

Determinants of Demand for Life Insurance Policy in Kapilvastu District

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Abstract

This study aims to achieve the key objectives of the factors affecting the demand of life insurance in Kapilvastu district. It is a novel study in the field of insurance industry in context of Kapilvastu district as this study incorporates socio- demographic variables, saving motives and financial literacy as a determinant of demand for life insurance. Primary data has been collected through convenience sampling from a sample of 384 individuals; the study has analyzed the influence of socio-demographic variables, saving motives and financial literacy on life insurance demand. To determine the relationship between the demographic factors and life insurance demand one way ANOVA tests have been conducted. Similarly to test the association between categorical variables chi-square test has been used. The relationship between financial literacy and saving motives (precautionary, bequest, life cycle and wealth accumulation motives) with life insurance demand is then analyzed using a multiple regression. Results have confirmed that among all the socio- demographic variables number of dependents, level of education and level of income has significant effect on demand for life insurance. Similarly bequest motives and financial literacy came out as positive contributors of life insurance policy demand. However, it is worthy to note that although marital status has insignificant effect on life insurance policy demand but still unmarried individuals tend to have more life insurance in compare to married and widowed respondents. Other determinants of saving motives like precautionary motives, life cycle motives and wealth accumulation motives have insignificant effect on life insurance demand.

Key words: Life Insurance, life insurance demand, socio-demographic determinants, chi-square analysis, Kapilvastu district

I. Introduction

People may have thought of savings for some forms of arrangement for self or the

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belongings which might be: higher education fees or marriage ceremony, organization of children, purchase of land or building and such continuing family needs. But death may happen much earlier when one's arrangements are not fully in place. The situation becomes even worse when it is the demise or (physical) damage of the breadwinner of the family. This may not only create emotional pain but also brings economic imbalance to the lives of dependent members. Hence; Insurance is a device to provide financial compensation to those who suffer from misfortune.

Insurance is the means to get financial security against risk. In other words; Insurance is the best way to secure human life and property from numerous risks. It is a kind of investment from which one gets return only when certain loss occurs from predetermined incidents (Singh, 2009). Insurance is defined as cooperative device 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 the risk. It is referred as a social device to accumulate funds to meet the uncertain losses arising through a certain risk to a person insured against the risk (Mishra, 2004). Insurance is the way of reducing uncertainty of occurrence of an event. Insurance essentially, is an arrangement where the losses experienced by few are extended over several who are exposed to similar risks. Life insurance is the legal contracts that provide the coverage against the uncertain events. The development of the insurance depends upon the soundness of financial system. Insurance sector is one of the major players of the financial system. The services provided by companies are almost similar in nature and type. Their customers are exposed to diversified choices. This means there are many alternative available and customer select that gives him/her maximum satisfaction and meet with their expectation. Life insurance is universally acknowledging as a tool to eliminate risk and minimize the uncertainty of future. It helps to ensure timely aid for the family in the unfortunate event of the death of the breadwinner. In simple, it is partial solution to the problem caused by death. Thus; we can say life insurance is different from general insurance because the main focus of this insurance (life insurance) is life of the people or providing financial support to the families who lose the bread winner of the family due to uncertain events. Insurance companies are a type of "non-bank" financial institutions that sell policies and provide protection from various kinds of risks. More specifically insurance company collect fund in the form of premium and provide indemnification if the probable loss occur in the future. But financial institutions provide both benefits and security on the fund collected from their clients. Generally risks that insurance policies cover include the loss of life, income, or possessions and the high cost of medical bills. Marine insurance was the first insurance in the history of insurance. Fire insurance was later development .After fire insurance; life insurance came into existence (Gurung, 2016). Nepal Insurance Act 1992(section 2-1) defines life insurance as the contract of insurance, affected on human life based on age to pay a fixed sum to the assured or his nominee, on the death or on the happening of any contingency, dependent on human life in consideration of payment of a fixed installment premium by the insured person. History of Nepalese non life insurance is sixty five years and life insurance is forty years old. The first general insurance company named "Nepal insurance and Transport Company "established in 1947, is

currently known as Nepal insurance company .Rastriya Beema Sansthan is only composite of both life and non life insurance business company which was established in 1968 and started non life business in same years but started life insurance business from 1972 (Insurance Board, 2012).

At present there are 40 registered insurance companies in Nepal. Of these, 19 are private commercial life insurers, 20 are private commercial non-life insurers and 1 is composite insurer i.e. Rastriya Beema Sansthan owned by the government. There are 10 life insurance companies in Kapilvastu district. Before the establishment of insurance company in Nepal, some insurance companies from India were operating. The development of insurance business is closely related to the beginning of industrialization in Nepal around 1940. There are still many areas that the Nepali insurance sector has not been able to cover but there is no denying factor that the sector is witnessing accelerated growth (Gurung, 2011).

