



THE EFFECT OF DEMOGRAPHIC FACTORS ON THE AWARENESS OF LIFE INSURANCE AMONG THE NON-USERS OF LIFE INSURANCE FROM RURAL AREAS

Dr. Kiran Vazirani

Asst. Prof., T John College, Bangalore University, Bangalore, Karnataka.

Abstract

According to the theoretical and empirical literature, life insurance demand is influenced by various economic, institutional, social, and demographic factors. The aim of this paper is to analyze the demographic determinants of life insurance consumption in rural areas of Udaipur district. The descriptive research is based on the survey data collected on the sample of 400 respondents. The research result shows that age, gender, family type, education and income impact on the awareness of life insurance among the non-users of life insurance belongs to the rural areas of Udaipur District.

Key Words: *Demographic Determinants, Life Insurance Penetration, Marketing Techniques.*

1.1 Introduction

Life Insurance plays an important role in individuals and families financing lives because it is a hedge against the loss of income following the death of a wage earner. The use of life insurance is to insure against lifetime uncertainty resulting for the mortality risk of individuals. Marketers typically combine several variables to define a demographic profile. Once these profiles are constructed, they can be used to develop a marketing strategy and marketing plan. Understanding households' behavior in this manner can play an important role in predicting demand for insurance also. However, emerging new complex financial products and changes in the preferences of people for preventing their risks make this difficult. Creating demographic profile is important as the progress of life insurance penetration and density is far from satisfying and this indicates at some problem in the way it is being sold in our country.

Overselling life insurance to few wealthy people in the society is not going to be the panacea for all the life insurers. They need to realize that every insurable individual has to be insured and then only the motive of life insurance can be fulfilled in the right sense. Analysis and understanding of prospective buyers of life insurance according to their demographic characteristics in specific geographical regions thus becomes important. This will enable the insurers to better prepare their marketing strategies as per the requirements of the people in the region.

1.2 Review of Literature

Athma. P and Kumar. R (2007) in the research paper titled "an explorative study of life insurance purchase decision making: influence of product and non-product factors". The empirical based study conducted on 200 sample size comprising of both rural and urban market. The various product and non-product related factors have been identified and their impact on life insurance purchase decision-making has been analyzed. Based on the survey analysis; urban market is more influenced with product based factors like risk coverage, tax benefits, return etc. Whereas rural population is influenced with non-product related factors such as: credibility of agent, company's reputation, trust, customer services. Company goodwill and money back guarantee attracts many people for life insurance.

Since **Mantise and Farmer (1968)** showed that marriages, births, personal income, population size, relative price index, and employment could affect the insurance purchase, many studies have been conducted to estimate the demand for insurance or to test risk-aversion.

Anderson and Nevin (1975) in the study looked at the life insurance purchasing behaviour of young newly married couples. The study suggested that the wife and the insurance agent are playing an influential role in the type of insurance purchased by young married households.

Burnett and Palmer (1984) in the study examined various demographic and psychographic characteristics in terms of how well they relate to differing levels of life insurance ownership. Owners of large amounts of life insurance are better educated, have larger families, have higher incomes, are not opinion leader, are geographically stable, are greater risk takers, are not price conscious, are not information seekers, are low in self-esteem, are not brand loyal and believe in community involvement but they do not rely heavily on the government. They conducted extensive research using Multiple Classification Analysis. Their study proved that demographic variables, as well as psychographic variables, are important predictor variables

Truett and Truett (1990) showed that age, education, and level of income are factors that affect the demand for life insurance, and that income elasticity of demand for life insurance is much higher in Mexico than in the United States.

Gandolfi and Miners (1996) showed that there are meaningful differences between husbands and wives in their demand for life insurance.

1.3 Research Methodology

Location of study: Rural areas of Udaipur district, Rajasthan.

Sampling Method: Convenient Sampling Technique.

Sample Size: 400 respondents.

Sampling Unit: Non-Users of Life Insurance in rural areas of Udaipur District.

Contact Method- Personal.

Sampling Area- Udaipur District (Comprising up of Udaipur City with -11 Tehsils).

Data Collection: Primary data collection through questionnaire.

Objectives

The study is organized in the way to meet all the specific objective of the study. The objectives are:

1. To determine the level of Awareness on Life Insurance among the non-users of rural populace.
2. To examine the association between Awareness on Life Insurance and Demographic variables of non-users of Life insurance from rural areas.
3. To examine the reasons for not purchasing life insurance by the rural populace of Udaipur district.

