

CHAPTER IV

RESULTS AND DISCUSSION

4.1. LEVEL OF AWARENESS ABOUT LIC MI AMONG THE POLICY HOLDERS

An attempt has been made to know about the sources of awareness of the LIC MI policies. Accordingly, the various sources have been classified into five categories viz., Advertisements, Non-Government Organisations, Micro Finance Institutions, Self Help Groups and Micro Insurance Agents. The details are furnished in the following table.

TABLE 4.2

Sources of Awareness about the LIC MI Policies

S.No	Criteria	No. of respondents	Percentage
1	Advertisements	27	4
2	Non-Government Organizations (NGO)	186	29
3	Micro Finance Institutions (MFI)	22	3
4	Self Help Groups (SHG)	238	37
5	Micro Insurance Agents	224	34

Source : Primary data

* Multiple Responses

The multiple responses are recorded in interviews.

It could be obtained from the above table that 37 percent of the respondents are aware of micro (life) insurance through SHG's, 34 percent of the respondents were aware of MI through MI agents, 29 per cent of them were aware through NGO's, only 4 percent were aware of MI through advertisements and 3 per cent were through MFI's.

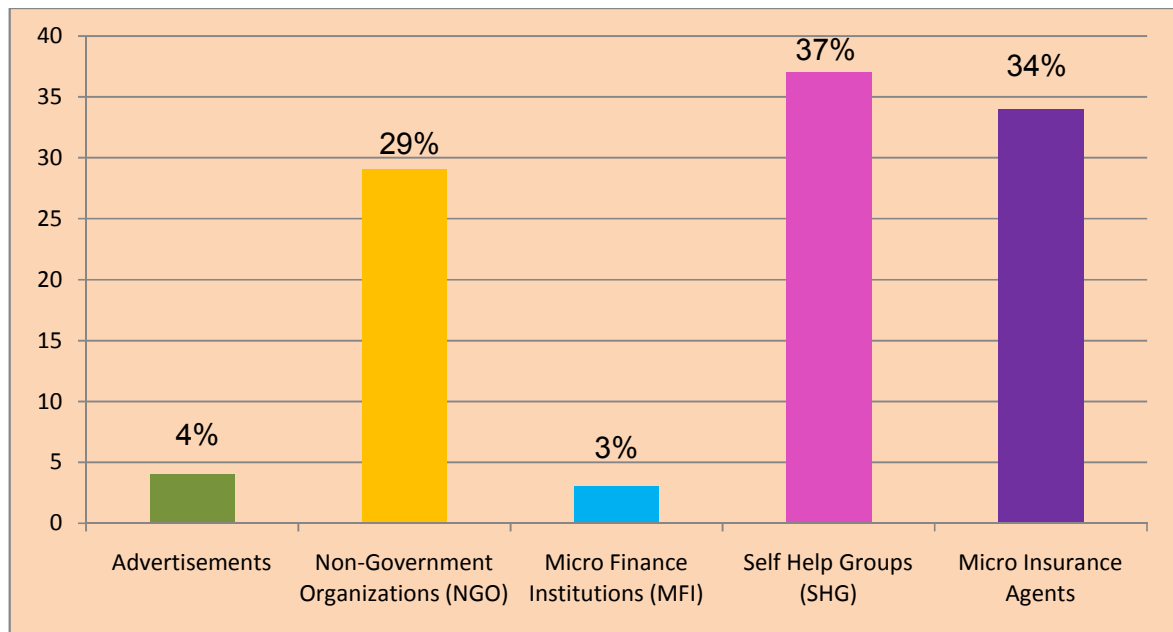


CHART 4.1

SOURCE OF AWARENESS ABOUT THE MI PRODUCTS OF LIC

Respondent's Ability to Distinguish MI Policies from Conventional Policies of LIC

The details about the ability of the respondents in distinguishing MI from Conventional policies of LIC are given below.

Table 4.3

Ability to Distinguish MI policies from Conventional LIC Policy

S.No	Opinion	No. of respondents	Percentage
1	Yes	387	60
2	No	263	40
	Total	650	100

Source : Primary data

The above table indicates the respondent's ability to distinguish MI from other conventional LIC life insurance policies. The majority (60%) of the respondents know the difference between MI and conventional policies of LIC. The remaining 40% of the respondents do not know that difference.