Insurance companies are competing not only with themselves but also with other financial institutions within the financial industry. With the entry of private sector insurance companies the number of insurance companies in all over the country has gone up. High level of competition is the most important factor in influencing the structure and activities of the insurance system around the globe (Mathur & Tripathi, 2014). With the growing awareness among the people about insurance, various services provided by the companies and availability of insurance facilities across the globe, the insurance sector is emerging very rapidly and there is a need to identify the main factors that affect the customer's demand for life insurance. Today insurance industry plays important role for developing countries and developing insurance is seen as an indicator of the degree of development (Ofoghi & Farsangi, 2013). The most common motive for the demand for life insurance product is safeguarding the economic interest of the insured when he/she dies. The accumulated cash value is used to cover funeral and other expenses. It is also invested to offer returns in replacement of the lost earnings (Hakansson, 1969), therefore the breadwinner in the family purchases the life insurance for the better future of his family members. Basaula (2017) studied about the customer satisfaction towards life insurance claim settlement in Nepal and found that a company which fails to settle the claims fails to attract the customer to purchase life insurance policies. Therefore claim settlement is one of the influencing factors to retain the existing customers and attract the new ones to purchase insurance. Gurung (2016) studied the insured's perception toward insurance services and found that the main motivators of insurance policies are insurance agents and the reduction of risk that influence the customer's willingness for purchasing life insurance. Similarly Ghimire (2017) explored the reasons behind the unwillingness of customer's towards the demand for life insurance policies. Therefore there is lack of empirical evidences related to the determinants of demand for life insurance in context of Nepal. Thus this study analyzes such factors that determine the demands for life insurance in Nepal.

Moreover, the empirical studies revealed that different researchers found different factors that determine the demand for life insurance. Redzuan (2014) found that the level of income, number of dependents and level of education are significant determinants of life

insurance demand. Celik and Kayali (2009) found that income is positively related with life insurance demand whereas education level and inflation affect life insurance policy demand in negative way. Contrary to this Sarkodie and Yusif (2015) found that higher education positively influences the odds of taking life insurance. Mahdzan and Victorian (2013) found that demographic factors and saving motives have a significant impact on life insurance demand whereas financial literacy has insignificant impact on life insurance demand. This study therefore analyzes the various factors that have impact on life insurance demand.

II. Theoretical Framework

Here the empirical research on the most relevant findings in the field of life insurance demand has been presented. An attempt is made to find out the relative impact of the factor that influence the life insurance consumption as empirical studies of earlier research work have identified and how these factors are applicable from consumer's perspectives. Fortune (1973) studied the United States insurance market for the seven years. The study revealed high degree of association between the consumption of life insurance, income and the real rate of interest. His work examined the expected utility hypothesis of choice under risk for life insurance demand. The study established that the consumption of life insurance is determined by income, non-human assets and interest rate.

Truett and Truett (1990) employed regression analysis to estimate life insurance demand functions. The researchers conducted that age, education and level of income are factors that affect the demand for life insurance. These demand function estimates are consistent with the hypothesis that the income elasticity of demand for life insurance in Mexico is far higher than that for the United States. Therefore, it indicates that the high income family would likely to accumulate greater wealth to protect the standard of living of the family if the major income earner died.

Browne and Kim (1993) carried out investigation into the uptake of life insurance on six Islamic nations within the period 1980-1987. The main variables used are income, anticipated inflation rate, dependency ratio, life expectancy, religion, policy loading charge and social security. The study revealed a direct association between life insurance and GDP and social security whereas an inverse relation with inflation was found.

Ondruska, Pastorakova and Brokesova (2016) identified the key determinants of life insurance demand in small economy represented by Slovak Republic. The researchers found that demographic indicators such as age, education and economic indicators savings and employment status are the most robust predictors of the life insurance consumption. The study used the questionnaire survey and classification tree method to identify the key factors determining life insurance consumption. The results of this study have helped the insurers to better understand their potential consumers and to improve their acquisition and segmentation techniques. (Suneja & Sharma, 2009) found five factors namely promotional activities, image of company, customer convenience, financial and non-financial facilities and premium and procedural formalities that determine the customer's demand for life insurance policies.

Similarly Mahdzan and Victorian (2013) determinants of life insurance demand namely socio-demographic variables, saving motives and financial literacy. The study of this article reveals that demographic factors and saving motives have a significant impact on the life insurance demand but financial literacy has no impact on life insurance demand.

Liebenberg, Carson and Dumm (2012) asserted that life insurance purchases are likely to follow various life events such as marriage, the birth of a child, purchasing a home and a new job. Similarly termination of life insurance is likely to follow other life events such as divorce, death of a spouse, unemployment and retirement. The analysis of this article sheds new light on the determinants of life insurance demand for both term and whole life policies. Redzuan (2014) found that the level of income, number of dependents and level of education are significant determinants of life insurance and family takaful demand in Malaysia. These variables are found to positively influence life insurance purchase, in the long-run as well as the short-run. The life-cycle theory of saving predicts that people save a lot when their income is high relative to lifetime average income and dissave when their income is low relative to the life time average; the middle aged save for retirement and the old dissave (Dornbusch, Fischer, & Startz, 1994). Therefore, savings motive have a great impact on life insurance demand.