Hypothesis

Through the reviews of the previous study, following are the assumptions for the study:

H₀₁: There is no significant association between Awareness on Life Insurance and Gender of the respondents

H₀₂: There is no significant association between Awareness on Life Insurance and Family Type of the respondents

H₀₃: There is no significant association between Awareness on Life Insurance and Age group of the respondents

H₀₄: There is no significant association between Awareness on Life Insurance and Annual Income of the respondents

H₀₅: There is no significant association between Awareness on Life Insurance and Education of the respondents.

H₀₆: There is no significant difference in the rank ordered preferences towards various reasons for not purchasing life insurance

H₀₇: The mean score of opinion of respondents' towards each Factor motivating the purchase of Life Insurance are 3

Statistical Tools and Techniques

For measuring various phenomena and analyzing the collected data effectively and efficiently to draw sound conclusions, a number of statistical techniques including Chi-square, Mean average score and T test have been used for the testing of hypotheses.

1.4 Data Analysis and Interpretation

1.4.1 Demographic profile of the Respondents

The demographic profile of the respondents is provided below:

Table 1.1 Distribution of The Respondents Based On Different Categories

Sl. No.	Basis for Classification	Categories	Number of the Participants	Percentage
Base I	Segregation on the basis of Gender	Female	158	39.5
		Male	242	60.5
Base II	Segregation on the basis of Age of the respondents	Up to 30 years	89	22.3
		Between 31 years – 40 years	168	42.0
		Between 41 years – 50 years	79	19.8

		Above 50 years	64	16.0
Base III	Segregation on the basis of type of family	Joint	155	38.8
		Nuclear	245	61.3
Base IV	Segregation on the basis of income	Up to Rs. 50000	119	29.8
		From Rs. 50001 to Rs. 1 Lac	149	37.3
		From Rs. 100001 to Rs. 2 Lacs	80	20.0
		Above Rs. 2 Lacs	52	13.0
Base V	Segregation on the basis of Qualification of respondents	Illiterate	96	24.0
		Up to school	158	39.5
		Graduate and above	82	20.5
		Others	64	16.0

Findings

1. From the study, it is observed that out of 400 sample respondents nearly 60.50 per cent are male and the remaining 39.5 per cent are female.
2. The analysis revealed that 42.0 percent of respondents are in the age group of 31 – 40 years, whereas 22.3 per cent belong to up to 30 years of the age group, 19.8 per cent respondents are in 41 – 50 years of age group and 16.0 per cent respondents are above 50 years of age group.
3. The analysis of data shows that nearly 61.3 per cent belong to nuclear family and 38.8 per cent belong to joint family.
4. It has also been observed that among the sample respondents 37.3 per cent of the participants have an annual income of between Rs. 50001 to Rs. 100000, 29.8 per cent of them have an income of up to Rs. 50000, 20.0 per cent earn of them are earning between Rs. 100001 – Rs. 200000 and 13.0 per cent participants have an annual income of above Rs. 200000.
5. The analysis revealed that 24.0 per cent are illiterates, 39.5 per cent are educated up to school level, 20.5 per cent are graduates and 16.0 per cent respondents have other category of education.

1.4.2 Summary statistics of Awareness on Life Insurance

The respondents are further classified on the basis of their awareness regarding the life insurance and its characteristics and plans.

Table 1.2 Distribution of Respondents Based on Awareness About Life Insurance

Sl. No.	Basis of Distribution	Categories	No. of Respondents	Percentage
Base I	Distribution of respondents on the basis of Awareness about life insurance	Aware	352	88 %
		Not Aware	48	12 %
Base II	Distribution of respondents on the basis of Awareness about Private life insurers	Aware	322	80.5 %
		Not Aware	78	19.5 %
Base III	Distribution of	Money Back plans	148	37 %

respondents on the basis of Awareness about the different life insurance plans	Endowment plans	132	33 %
	Term insurance plans	45	11.25 %
	Children plans	0	0 %
	Pension plans	16	4 %
	ULIP plans	21	5.25 %
	Group Life insurance plans	90	25.5 %
	None of the above	224	56 %

Findings

1. From the study, it is observed that majority 88.0 per cent of the sample respondents have awareness towards life insurance and the rest 12.0 per cent are not aware about life insurance.
2. The analysis of data shows that majority 80.5 per cent of the sample respondents is aware about private life insurance companies and only 19.5 per cent of the sample respondents are not aware about private life insurance.
3. It has also been observed that 37 per cent of the respondents are aware of money back plans, 33 per cent of the respondents are aware of endowment plans, 4 per cent of the respondents are aware of pension plans, 25.5 per cent of the respondents are aware of group life plans, 11.25 per cent of the respondents are aware of term insurance plans and 5.25 per cent of the respondents are aware of ULIP plans.

