applied Economic Research*, vol. 4 no. 1, pp: 49-77.
- Preeti Kakar and Rajesh Shukla (2010): op.cit. Thorsten Beck and Ian Webb (2003): “Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries”, *The World Bank Economic Review*, Vol. 17, No. I, pp: 51-88.
- Tienyu Hwang and Brian Greenford (2005): “A Cross Section Analysis of the Determinants of Life Insurance Consumption in Mainland China, Hong Kong, and Taiwan”, *Risk Management and Insurance Review*, Vol. 8, No. 1, pp: 103-125.
- Vince E. Showers and Joyce A. Shotick (1994): “The Effects of Household Characteristics on Demand for Insurance: A Tobit Analysis”, *The Journal of Risk and Insurance*, Vol. 61, No. 3, pp: 492-502.
- Yogesh Kumar Singh (2006): *Fundamental of Research Methodology and Statistics*, New Age International (P) Limited Publishers, New Delhi, Chapter 5, p. 89.

**Appendix -1: Individual Factors**

Factors	Group	Urban		Rural	
		Insured	Uninsured	Insured	Uninsured
Occupation	Government Employee	45 (22.50)	7 (3.50)	13 (6.50)	8 (4.00)
	Private Employee	35(17.50)	9(4.50)	10(5.00)	15(7.50)
	Business	22(11.00)	9(4.50)	19(9.50)	16(8.00)
	Farmer	23 (11.50)	13(6.50)	24 (12.00)	32 (16.00)
	Others	18 (9.00)	19 (9.50)	32 (16.00)	31 (15.50)
Age group	19 – 29	25(12.50)	17(8.50)	21(10.50)	33(16.50)
	30 – 39	47(23.50)	18(9.00)	36(18.00)	31(15.50)
	40 – 49	40(20.00)	11(5.50)	22(11.00)	21(10.50)
	50 – 59	17(8.50)	4(2.00)	15(7.50)	8(4.00)
	Above 60	14(7.00)	7(3.50)	4(2.00)	9(4.50)
Caste	SC	16(8.00)	16 (8.00)	10 (5.00)	26 (13.00)
	ST	12 (6.00)	7 (3.50)	4 (2.00)	21 (10.50)
	BC	41 (20.50)	15 (7.50)	31 (15.50)	28 (14.00)
	OC	74 (37.00)	19 (9.50)	53 (26.50)	27 (13.50)
Education	Illiterate	11 (5.50)	19 (9.50)	17 (8.50)	22 (11.00)
	Primary Education	18 (9.00)	9 (4.50)	15 (7.50)	25 (12.50)
	Upper Primary Education	10 (5.00)	7 (3.50)	9 (4.50)	13 (6.50)
	SSC	22 (11.00)	5 (2.50)	15 (7.50)	14 (7.00)
	Intermediate	22 (11.00)	4 (2.00)	14 (7.00)	5 (2.50)
	Graduation	43(21.50)	10(5.00)	21(10.50)	10(5.00)
	Post-Graduation	14 (7.00)	2 (1.00)	7 (3.50)	13 (6.50)
Others	3(1.50)	1(0.50)	--	--	

**Appendix -1 (a): Individual Factors Chi-Square Result**

Area	Factors	$\chi^2$ -Value	p-Value
Urban	Occupation	17.678	0.001
	Age Group	5.341	0.254
	Caste	10.961	0.011
	Education	27.475	0.000
Rural	Occupation	3.528	0.473
	Age Group	7.039	0.133
	Caste	27.205	0.000
	Education	13.795	0.032

**Appendix -2: Family Factors**

Factors	Group	Urban		Rural	
		Insured	Uninsured	Insured	Uninsured
Family Structure	Single	12(6.00)	8(4.00)	9(4.50)	13(6.50)
	Nuclear	84(42.00)	32(16.00)	53(26.50)	64(32.00)
	Joint Family	47(23.50)	17(8.50)	36(18.00)	25(12.50)
Number of Children	One	33(16.50)	8(4.00)	11(5.50)	12(6.00)
	Two	67(33.50)	25(12.50)	40(20.00)	19(9.50)
	Three	21(10.50)	13(6.50)	22(11.00)	24(12.00)
	Four & Above	16(8.00)	7(3.50)	8(4.00)	33(16.50)
	Nil	6(3.00)	4(2.00)	17(8.50)	14(7.00)
Number of Dependents In the Family	Nil	6(3.00)	4(2.00)	8(4.00)	2(1.00)
	One	43(21.50)	8(4.00)	27(13.50)	14(7.00)
	Two	34(17.00)	17(8.50)	22(11.00)	24(12.00)
	Three	35(17.50)	17(8.50)	26(13.00)	50(25.00)
	Four & Above	25(12.50)	11(5.50)	15(7.50)	12(6.00)