Gustina and Abdullah (2012) found that the determinant factor that influence demand for family takaful and life insurance is different. Regarding family takaful the findings show that, there are four variables namely GDP per capita, education, saving and religion that are significantly related to the determinant of demand for family takaful. On the other hand, there are only three variables that significantly influence the demand for life insurance which are GDP per capita, saving and religion. Thus the study indicates that the demand for life insurance is determined in different way depending on the rules and regulations of the countries. In addition Zelizer (1979) noted that religion has historically provided a strong source of cultural opposition to life insurance.

In the same way, Theil (2011) analyzed the demographic variables and the appraisal of insurance with a case analysis, pertaining to assistance products. A consumer survey was conducted to find the demographic characteristics and the related assistance products. It also analyzed the consumer's judgment towards new class of insurance products. The study revealed that variables used in the survey are different and there is a weak relationship between consumer's judgment and class of products. As demographic variables are not performing as expected it seems advisable to focus on alternative factors.

III Research Methodology

Population and sample

The population for this study is comprised of life insurance policyholders in Kapilvastu district. Kapilvastu district lies in mid southern part of Nepal and is one of the districts of Province no. 5 of Nepal. The district has six municipalities and four rural municipalities, has population almost 0.6 million population (Central Bureau of Statistics, 2011). The total number of policyholders of Kapilvastu district is difficult to find out so that it is assumed that

the population of the study is infinite. According to Krejice and Morgan (1970) 384 samples have been determined and selected using the purposive sampling technique.

Research Design and Tools for Data Collection and analysis

The study is based on descriptive, analytical and causal comparative research design. Descriptive research design is used to explain the demographic profile of the respondents. Analytical research design is used to investigate the difference in life insurance demand with respect to the demographic characteristics. Further, causal comparative design is used to examine the impact of saving motives and financial literacy on demand for life insurance. Similarly, structured questionnaire was used to collect the primary data. The questionnaire consists of three sections, which required respondents to tick the most appropriate option. The first section investigates demographic information such as gender, age group, education level, main occupation, permanent residency, marital status, economic class and approximate monthly income of the respondents. Section two addresses questions related to the ownership of the life insurance policyholders and at last the third section deals with the motives for life cycle holdings.

Conceptual Framework

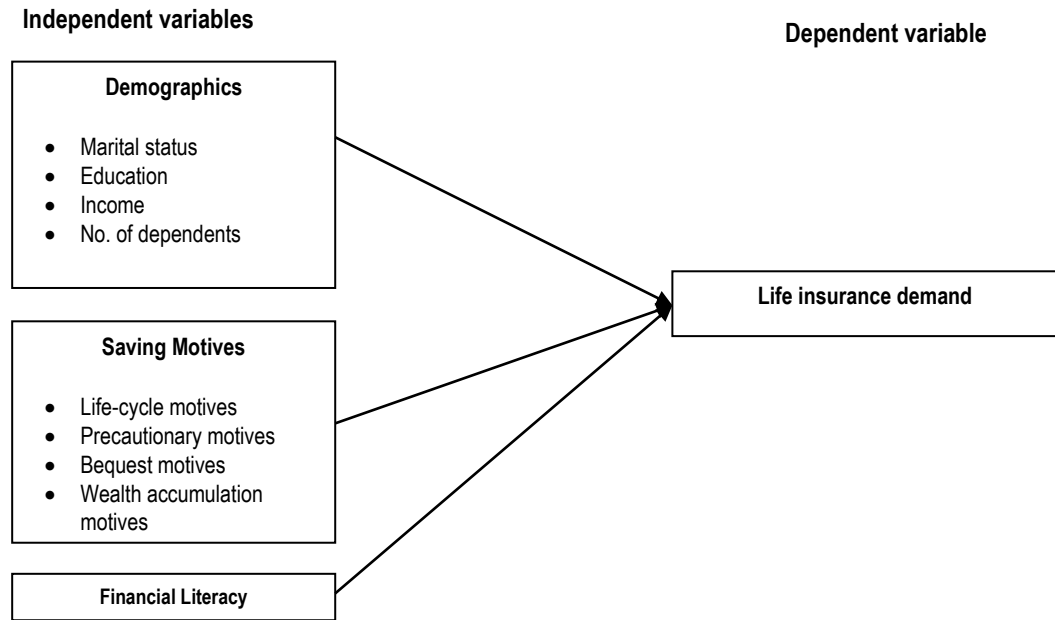
The conceptual framework of the study designed as follows. The study tries to explore the association between independent variables like gender, age group, education level, main occupation, permanent residency, marital status, economic class and approximate monthly income of the respondents and dependent variable i.e. annual premium amount paid for the life insurance.