1.5 Inferential Statistics

Throughout the analysis process, significance tests were used to decide whether to accept or reject the hypotheses concerning the sample data that have been collected (Harris, 1998). The confidence level was taken as 95% (or 5% level of significance).

Association between Awareness on Life Insurance and Demographic variables

For testing the association between the respondent's awareness on life insurance and the demographic variables, chi-square test has been employed.

1.5.1 Association between Awareness on Life Insurance and Gender of the respondents

H0: There is no significant association between Awareness on Life Insurance and Gender of the respondents

Table 1.3 Chi Square Test Between Awareness on Life Insurance And Gender of The Respondents

Awareness	Gender			Chi Square value	P value
	Female	Male	Total		
Aware	137 (86.7%)	185 (76.4%)	322 (100%)	6.413	.011*
Not Aware	21 (13.3%)	57 (23.6%)	78 (100%)		
Total	158(100%)	242(100%)	400(100%)		

* denotes five percent level of significance

Note: The value within () refers to Column Percentage

Findings

As per the chi square above table it is found that there is a significant association between Awareness on Life Insurance and Gender of the respondents ($\chi^2 = 6.413$, $P < 0.05$). Hence the null hypothesis is rejected and the alternate hypothesis is accepted. Cross table result shows that out of 158 female respondents 86.7 per cent are aware of life insurance and out of 242 male respondents 76.4 per cent are aware of life insurance.

1.5.2 Association Between Awareness on Life Insurance And Family Type of The Respondents

H0: There is no significant association between Awareness on Life Insurance and Family Type of the respondents

Table 1.4 Chi Square Test Between Awareness on Life Insurance And Family Type of The Respondents

Awareness	Family Type			Chi Square value	P value
	Joint	Nuclear	Total		
Aware	136 (87.7%)	186 (75.9%)	322 (100%)	8.455	.004*
Not Aware	19 (13.3%)	59 (23.6%)	78 (100%)		
Total	155(100%)	245(100%)	400(100%)		

* denotes five percent level of significance

Note: The value within () refers to Column Percentage

Findings

As per the chi square table it is found that there is a significant association between Awareness on Life Insurance and Family Type of the respondents ($\chi^2 = 8.455$, $P < 0.05$). Hence the null hypothesis is rejected and the alternate hypothesis is accepted. Cross table result shows that out of 155 respondents in joint family 87.7 per cent are aware of life insurance and out of 245 respondents in nuclear family 75.9 per cent are aware of life insurance.

1.5.3 Association Between Awareness on Life Insurance And Age Group of The Respondents

H0: There is no significant association between Awareness on Life Insurance and Age group of the respondents

Table 1.5 Chi Square Test Between Awareness on Life Insurance And Age Group of The Respondents

Sl. No	Awareness	Age Category (years)				Total	Chi Square Value
		Up to 30	31 – 40	41 – 50	Above 50		
1	Aware	77 (86.5%)	134 (79.8%)	64 (81.0%)	47 (73.4%)	322 (80.5%)	4.158 (Sig =.245)
2	Not Aware	12 (13.5%)	34 (20.2%)	15 (19.0%)	17 (26.6%)	78 (19.5%)	
Total		89 (100 %)	168 (100%)	79 (100%)	64 (100%)	400 (100%)	

Note: The value within () refers to Column Percentage

Findings

As per the chi square table above it is found that there is no significant association between Awareness on Life Insurance and Age Category of the respondents ($\chi^2 = 4.158$, $P > 0.05$). Hence the null hypothesis is accepted.