Repondent's Awareness about Variety of LIC MI Policies

An attempt has been made to know about the repondents' awareness about the variety of LIC MI policies in individual category. For this purpose of this study, LIC MI policies (individual category) namely Jeevan Madhur, Jeevan Mangal and Jeevan Deep are taken. There are only three policies in LIC MI Individual category in the study period.

Table 4.4
Awareness about Variety of LIC MI Policies*

S.No	Name of the policy	No. of respondents	Percentage
1	Jeevan Madhur	245	38
2	Jeevan Mangal	187	29
3	Jeevan deep	138	21
4	All the above	108	17

Source : Primary data

*Multiple responses

The above table shows that 38 percent of the respondents know about Jeevan Madhur policy, 29 percent are aware of Jeevan Mangal policy, 21 percent aware of Jeevan Deep policy and 17 percent know about all the policies.

It was found out from the analysis that Jeevan Madhur MI policy is the most popular among the three policies.

Relationship between socio economic factors and ability to distinguish LIC MI policies from conventional policies

In order to examine the relationship between socio economic factors (Type of MI intermediary, gender, Age, Education, Occupation, monthly income, marital status and Location) and the ability to distinguish LIC MI policies from conventional policies of the respondents, Pearson's Chi-square test was executed. The Null hypothesis framed was

H0 : There is no significant relationship between socio economic factors and ability to distinguish LIC MI policies from conventional policies

H1 : There is a significant relationship between socio economic factors and ability to distinguish LIC MI policies from conventional policies

The calculated chi-square values are shown in the following table

Table 4.5
Socio Economic Factors and ability to Distinguish MI Policies from
Conventional LIC Policies

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI Intermediary	3.063	1	3.841	NS at 5% level	Accepted
Gender	15.120	1	6.635	S at 1% level	Rejected
Age	42.211	3	11.345	S at 1% level	Rejected
Education	44.456	4	13.277	S at 1% level	Rejected
Occupation	23.804	3	11.345	S at 1% level	Rejected
Monthly income	23.428	3	11.345	S at 1% level	Rejected
Marital status	10.465	3	7.815	S at 5% level	Rejected
Location	6.607	1	6.635	S at 1% level	Rejected

Source : Primary data

It is observed from the above analysis that, the relationship between the type MI intermediary and the ability to distinguish LIC MI policies from conventional policies, the calculated chi-square value 3.063 is less than the table value of 3.841 at 5% level of significance. Hence null hypothesis is accepted. There is no significant relationship between the type of MI intermediary and ability to distinguish LIC MI policies from conventional policies.

For the rest of the socio economic factors, the null hypothesis is rejected and alternate hypothesis is accepted. Gender, age, education, occupation, monthly income, and location factors have a significant relationship with the ability to distinguish LIC MI policies from conventional policies at 1% level of significance. Marital status also has a significant relationship with ability to distinguish LIC MI policies from conventional policies at 5% level of significance.

From the analysis, it is concluded that the respondents' socio economic factors definitely influence the ability to distinguish LIC MI policies from conventional policies. But in type of intermediaries' i.e NGO or MI Agent, does not influence the ability to distinguish LIC MI policies from conventional policies.

Channels Influence on Purchase of LIC MI Policy

Table 4.6

Channels Influence on Purchase of LIC MI Policy

S.No	Channel	No. of respondents	Percentage
1	NGO	169	26
2	SHG	246	38
3	MI agents	235	36
	Total	650	100

Source : Primary data

The above table indicates that 38 percent of the respondents are influenced by SHG members to buy the MI policy, 36 percent of them bought the MI due to the influence of MI agents and 26 percent of them were influenced by NGO's. This indicates that SHGs and MI agents (74%) are the most popular channels positively influencing MI policy holders to buy MI policies.