**Appendix -2 (a): Family Factors Chi-Square Result**

Area	Factors	$\chi^2$ -Value	p-Value
Urban	Family Structure	1.463	0.481
	Number of Children	3.977	0.409
	Number of Dependents	5.866	0.209
Rural	Family Structure	3.667	0.159
	Number of Children	23.068	0.000
	Number of Dependents	15.647	0.003

**Appendix -3: Economic Factors**

Factors	Group	Urban		Rural	
		Insured	Uninsured	Insured	Uninsured
Earning Members	Nil	2(1.00)	6(3.00)	--	--
	One	86(43.00)	25(12.50)	46(23.00)	40(20.00)
	Two	36(18.00)	15(7.50)	32(16.00)	37(18.50)
	Three	12(6.00)	7(3.50)	10(5.00)	20(10.00)
	Four & Above	7(3.50)	4(2.00)	10(5.00)	5(2.50)
Annual Income of the Respondent	Below – 10,000	13(6.50)	27(13.50)	16(8.00)	62(31.00)
	10,001 – 20,000	14(7.00)	11(5.50)	14(7.00)	20(10.00)
	20,001 – 30,000	8(4.00)	4(2.00)	10(5.00)	9(4.50)
	30,001 – 40,000	4(2.00)	5(2.50)	13(6.50)	6(3.00)
	40,001 – 50,000	21(10.50)	6(3.00)	8(4.00)	2(1.00)
	Above 50,000	83(41.50)	4(2.00)	37(18.50)	3(1.50)
Annual Income of the Family	Below – 10,000	10(5.00)	26(13.00)	11(5.50)	50(25.00)
	10,001 – 20,000	15(7.50)	12(6.00)	15(7.50)	27(13.50)
	20,001 – 30,000	13(6.50)	6(3.00)	11(5.50)	11(5.50)
	30,001 – 40,000	5(2.50)	8(3.50)	13(6.50)	3(1.50)
	40,001 – 50,000	23(11.50)	2(1.00)	9(4.50)	4(2.00)
	Above 50,000	77(38.50)	4(2.00)	39(19.50)	7(3.50)
Annual Saving of the Family	Below – 10,000	51 (25.50)	25(12.50)	48(24.00)	39(19.50)
	10,001 – 20,000	13(6.50)	10(5.00)	22(11.00)	40(20.00)
	20,001 – 30,000	34(17.00)	16(8.00)	17(8.50)	19(9.50)
	30,001 – 40,000	1(0.50)	4(2.00)	3(1.50)	4(2.00)
	40,001 – 50,000	32(16.00)	2(1.00)	5(2.50)	--
	Above 50,000	12(6.00)	--	3(1.50)	--
Nature of Accommodation	Own House	60(30.00)	21(10.50)	58(29.00)	65(32.50)
	Own Flat	36(18.00)	2(1.00)	12(6.00)	10(5.00)
	Rented House	41(20.50)	30(15.00)	28(14.00)	22(11.00)
	Office Quarters	5(2.50)	4(2.00)	--	4(2.00)
	Others	1(0.50)	--	--	1(0.50)

**Appendix -3(a): Economic Factors Chi-Square Result**

Area	Factors	$\chi^2$ -Value	p-Value
Urban	Earning Members	11.439	0.022
	Annual Income of the Respondent	61.089	0.000
	Annual Income of the Family	73.397	0.000
	Annual Saving of the Family	23.379	0.000
	Nature of Accommodation	18.445	0.001
Rural	Earning Members	5.703	0.126
	Annual Income of the Respondent	63.264	0.000
	Annual Income of the Family	58.740	0.000
	Annual Saving of the Family	14.337	0.013
	Nature of Accommodation	6.223	0.183