Theoretical Framework

The Theoretical framework of the study is presented below. The study tries to explore the demographic variables such as marital status, education, income and number of dependents, financial literacy and saving motives (life-cycle, precautionary, wealth accumulation and bequest) are included as independent variables and life insurance demand as dependent variable to examine the factors of demand for life insurance in Kapilvastu district.

Figure 1

Theoretical Framework



(Source: Mahdzan and Victorian, 2013)

III. Results and Conclusion

Demographic Profile of Respondents

This section explains about the demographic profile of the respondents. In this section the respondents profile has been analyzed in terms of gender, age group, level of education, marital status, religion, permanent residency, main occupation, economic class and income level, number of dependents and monthly income

Table 4.1

Demographic Profile of Respondents

Characteristics	Categories	Frequency	Percentage
Gender	Male	280	72.9
	Female	104	27.1

Age group	Below 25	79	20.6
	25-29 years	65	16.9
	30-34 years	74	19.3
	35-39 years	95	24.7
	40 and above	71	18.5
Educational level	Primary	153	39.8
	Secondary	112	29.2
	Higher Secondary	57	14.8
	Bachelor	49	12.8
	Masters	13	3.4
Marital Status	Married	288	70.1
	Unmarried	74	18.0
	Widowed	22	5.4
Religion	Hindu	327	85.2
	Muslim	57	14.8
Permanent Residency	Province 5	383	99.7
	Province 2	1	0.3
Main Occupation	Agriculture	184	47.9
	Business	84	21.9
	Governmental Job	31	8.1
	Private Job	46	12.0
	INGO/NGO	11	2.9

	Others	28	2.9
Economic Class	High	51	13.3
	Medium	198	51
	Low	135	35.2
No. of Dependents	No one	49	12.8
	Two	36	9.4
	Three	70	18.2
	Four	92	24.0
	Five	74	19.3
	Six or above	63	16.4
Monthly income	Below 20,000	116	30.2
	20,000-29,999	119	31.0
	30,000-39,999	49	12.8
	40,000-49,999	51	13.3
	50,000 and above	49	12.8

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.1 shows the frequency distribution and percentage of different demographic characteristics of the respondents. The result shows that majority of the respondents are male. Similarly the majority of the respondents belong to the age group 35-39 and least respondents are from the age group 25-29. About 39.8 percent of the respondent's educational level is primary, 29.2 percent of them have completed secondary level, and 14.8 percent respondent's educational level is higher secondary whereas 12.8 percent of them are bachelor degree holder and 3.4 percent are master level degree holder. In terms of occupation most of the respondents are engaged in agriculture, followed by business, private job, governmental job, other jobs, INGOs/NGOs respectively. The sample consists of 70.1 percent of married respondents, 18 percent of unmarried and 5.4 percent of widowed respondents. Out of the total respondents majority of them had four dependents followed by five, three, six, zero and two dependents respectively. In terms of permanent residency most of the respondents were from province 5 and only 0.3 percent respondents

are from province 2 whereas there are no any respondents from any other province. In the same way 85.2 percent of the respondents belong to Hindu religion and remaining 14.8 percent belong to Muslim religion .Similarly 51.6 percent of the respondents are from medium economic class followed by 35.2 percent of low and 13.3 percent of high economic class. In terms of income level majority of the respondents who purchased life insurance are from the income group of Rs.20, 000-29,000 and below 20,000 respectively.

Reliability and Validity

Cronbach's alpha is used to access the reliability of a set of questionnaire and if it's values are closer to 1 the questionnaire will be reliable. Cronbach's alpha also helps to determine if there are single or multiple items that are needed to be removed from the scale to improve the reliability.

Table 4.2

Reliability Statistics

Cronbach's Alpha	Number of Items
.710	21

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.2 illustrates the overall reliability statistics. The overall statistics of the data is 0.71 which indicates an acceptable degree of reliability.

Life insurance demand and Demographic variables

One way ANOVA has been used to identify whether there is a significant differences in life insurance demand with respect to marital status, no. of dependents, educational level and income level of respondents. Here ANOVA presents F-statistic and p-value to help support or reject the hypothesis.