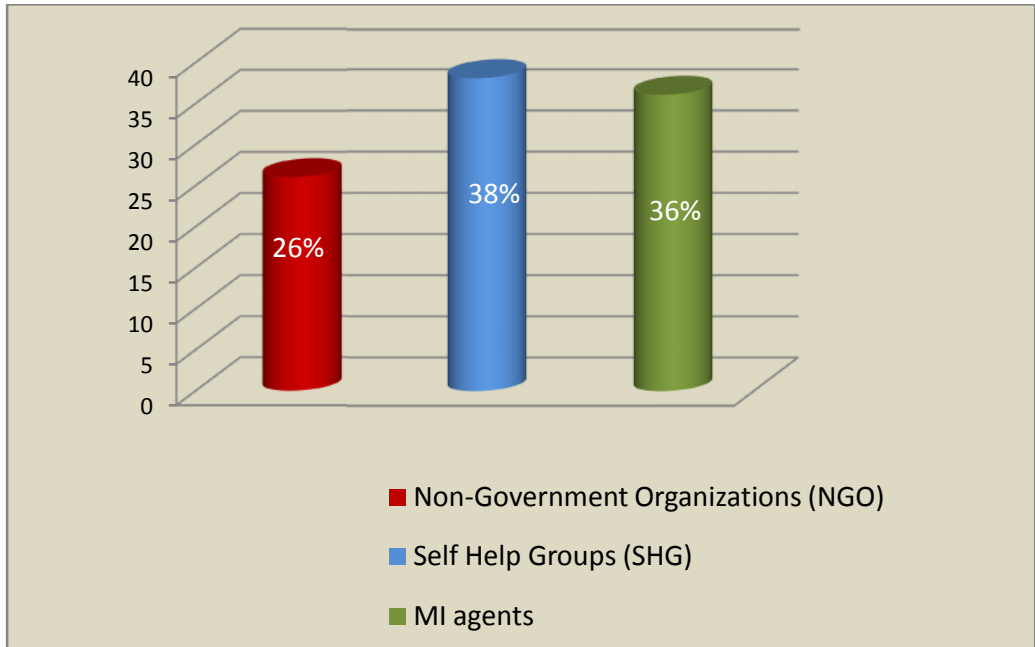


CHART 4.2

CHANNELS INFLUENCE ON PURCHASE OF LIC MI POLICY

Relationship between socio economic factors and the channels influence on purchase of MI policies

In order to find out the relationship between the socio economic factors (type of MI intermediary, gender, Age, Education, Occupation, monthly income, marital status and Location) and the channels influence on the purchase of MI policy, Pearson's Chi-square test was executed. The Null hypothesis framed was

H0 : There is no significant relationship between socio economic factors and the channel influence on the purchase of MI policy.

H1 : There is a significant relationship between socio economic factors and the channel influence on the purchase of MI policy.

The calculated chi-square values are shown in the following table

Table 4.7

Socio Economic Factors and Channels Influence on the Purchase of MI Policy

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI intermediaries	541.163	2	9.210	S at 1% level	Rejected
Gender	1.502	2	5.991	NS	Accepted
Age	9.655	6	12.592	NS	Accepted
Education	10.855	8	15.507	NS	Accepted
Occupation	8.094	6	12.592	Ns	Accepted
Monthly Income	12.972	6	12.592	S at 5% level	Rejected
Marital status	4.546	6	12.592	NS	Accepted
Location	0.400	2	5.991	NS	Accepted

Source : Primary data

It is identified from the above analysis that the chi-square value is greater than the table value forty of MI intermediary and monthly income. Hence, it has a significant relationship with the channels influence on the purchase of the MI policy at 1% level of significance and 5% level of significance respectively. Therefore the null hypothesis is rejected. Alternate hypothesis (H1) is accepted.

The calculated chi-square value is less than the table value for the factors like gender, age, education, occupation, marital status and locations. So they do not have any significant relationship with the channel influence on the purchase of MI policy. Therefore the null hypothesis is accepted.

It is concluded that there is a close significant relationship between type of MI intermediary, Monthly income and the channel influence on the purchase of the MI policy. But there is no significant relationship between the factors like gender, age, education, occupation, marital status, locations and the channel influence on the purchase of the MI policy.

II. PERCEPTION OF TARGET GROUPS ABOUT LIC MICRO INSURANCE

Consumer perception pertains to how individuals form opinions about companies that offer policies through the purchases they make. This helps the company to develop effective marketing and advertising strategies intended to retain current customers and attract new ones.

a) Mean Score Analysis

The mean score analysis was applied to 25 perception statements for a likert scale of 5 points namely Strongly agree, Agree, Neutral, Disagree and Strongly disagree.

The mean score of majority of the statements fall between 3 and 5. So Majority of the statement lies between the category neutral and agree. Highest mean score is 4.2985, is given for the statement states that it is easy to take the MI policy, there is no need to fulfil the eligibility norms. The least score (1.66) is to the

statement, MI policy holders are not able to pay the premium at any of the LIC branches directly.