1.5.4 Association between Awareness on Life Insurance and Annual Income of the respondents

H0: There is no significant association between Awareness on Life Insurance and Annual Income of the respondents

Table 1.6 Chi Square Test Between Awareness on Life Insurance And Annual Income of The Respondents

Sl. No	Awareness	Annual Income (Rs.)				Total	Chi Square Value
		Up to 50000	50001 - 100000	100001 – 200000	Above 200000		
1	Aware	84 (70.6%)	124 (83.2%)	69 (86.3%)	45 (86.5%)	322 (80.5%)	11.044* (Sig =.011)
2	Not Aware	35 (29.4%)	25 (16.8%)	11 (13.8%)	7 (13.5%)	78 (19.5%)	
Total		119 (100 %)	149 (100%)	80 (100%)	52 (100%)	400 (100%)	

* denotes five percent level of significance

Note: The value within () refers to Column Percentage

Findings

As per the chi square table it is found that there is a significant association between Awareness on Life Insurance and Annual Income of the respondents ($\chi^2 = 11.044$, $P < 0.05$). Hence the null hypothesis is rejected. . Cross table result shows that among those respondents who are aware of life insurance a lesser percentage of respondents are found among those who are with annual income of up to rs 50000 in comparison with other groups.

1.5.5 Association between Awareness on Life Insurance and Education of the respondents

H0: There is no significant association between Awareness on Life Insurance and Education of the respondents

Table 1.7 Chi Square Test Between Awareness on Life Insurance And Education of The Respondents

Sl. No	Awareness	Education				Total	Chi Square Value
		Illiterate	Up to school	Graduate and above	Others		
1	Aware	78 (81.3%)	123 (77.8%)	67 (81.7%)	54 (84.4%)	322 (80.5%)	1.431 (Sig =.0698)
2	Not Aware	18 (18.8%)	35 (22.2%)	15 (18.3%)	10 (15.6%)	78 (19.5%)	
Total		96 (100 %)	158 (100%)	82 (100%)	64 (100%)	400 (100%)	

Note: The value within () refers to Column Percentage

Findings

As per the chi square table it is found that there is no significant association between Awareness on Life Insurance and Education of the respondents ($\chi^2 = 1.431$, $P < 0.05$). Hence the null hypothesis is accepted. .

1.5.6 Friedman Test For Reasons For Not Purchasing Life Insurance

Friedman test is a non-parametrical test similar to the parametric repeated measures ANOVA; it is used to detect differences in treatments across multiple test attempts. The procedure involves ranking each row (or block) together, then considering the values of ranks by columns.

H0 There is no significant difference in the rank ordered preferences towards various reasons for not purchasing life insurance.

In this method, the respondents are asked to rank all the reasons for not purchasing life insurance such as Agent's Compulsion, Poor after sale services, Long procedures, Less visits of agent, Complicated products, Complex claim settlement procedures and Lower services in rural areas. The scores for each variable are ranked, and the mean ranks for the variables are compared.

A Friedman test was conducted to determine whether respondents had a differential rank ordered preferences towards various reasons for not purchasing life insurance. Results of the analysis indicate that there was a significant difference in the respondents rank ordered as the p value is less than .05.

Table 1.8 Friedman Test For Reasons For Not Purchasing Life Insurance

SI. No	Reasons	Mean Rank	Chi Square Value	P Value
1	Agent's Compulsion	1.42	337.52	0.000*
2	Poor after sale services	5.87		
3	Long procedures	4.61		
4	Less visits of agent	6.61		
5	Complicated products	6.97		
6	Complex claim settlement procedures	3.26		
7	Lower services in rural areas	2.38		

* Significance at one per cent level

Findings

The analysis also revealed that there were significantly more favourable rankings for an Agent's Compulsion (1.42), followed by Lower services in rural areas (2.38), Complex claim settlement procedures (3.26) Long procedures (4.61), Poor after sale services (5.87), Less visits of agent (6.61) and Complicated products (6.97).

1.5.7 One Sample T Test On Factors Motivating Purchase of Life Insurance

A one sample t test was used for the data analysis to measure the opinion of the respondents on the Factors motivating purchase of Life Insurance. For measuring the opinion of the respondents a summated scale of all the items pertaining to each factor is used. The one sample T test procedure tests whether the mean of a single variable differs from a specified constant. The hypothesized test value in the present research is 3 as it will help in categorizing highly agreed and less agreed respondents. Accordingly the null hypothesis is stated as below.

H₀: The mean score of opinion of respondents' towards each Factor motivating the purchase of Life Insurance are 3. The results are presented in Table.