Marital Status and Demand for Life Insurance

Table 4.3

Marital Status and Demand for Life Insurance

Marital status	N	Mean	Standard deviation	F-value
Married	285	142088.25	322349.03	1.460
Unmarried	77	217052.60	455381.62	(0.234)
Widowed	22	192772.73	340982.43	
Total	384	160023.96	354301.36	

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.3 suggests that there is no significant difference in life insurance demand with respect to marital status of the respondents at 5 percent level of significance since the p-value is more than 0.05 ($F= 1.460$, $Sig=.0.234$), not supporting the hypothesis H1a. The result shows that the mean value of married respondents is 142088.25 whereas that of unmarried respondents is 17052.60 similarly the mean value of widowed respondents is 192772.73 among all the categories the mean value of unmarried respondents is slightly higher than that of married and widowed respondents. This indicates that life insurance is mostly demanded by unmarried individuals and is least bought by individuals who are married in compare to unmarried and widowed ones. A possible reason is because unmarried people find that they may not have anyone to depend on in the event of a major accident such as disability or critical illness and hence, need to rely on life insurance policies. Furthermore, single individuals may have less financial commitments as opposed to married individuals and have the ability to allocate funds into life insurance.

Education level and Demand for Life Insurance

Table 4.4

Education level and Demand for Life Insurance

Level of Education	N	Mean	Standard Deviation	F-value
Primary	153	68931.37	203028.696	5.018
Secondary	112	184929.46	373304.816	(0.01)
Higher Secondary	57	268913.16	466345.307	
Bachelor	49	232582.65	447532.859	
Masters	13	265846.15	421871.741	
Total	384	159997.92	354312.23	

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.4 shows that there is significant difference in life insurance demand with respect to the education level at 5 percent level of significance since the p-value is less than 0.05 ($F=3.696$, $Sig=0.03$), supporting the hypothesis. The mean value for respondents who have completed higher secondary is higher than those of other respondents. Similarly the respondents who have done masters and bachelors have the second and third highest mean value which shows educated individuals are more likely to purchase life insurance. However the table also reveals that the case is not applicable to the respondents with primary and secondary level of education because the mean value of the respondents is less in compare to other mean values.

Number of dependents and Demand for Life Insurance

Table 4.5 shows that there is significant difference in life insurance demand with respect to number of dependents at 5 percent level of significance since the p-value is less than 0.05 ($F=3.696, \text{Sig}=0.003$), supporting the hypothesis. The result shows that individuals with higher number of dependents have the highest demand for life insurance, followed by individuals with two, five, four, three and lastly no dependents.

Table 4.5

Number of dependents and Demand for Life Insurance

No. of Dependents	N	Mean	Standard Deviation	F-value
No one	49	75877.55	201688	3.696
Two	36	182083.33	408636.994	(0.03)
Three	70	124821.43	290668.234	
Four	92	130028.26	318452.037	
Five	74	136906.76	283447.718	
Six or above	63	322777.78	525452.998	
Total	384	159997.92	354312.23	

Source: Author's calculation using the data from questionnaire's survey-2019

Income level and Demand for Life Insurance

Table 4.6 shows that there is significant difference in life insurance demand with respect to income level of the respondents since p-value is less than 0.05 at 5 percent level of significance ($F=5.018, \text{Sig}=0.01$), supporting the hypothesis. The mean value for income group of above 50,000 is higher as compared to all other groups which indicate the individual with higher income are more likely to demand for life insurance. The evidence for this is represented by the table 4.6 where the mean value for life insurance demand is continuously increased with the increase in income level of individuals.

Table 4.6*Income level and Demand for Life Insurance*

Income level (Monthly)	N	Mean	Standard Deviation	F-value
Below 20,000	116	19719.83	26044.718	19.872
20,000-29,999	119	102029.83	210930.027	(0.00)
30,000-39,999	49	184798.98	350537.973	
40,000-49,999	51	292098.04	484907.50	
50,000 and above	49	470775.51	590898.742	
Total	384	160023.96	354301.3	

Source: Author's calculation using the data from questionnaire's survey-2019

Normality test

In statistics, normality tests are used to find out if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. Deviations from normality, called non-normality, make those statistical tests imprecise, so it is imperative to identify if the data are normal or non-normal. Tests that rely upon the assumption of normality are called parametric tests. If data are not normal, non-parametric tests are used for the analysis. Non-parametric tests are less influential than parametric tests, which mean non-parametric tests have less capability to detect real differences or inconsistency in the data. In other words, parametric tests amplify the chances of finding significant results.