From the above analysis it is inferred that there is a strong perception on the statement easy to take the LICs MI policy. The respondents have a poor perception on the payment of premium is not flexible.

Relationship between type of MI Intermediaries, Gender, Location and Perception on LIC MI

t-TEST ANALYSIS

t-Test tool is applied to make a comparison between :

- Type of MI intermediary and Perception on MI
- Gender and Perception on MI
- Location and Perception on MI

H0 : There is no significant relationship between type of MI intermediary, genders, locations and the average perception scores on LIC MI insurance.

H1 : There is a significant relationship between type of MI intermediary, genders, locations and the average perception scores on LIC MI insurance.

Table 4.9
Type of MI Intermediary, Gender, Location and Perception on LIC MI Policies

	T	df	Sig.
Type of MI Intermediary	5.210	648	S at 1% level
Gender	1.039	648	Ns
Location	2.127	648	S at 5% level

Source : Primary data

The t-test was applied to find out whether there is any significant relationship between type of MI intermediary, genders, locations and MI perception. The calculated t-test value for type of MI intermediary (5.210) and location (2.127) are greater than the table value. Since the calculated value is higher than the table value it is inferred that there is a significant relationship between MI intermediaries at 1% level and locations at 5% level with perception. Hence the null hypothesis (H₀) is not accepted. Alternative hypothesis is accepted. The perception of MI differs between MI intermediaries and locations.

The calculated t-test value for genders is 1.039 which is smaller than the table value. Since the calculated value is less than the table value it is inferred that the perception has no significant relationship with gender. Hence null hypothesis is accepted. Alternative hypothesis is rejected.

It is concluded from the above analysis that there is a significant relationship between type of MI intermediary (NGO and MI agent), location (Rural and Urban) and the perception towards LIC MI policies. But there is no significant relationship between gender and perception towards LIC MI.

Relationship among socio economic factors (age, education, occupation, monthly income and marital status) and perception score on LIC MI

ANOVA TEST ANALYSIS

H₀ : There is no significant relationship among socio economic factors (age, education, occupation, monthly income and marital status) and perception score on LIC MI.

H₁ : There is a significant relationship among socio economic factors (age, education, occupation, monthly income and marital status) and perception score on LIC MI.

Table 4.10
Socio Economic Factors and Perception Score on LIC MI

Variables	Sources	Sum of Squares	Df	Mean Square	F	Sig.
AGE	Between Groups	57.147	3	19.049	0.411	Ns (2.619)
	Within Groups	29940.547	646	46.348		
	Total	29997.694	649			
EDUCATION	Between Groups	345.353	4	86.338	1.878	Ns(2.386)
	Within Groups	29652.341	645	45.973		
	Total	29997.694	649			
OCCUPATION	Between Groups	493.976	3	164.659	3.605	S (2.619)
	Within Groups	29503.718	646	45.671		
	Total	29997.694	649			
MONTHLY INCOME	Between Groups	281.747	3	93.916	2.042	Ns(2.619)
	Within Groups	29715.947	646	46.000		
	Total	29997.694	649			
MARITAL STATUS	Between Groups	81.562	3	27.187	0.587	Ns(2.619)
	Within Groups	29916.132	646	46.310		
	Total	29997.694	649			

Source : Primary data

One way ANOVA was applied to find whether there is any significant relationship among socio economic factor (age, education, occupation, monthly income and marital status) and perception score on MI. The ANOVA result show that the calculated F-ratio value is 0.411 (Age), 1.878 (Education), 2.042 (monthly income) and 0.587 (marital status) which is less than the table values. Since the calculated value is less than the table value it is inferred that there is no significant relationship among socio economic factors (age, education, monthly income and marital status) and perception score on MI. Hence the null hypothesis (H₀) is accepted. Alternate hypothesis (H₁) is rejected.

Whereas calculated F-ratio value for occupation is 3.605, is greater than the table value. It is inferred that there is a significant relationship between perception

and occupation. Hence the null hypothesis (H0) is rejected. Alternate hypothesis (H1) is accepted. There is a significant relationship among occupations and perception on LIC MI policies.

It is concluded from the above analysis that whatever may be the socio economic factors like age, education, monthly income and marital status, the perception on LIC MI policies do not differ at all. But the different occupational groups have different perception values.