Table 1.9 T Test Results For The Factors Motivating Purchase of Life Insurance

Dimensions	Mean	T Statistics	Sig	Results
Evidence Oriented	3.14	2.981	0.003**	Significant
Flexibility and Convenience	3.49	12.388	0.000**	Significant

** Significant at one per cent level

Findings

From the above Table, significant mean difference were found with regard to the factors Evidence Oriented ($t = 2.981$, $P < 0.01$) and Flexibility and Convenience ($t = 12.288$, $P < 0.01$). Also it is found from the analysis that the mean value for both the dimensions is higher than the hypothesized value of 3 which shows that the respondents are highly motivated by both the factors.

When observing the mean scores for the two factors it is evident that participants have score on the factor "Flexibility and Convenience" ($M = 3.49$), in comparison with "Evidence Oriented" ($M = 3.14$).

1.6 Conclusion

In this paper we analyzed demographic determinants of life insurance in case of awareness of life insurance in rural areas of Udaipur district. The descriptive research is based on the survey data collected on the sample of 400 respondents. According to the results, Gender, Family type, Annual Income, show statistically significant impact on awareness of life insurance in rural areas of Udaipur district. Other examined factors - Age and Education have no influence on the awareness of life insurance among the non-users of life insurance among the rural areas. Other than demographic profiles, the reasons



provided by the respondents for not purchasing life insurance is the extra force provided by agent, lower service in rural areas, complex claim settlement procedures with long procedures for the issue of life insurance. The motivating factors which can help life insurance companies to improve the sale of life insurance and increase the penetration level in rural areas is the "Flexibility and Convenience Factors" with some proofs related to the proposed products.

The results of the research have implications on decision makers on both macroeconomic and insurance companies' level. In other to encourage life insurance demand macroeconomic decision makers should provide policies that ensure employment and encourage education. The findings of the research should be taken into consideration by life insurance companies especially in planning their distribution channels. Namely, since Gender, Family Type and Income are the relevant factors of insurance awareness among the non-users of life insurance.

Bibliography

1. Anderson, D. R., and Nevin, J. R. (1975), "Determinants of young married life Insurance purchasing behavior: an empirical investigation", *Journal of Risk and Insurance*, Vol. 42, pp. 375-387.
2. Athma, P. And Kumar, R. (2007) " an explorative study of life insurance purchase decision making: influence of product and non-product factors ", *ICFAI Journal Risk & Insurance*, Vol. IV, October 2007, pg. No 19-21.
3. Burnett, J.J., & Palmer, B.A. (1984), Examining life insurance ownership through demographic and psychographic characteristics, *Journal of Risk and Insurance*, 51,453-467.
4. Divya Negi, P. S.(2012). Demographic Analysis of Factors Influencing Purchase of Life Insurance Product In India. *European Journal of Business and Management*.
5. Fitzgerald, J. (1987). The effects of social security on life insurance demand by married couples, *Journal of Risk and Insurance*, 54, 86-99.
6. Gandolfi, Anna Sachko, and Laurence Miners (1996), "Gender-Based Differences in Life Insurance Ownership", *The Journal of Risk and Insurance*, Vol. 63, No. 4, pp. 683-693.
7. Gopinath K; "Rural and Social Sector insurance"; *IRDA Journal* September 2009; P. no. 17 – 19.
8. Mantis, G., and R. Farmer (1968), "Demand for life Insurance", *Journal of Risk and Insurance*, Vol. 35, pp. 247-256.
9. Ruchismita Rupali and Varma Sona, "Innovations in insuring the poor", *2020 Vision for Food, agriculture and Environment*, Dec 2009, p. no. 19- 20.
10. Singh, Manvender Pratap, Choudhary, Arpita and G. Dr. Raju, "Contemporary Issues in Marketing of Life insurance services in India", *Zenith International Journal of Multidisciplinary Research*, Vol. 1, Issue 7, Nov 2011, p. no. 47-61.
11. Showers, V.E., & Shotick, J.A. (1994). The effects of household characteristics on demand for insurance: A Tobit analysis. *Journal of Risk and Insurance*, 61, 492- 502.
12. Truett, Dale B. and Lila J. Truett, 1990, *The Demand for Life Insurance in Mexico and The United States: A Comparative Study*, *The Journal of Risk and Insurance*, Vol. 57, No. 2, 321-328.
13. *IRDA Journals and Quaterly Reports of Various years.*