Figure 4.1

Normality test from the histogram

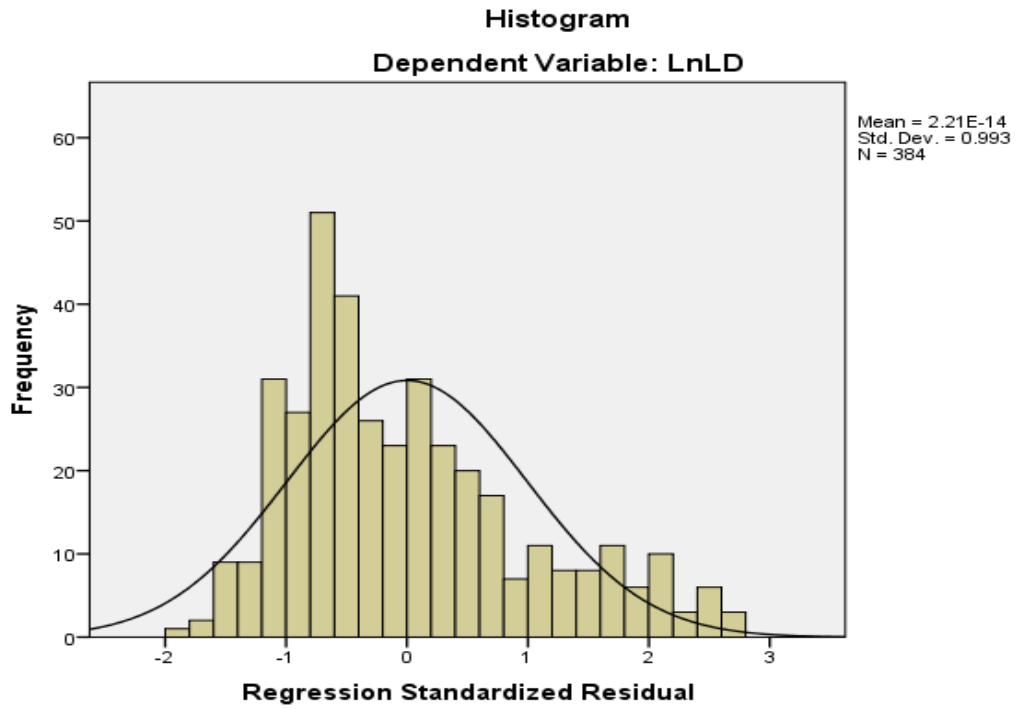
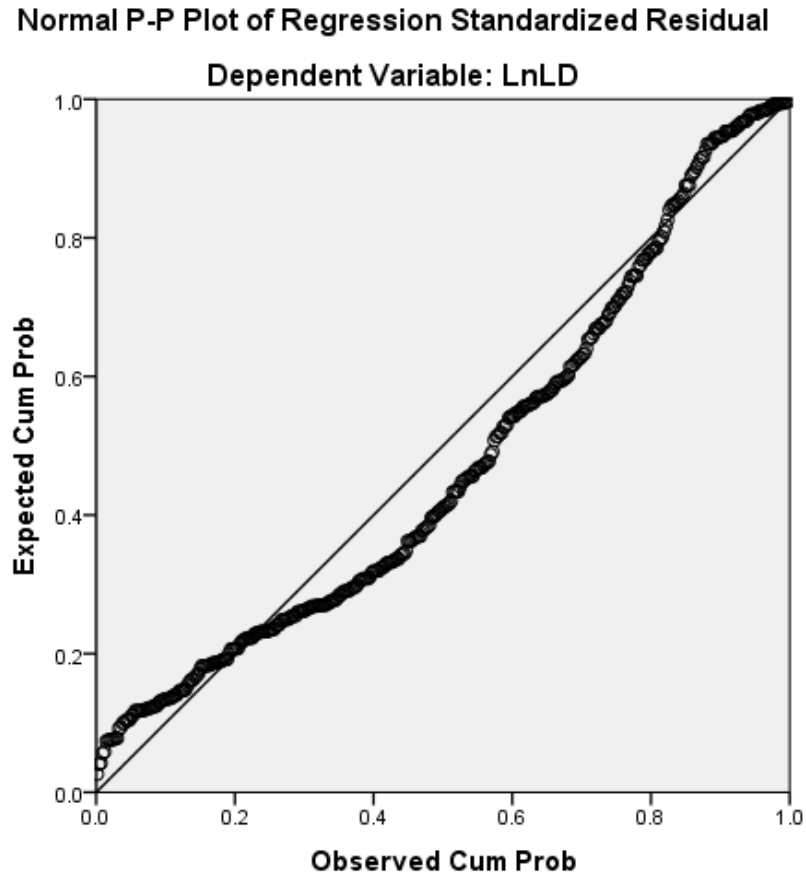


Figure 4.1 shows the histogram of regression residual which is bell-shaped. So, it can be concluded that the data taken for analysis are normally distributed. Further, the normality of the data is tested using P-P plots of regression residuals. The result of P-P plots of regression residuals is illustrated in figure below.

Figure 4.2

Normality Test from P-P plots of Regression Standardized Residuals



A P-P plot compares the empirical cumulative distribution function (ECDF) of a variable with a specified theoretical cumulative distribution function. Figure 4.8 reveals that the expected cumulative probability and observed cumulative probability are around the mean line which confirms data are normally distributed. Verification of normality allows the use of parametric tests for further analysis of the data.