Factor analysis

Using the twenty five perception scores on several aspects of MI policies of LIC, factor analysis is performed based on the strength of inter-correlation between them, in order to group the aspects called 'factors' on priority basis and cluster these aspects into the extracted factors and the results are presented in the following tables.

Since one of the goals of the factor analysis is to obtain 'factors' that help explain these correlations, the variables must be related to each other for the factor model to be appropriate. A closer examination of the correlation matrix may reveal what are the variables which do not have any relationship. Usually a correlation value of 0.3 (absolute value) is taken as sufficient to explain the relation between variables. All the variables from 1 to 25 have been retained for further analysis. Further, two tests are applied to the resultant correlation matrix to test whether the relationship among the variables is significant or not.

Table 4.11

KMO AND BARTLETT'S Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.598
Bartlett's Test of Sphericity	Approx. Chi-Square	6714.494
	Df	300
	Sig.	**

** - Significant at 1% level (P<0.01)

One is Bartlett's test of sphericity. This is used to test whether the correlation matrix is an identity matrix. i.e., all the diagonal terms in the matrix are 1 and the off-diagonal terms in the matrix are 0. In short, it is used to test whether the correlations between all the variables is 0. The test value (6714.494) and the significance level ($P < .01$) are given above. With the value of test statistic and the associated significance level is so small, it appears that the correlation matrix is not an identity matrix, i.e., there exists correlations between the variables.

Another test is Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. This test is based on the correlations and partial correlations of the variables. If the test value, or KMO measure is closer to 1, then it is good to use factor analysis. If KMO is closer to 0, then the factor analysis is not a good idea for the variables and data. The value of test statistic is given above as 0.598 which means the factor analysis for the selected variables is found to be appropriate to the data.

The next step is to determine the method of factor extraction, number of initial factors and the estimates of factors. Here Principal Components Analysis (PCA) is used to extract factors. PCA is a method used to transform a set of correlated variables into a set of uncorrelated variables (here factors) so that the factors are unrelated and the variables selected for each factor are related. Next PCA is used to extract the no. of factors required to represent the data.

The question then is, how many factors do we want to extract? Note that as we extract consecutive factors, they account for less and less variability. The decision of when to stop extracting factors basically depends on when there is only very little "random" variability left.

The results from principal components analysis are given below.

To start with, in the correlation matrix, where the variances of all variables are equal to 1.0. Therefore, the total variance in that matrix is equal to the number of variables. For our study, we have 25 variables(items) each with a variance of 1 then the total variability that can potentially be extracted is equal to 25 times 1.

Table 4.12
Rotated Component Matrix

	Component								
	1	2	3	4	5	6	7	8	9
No variety of MI policies cater to the different requirements of me	0.745	-0.027	0.182	0.027	-0.083	-0.300	-0.166	-0.004	-0.075
The sum assured amount is in MI policies, so it will not be beneficial to me	0.691	0.093	-0.240	0.146	-0.019	-0.153	-0.111	0.150	0.136
The conventional policies of LIC fulfil the purpose; MI policy is not necessary.	0.686	-0.024	0.050	0.204	-0.270	0.031	-0.172	-0.104	0.061
I like the flexible mode of premium payment.i.e monthly to quarterly vice versa and etc.	0.677	0.123	0.115	0.038	0.194	0.066	0.188	0.083	-0.151
I cant pay the MI policy premium at any of the LIC branches directly	0.627	-0.304	-0.301	-0.077	0.006	0.198	0.097	0.169	0.267
The intermediaries can collect the premium from my place of residence	-0.567	0.266	-0.191	-0.002	0.123	-0.073	0.031	0.213	-0.052
Claims of my MI policy may reduce my family's short term financial burden	0.082	0.771	0.034	-0.006	0.136	0.286	0.093	-0.272	0.006
I was attracted by the intermediaries services	-0.481	0.673	0.082	-0.210	-0.132	-0.220	0.089	0.016	0.088
I find that MI intermediaries will take the responsibility in all policy matters	-0.300	0.638	-0.198	-0.013	0.154	-0.116	0.117	0.213	0.136
MI policy covers the risk of my life and it will be a great help to my family members	0.289	0.634	0.117	0.328	0.060	0.127	-0.062	0.099	-0.079
MI policies will encourage the small savings among the low income people	-0.045	0.027	0.811	-0.171	0.246	0.079	-0.195	-0.024	0.037
I think micro insurance policies are beneficial for low income people	0.100	-0.002	0.776	-0.074	-0.278	-0.110	0.027	0.067	0.012