Multicollinearity Test

Multicollinearity is a phenomenon in which one predictor variable in multiple regression models can be linearly predicted from the other with substantial degree of accuracy. Variance inflation factor (VIF) and tolerance measure the multicollinearity among the independent variables. If the tolerance values are more than 0.1 and VIF values are less

than 10 in all independent variables than, the regression model was free from multicollinearity (Burns & Bush, 2007). The following table shows the VIF and tolerance value of variable.

Table 4.7

Collinearity Diagnostics

Collinearity Statistics	
Tolerance	VIF
.859	1.165
.890	1.123
.819	1.222
.886	1.129
.963	1.039

Source: Author's calculation using the data from questionnaire'ssurvey-2019

The Table 4.7 show that tolerance values are above 0.10, additionally the VIF-values were below 10. Since the minimum acceptances of tolerance were above 0.10 and the tolerated VIF-values were those below 10, we can conclude that multicollinearity between the independent variables hasn't affected the outcome. Thus, we conclude that the variables are free of the problem of multicollinearity. Hence, we can run the regression analysis for these variables.

Table 4.8

Test of significance of regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Constant)	10.121	.843		12.006	.000
Lcmotive	.017	.032	.028	.531	.595
Pcmotive	-.054	.030	-.094	-1.792	.074
Bqmotive	-.091	.034	-.145	-2.649	.008
Wealth.acc.motive	-.013	.032	-.022	-.419	.676
Financialliteracy	.154	.035	.220	4.356	.000

Table 4.8 shows that independent variables Bq motive and financial literacy are significant because p-value is less than 0.05 and remaining two independent variables are insignificant because their p-values are more than 0.05.

Chi-square Analysis

Table 4.9 shows that p value of chi square test is 0.000 which is less than 0.05 so we reject null hypothesis. Hence we conclude that there is association between demand of life insurance and level of education

Table 4.9

Showing Chi-square analysis of level of education

	5,001- 10,000	10,001- 15,000	15,001- 20,000	20,001- 25,000	25,000 and above	Total
Primary	38	40	18	12	45	153
Secondary	15	16	12	19	50	112
Level of education Higher	5	6	5	3	38	57
Secondary						
Bachelor	2	5	5	7	30	49
Masters	1	1	3	1	7	13
Total	61	68	43	42	170	384

Source: Author's calculation using the data from questionnaire's survey-2019

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.617 ^a	16	.000
Likelihood Ratio	53.261	16	.000
Linear-by-Linear Association	34.226	1	.000
N of Valid Cases	384		

a. 4 cells (16.0%) have expected count less than 5. The minimum expected count is 1.42.

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.10*Showing Chi-square analysis of marital status*

		5,001- 10,000	10,001- 15,000	15,001- 20,000	20,001- 25,000	25,000 and above	Total
Marital status	Married	49	57	26	30	126	288
	Unmarried	11	9	12	10	32	74
	Widowed	1	2	5	2	12	22
	Total	61	68	43	42	170	384

Source: Author's calculation using the data from questionnaire's survey-2019

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.610 ^a	8	.169
Likelihood Ratio	11.862	8	.157
Linear-by-Linear Association	2.811	1	.094
N of Valid Cases	384		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is 2.41.

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.10 shows that p value of chi square test is 0.169 which is more than 0.05 so we accept null hypothesis. Hence we conclude that there is no association between demand of life insurance and marital status.

Table 4.11*Showing Chi-square analysis of dependent family*

		Approx. annual premium					Total
		5,001- 10,000	10,001- 15,000	15,001- 20,000	20,001- 25,000	25,000 and above	
Dependent family members	No one	8	11	12	4	14	49
	Two	7	7	3	7	12	36
	Three	18	12	6	8	26	70
	Four	18	15	10	12	37	92
	Five	6	19	9	6	34	74
	Six or above	4	4	3	5	47	63
	Total	61	68	43	42	170	384

Source: Author's calculation using the data from questionnaire's survey-2019

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.787 ^a	20	.000
Likelihood Ratio	51.563	20	.000
Linear-by-Linear Association	17.544	1	.000
N of Valid Cases	384		

a. 2 cells (6.7%) have expected count less than 5. The minimum expected count is 3.94.

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.11 shows that p value of chi square test is 0.000 which is less than 0.05 so we reject null hypothesis. Hence we conclude that there is association between demand of life insurance and no. of dependents.

Table 4.12

Showing Chi-square analysis of dependent family

	Approx. annual premium					Total
	5,001-10,000	10,001-15,000	15,001-20,000	20,001-25,000	25,000 and above	
Below 20,000	46	39	9	6	16	116
20,000-29,000	10	22	13	16	58	119
Approx. monthly income						
30,000-39,999	1	4	14	10	20	49
40,000-49,999	3	1	5	7	35	51
50,000 and above	1	2	2	3	41	49
Total	61	68	43	42	170	384

Source: Author's calculation using the data from questionnaire's survey-2019

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	167.318 ^a	16	.000
Likelihood Ratio	169.573	16	.000
Linear-by-Linear Association	103.831	1	.000
N of Valid Cases	384		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.36.