	Component								
	1	2	3	4	5	6	7	8	9
Since the policy premium is less, I am able to pay without lapse	0.076	-0.003	0.577	0.079	-0.401	0.106	0.269	0.128	0.425
Motivation is not good to pay the premium of MI policy	-0.071	-0.047	-0.068	0.787	0.022	0.187	0.282	-0.074	0.056
I am attracted to buy the MI policy after seeing the claim settlement of my neighbour	0.214	0.024	-0.252	0.685	-0.165	-0.082	-0.137	-0.171	-0.092
It is a convenient and suitable avenue for short term investment to me	0.198	0.346	-0.006	0.631	0.140	0.215	-0.160	0.279	0.128
I will buy the MI policy of LIC due to the popularity of LICs brand name	-0.253	0.182	-0.101	-0.491	-0.057	0.401	0.297	0.099	0.292
I find myself comfortable as there are only few formalities in the claim process	-0.092	0.352	-0.038	0.044	0.695	0.076	-0.121	0.324	0.016
The loss is meagre on lapse so chances are there to discontinuance	0.004	0.039	-0.304	-0.007	0.677	0.332	0.270	-0.293	-0.067
The less amount of bonus on maturity of MI policies is not attractive	0.524	0.111	-0.248	0.098	-0.548	0.363	-0.140	0.070	-0.089
Taking MI policies is not a big burden to me	-0.026	0.061	0.039	0.153	0.097	0.827	-0.062	0.026	-0.142
I bought the MI policies because of forced sale by intermediaries	-0.120	0.078	0.079	-0.095	0.071	0.076	0.771	0.089	0.081
I find that it is easy to take policy as there is no need to fulfil the eligibility norms.	0.007	-0.035	0.276	-0.173	0.035	0.245	-0.628	0.110	0.255
The maturity period of the MI policy is short so it is beneficial to me	0.048	-0.006	0.076	-0.088	0.010	0.036	0.047	0.915	-0.088
I usually watch the attractive advertisements of MI policies.	-0.055	-0.067	-0.093	0.004	-0.010	0.149	0.070	0.112	-0.889

Extraction Method : Principal Component Analysis.

Source : Computed from Primary data

Rotation Method : Oblimin with Kaiser Normalization.

Rotation converged in 21 iterations.

Although the factor matrix obtained in the extraction phase indicates the relationship between the factors and the individual variables, it is usually, difficult to identify meaningful factors based on this matrix. Often variables and factors do not appear to be correlated in any interpretable pattern. Most factors are correlated with many variables. Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the Rotation phase of the factor analysis attempts to transfer initial matrix into one that is easier to interpret. It is called the rotation of the factor matrix. There are several methods available for rotating factor matrix. The one used in this analysis is Oblique Rotation. But, the most commonly used method is the Varimax Rotation, which attempts to minimise the number of variables that have high loadings on a factor. This should enhance the interpretability of the factors.. The Rotated Factor Matrix (Table titled Rotated Component Matrix) using varimax rotation is given in Table 5 where each factor identifies itself with a few set of variables. The variables which identify with each of the factors were sorted in the decreasing order and are highlighted against each column and row.

Normally, from the factor analysis results arrived above, factor score coefficients can be calculated for all variables (since each factor is a linear combination of all variables). They are then used to calculate the factor scores for each individual. Since PCA was used in extraction of initial factors, all methods will result in estimating same factor score co-efficients. However, for the study, original values of the variables were retained for further analysis and factor scores were thus obtained by adding the values (ratings given by the respondents) of the respective variables for that particular factor, for each respondent.

From the above analysis the perception towards LIC MI policies, the 25 variables in the data were reduced to 9 factor model and each factor may identify with the corresponding variables as follows:

TABLE 4.13
Factors identified against Statements relating to the Perception

Item	No. of Items	Factor Name
No variety of MI policies cater to the different requirements of me	6	Inflexibility
The sum assured amount is low in MI policies, so it will not be beneficial to me		
The conventional policies of LIC fulfil the purpose; MI policy is not necessary.		
I like the flexible mode of premium payment		
I cant pay the MI policy premium at any of the LIC branches directly		
The intermediaries can collect the premium from my place of residence		
Claims of my MI policy may reduce my family's short term financial burden	4	Support
I was attracted by the intermediaries services		
I find that MI intermediaries will take the responsibility in all policy matters.		
MI policy covers the risk of my life and it will be a great help to my family members		
MI policies will encourage the small savings among the low income people	3	Savings
I think micro insurance policies are beneficial for low income people		
Since the policy premium is less, I am able to pay without lapse		
Motivation is not good to pay the premium of MI policy	4	Motivation
I am attracted to buy the MI policy after seeing the claim settlement of my neighbour		
It is a convenient and suitable avenue for short term investment to me		
I will buy the MI policy of LIC due to the popularity of LICs brand name		
I find myself comfortable as there is only few formalities in the claim process	3	Attractiveness
The loss is meagre on lapse so chances are there to discontinuance		
The less amount of bonus on maturity of MI policies is not attractive		
Taking MI policies is not a big burden to me	1	Affordable Premium
I bought the MI policies because of forced sale by intermediaries	2	Marketing
I find that it is easy to take policy as there is no need to fulfil the eligibility norms.		
The maturity period of the MI policy is short so it is beneficial to me	1	Maturity period
I usually watch the attractive advertisements of MI policies.	1	Advertisements

Source : Computed from Primary data

DISCRIMINANT FUNCTION ANALYSIS

Discriminant Function Analysis attempts to construct a function with these and other variables so that the respondents belonging to either of these two groups are differentiated at the maximum. The linear combination of the variables is known as Discriminant Function and its parameters are called Discriminant Function coefficients.

A typical Discriminant Function will be of the form,

$$Z = a_0 + a_1X_1 + a_2X_2 + \dots + a_nX_n$$

where, a_0 - constant

a_1, a_2, \dots, a_n - Discriminant Function coefficients of the independent variables X_1, X_2, \dots, X_n , respectively.

Since the objective is to determine the variables which discriminate most efficiently between Policy holders through NGO and Policy holders through Agents the stepwise approach was used.

The following variables were included the model.

Inflexibility

Support

Savings

Motivation

Attractiveness

Affordable Premium

Marketing

Maturity period

Advertisements

Satisfaction score on policy

Satisfaction score on Distribution Channel

Satisfaction score on Promotion
 Satisfaction score on Process
 No. of policies-Micro Life Policies
 Premium paid-Micro Life
 Sum Assured-Micro Life
 Maturity Period-Micro Life
 How many of your policies are discontinued

The results of the discriminate function analysis are given in following with the values of discriminant function coefficients for each of the discriminating variable.

Table 4. 14

Canonical Discriminant Function Coefficients

Factors	Function
Inflexibility	-.171
Savings	.071
Motivation	-.154
Affordable Premium	-.354
Marketing	.515
Advertisements	.209
Satisfaction score on policy	.130
Satisfaction score on Distribution Channel	.118
Satisfaction score on Promotion	-.133
No. of policies-Micro Life Polcies	-.176
Premium paid-Micro Life	.003
Maturity Period-Micro Life	-.055
How many of your policies are discontinued	-.274
(Constant)	.512

Source : Computed from Primary data

It is seen that out of 18 variables included in the model the step-wise approach selected only 13 items as variables best discriminating between the three farmer groups. The discriminate function coefficients are partial coefficients, reflecting the unique contribution of each variable to the classification of the dependent variable. The coefficient values are used to find the discriminate scores of each case, by substituting the values for each of the variables in the discriminate functions for each case.

Using the values given in table 1 the discriminate Function (Z) for the problem under study can be written as,

$$Z = 0.512 - 0.171X_1 + 0.071X_2 - 0.154X_3 - 0.354X_4 + 0.515X_5 + 0.209X_6 + 0.130X_7 + 0.118X_8 - 0.133X_9 - 0.176X_{10} + 0.003X_{11} - 0.055X_{12} - 0.274X_{13} \text{ ----- (A)}$$

Where,

X1=Inflexibility

X2=Savings

X3=Motivation

X4=Affordable Premium

X5=Marketing

X6=Advertisements

X7=Satisfaction score on policy

X8=Satisfaction score on Distribution Channel

X9=Satisfaction score on Promotion

X10=No. of policies-Micro Life Policies

X11=Premium paid-Micro Life

X12=Maturity Period-Micro Life

X13=How many of your policies are discontinued

The above table provides the multivariate aspect of the model given under the heading 'Canonical Discriminate Function'. Note that Discriminate Function is significant at 1% level (Wilks lambda and chi-square test values given in the table

indicate that the model is significant at 1% level) and displays a correlation of 0.795 which explains that there is a good correlation between the grouping variable and the independent variables.