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.12 shows that p value of chi square test is 0.000 which is less than 0.05 so we reject null hypothesis. Hence we conclude that there is association between demand of life insurance and monthly income.

ANOVA (F – tests)

The results of the ANOVA (F-test) were presented in an ANOVA table. A sample was a finite number (N) of scores. Sample statistics were numbers which describe the sample. The F-ratio can be thought of as a measure of how different the means were relative to the variability within each sample. The larger this value, the greater the likelihood that the differences between the means were due to something other than chance alone, namely real effects. In an ANOVA, the F-ratio was the statistic used to test the hypothesis that the effects were real. In other words, that the means were significantly different from one another.

Table 4.13 shows that p value is 0.000 which is less than $\alpha = 0.05$, so there is no evidence to accept null hypothesis. Hence we conclude that overall fit of the regression model is significant. The table No 4.9 exhibits that F- value and p-value of the model is 5.761 and 0.000 respectively this is significant at 5% level of significance. So the model is fitted linearly.

Table 4.13

Showing ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	62.095	5	12.419	5.761	.000 ^b
	Residual	814.873	378	2.156		
	Total	876.968	383			

a. Dependent Variable: Ln LD

b. Predictors: (Constant), Financial literacy, Wealth.acc. motive, Pc motive, Lc motive, Bq motive

Source: Author's calculation using the data from questionnaire's survey-2019

Multiple Regression Analysis

To investigate the relationships in order to detect which of the independent variables has the effect on the dependent variable life insurance demand. Multiple regression analysis is used in order to test the conceptual framework.

Table 4.14

Showing multiple regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.266 ^a	.071	.059	1.46825

a. Predictors: (Constant), Financial literacy, Wealth.acc. motive, Pc motive, Lc motive, Bq motive

Source: Author's calculation using the data from questionnaire's survey-2019

Table 4.14 shows the R square of the model is 0.071% which means only 0.071% of variation in Life insurance demand is explained by variation in different independent variables like: life cycle motive, precautionary motive, bequest motive, wealth accumulation motive and financial literacy .If the amount explained by the model is not large then we can't conclude the model is insignificant rather we must compute F-statistic for joint significance (Wooldridge, 2012).The result of F-statistic is significant of this study.

The fitted model is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e_i$$

Where, Y = Life insurance Demand

X1 = Life-Cycle motives

X2 = Precautionary motives

X3 = Bequest motives

X4 = Wealth accumulation motives

X5 = Financial Literacy

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$ =Regression coefficients

e_i = Stochastic error term

Summary of Hypotheses

Table 4.15

Summary of Hypotheses

Hypothesis	p- value	Result
There is significant difference between LID and demographic characters		
H1	0.059	Not

			accepted
	H1a	0.03	Accepted
H1c	H1b	0.00	Accepted
H1d	There is significant difference between LID and education level.	0.01	Accepted
H2	Saving motives have positive effects in life insurance demand.		
H2a	Precautionary motives have positive effect on LID	0.074	Not accepted
H2b	Life cycle motives have positive effect on LID	0.595	Not accepted
H3c	Bequest motives have positive effect on LID	0.008	Accepted
H4d	Wealth accumulation motives have positive effect on LID	0.676	Not accepted
H3	Financial literacy has positive effect on LID	0.00	Accepted

Conclusion

This study analyzed the determinants of demand for life insurance in the context of kapilvastu district. The study includes variables such as demographic variables, saving motives and financial literacy to determine their effects on life insurance demand. The study found that marital status is not so reliable factor in determining demand for life insurance. However unmarried individuals tend to have high demand for life insurance in compare to married ones. Similarly the study concluded that the individuals with higher number of dependents, high level of income and education tend to have high demand for life insurance.

The study found that the individuals who are conscious about the future of their dependents tend to have high demand for life insurance. However, precautionary motive is found to have insignificant impact on life insurance demand which indicate that individuals are not so precautions about future incidents. Similarly life cycle motive is also found to have insignificant impact on life insurance demand which indicates that the increase or decrease in life cycle needs does not have any impact on demand for life insurance. In the same regard wealth accumulation motive is also found to have insignificant impact on life

insurance demand which indicates that individuals in Kapilvastu district are not focused towards the collection of wealth for future benefits through the purchase of life insurance. Finally the study found that financial literacy has significant impact on life insurance demand. It is positively correlated with life insurance demand which indicates that as the financial literacy among the individual increases the demand for life insurance also increases.

Conclusively, the study found that education level, income level, number of dependents, bequest motives and financial literacy are reliable factors in determining the demand for life insurance whereas marital status, precautionary motives, life cycle motives and wealth accumulation motives are found to be not so reliable factors in determining the demand for life insurance demand. However, readers should bear in mind that this research study is not without limitation and is based on the respondents of only Kapilvastu district.

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