Canonical discriminant function

Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
.795	.369	639.955	13	**

Computed from Primary data

CLASSIFICATION:

Once the Discriminant Function is arrived at, then the efficiency of the function as to, how accurately it predicts the respondents in to the respective groups must be assessed. For this a classification matrix is to be developed using actual and 'predicted' group membership of the respondents. Before a Classification Matrix can be considered, several things must be decided beforehand. First, the group centroids (means), second cutting score and third a prior probabilities of each group.

Group Centroids :

Using the Discriminant Function given in (A) the discriminant score for each respondent is calculated by substituting the values for discriminating variables from the analysis data. Then means scores for NGO group (Z_0) and Agents group (Z_1) are calculated, which are called Group Centroids.

Canonical Discriminant functions evaluated at group means

Type of respondent	Function
NGO-Policy holders	-1.033
Agents-Policy holders	1.652

Source : Computed from Primary data

Prior Probabilities for Groups

Type of respondent	Prior	No.
NGO-Policy holders	.615	400
Agents-Policy holders	.385	250
Total	1.000	650

Source : Computed from Primary data

Cutting Score:

Using the sample sizes and centroids for these two groups Cutting Score is calculated as follows:

$$Z_c = \frac{N_0 Z_0 + N_1 Z_1}{N_0 + N_1}$$

- where,
- Z_c = Cutting Score
 - Z_0 = Centroid for NGO-Policy holder
 - Z_1 = Centroid for Agents-Policy holder
 - N_0 = Sample size of NGO -Policy holders
 - N_1 = Sample size of Agents-Policy holders

Hence substituting the respective values the cutting score is

$$Z_c = [400 * (-1.033) + 250 * (1.652)] / (400 + 250) = 0.00$$

Against this Cutting Score each respondent's discriminant score is examined. If his score is less than Z_c value, then he is classified in NGO group, otherwise in Agents group.

Table 4.15

Structure Matrix

Variable	Function (R)	R ² %
Inflexibility	-0.449	20.16
Premium paid-Micro Life	0.360	12.96
Marketing	0.349	12.18

Satisfaction score on Distribution Channel	0.290	8.41
Maturity Period-Micro Life	-0.251	6.30
Motivation	-0.226	5.11
Satisfaction score on Promotion	-0.199	3.96
Satisfaction score on policy	0.155	2.40
How many of your policies are discontinued	-0.145	2.10
Affordable Premium	-0.114	1.30
No. of policies-Micro Life Polcies	-0.108	1.17
Savings	0.080	0.64
Advertisements	0.026	0.07

Source : Computed from Primary data

Once the Discriminant Function and its classification efficiency are assessed, then the next question remains to be answered is: how efficient are the discriminating variables in the Discriminant Function? This cannot be answered directly. However, the discriminating power or the contribution of each variable to the function can sufficiently answer the question. That is, by examining the Discriminant Function to determine the relative importance of each discriminating variable in the D.F between the two groups. Table 6 gives the structural correlations which measure the simple linear correlations between each independent variable and the Discriminant Function. The $R^2\%$ gives the percent contribution of each variable to Discriminant Function. By looking at the structure matrix it is seen that '**Inflexibility**' is the maximum discriminating variable ($R^2\%=20.16\%$) between NGO and Agents Micro Life policy holders, followed by '**Premium Paid-Micro Life**' (12.96%), and '**Marketing**' (12.18%) in that order. Other variables' contribution in discriminating between Micro Life policy holders through NGO and Agents- Micro Life policy holders are less than 10%.

Insurance Practice

An attempt has been made to know about the insurance buying practice among the MI policy holders. For the purpose of the study, details about the MI policies, Details about the regular policies, term and mode of premium payment, services of intermediaries and discontinuance details of MI policies were considered. This is further explained with the help of t-Test, Chi-square test and Mean Rank.

Table 4.16
Micro Insurance Policies: Details

Particulars	Mean	SD
No of policies	1.6046	0.8894
Premium paid (months)	188.8431	166.8017
Sum assured (Rs.)	16,868	12,745.3278
Maturity period (years)	10.2846	3.2843

Source : Computed from Primary data

The above table depicts the mean of MI policy details like numbers, premium, sum assured and maturity period using the mean and Standard deviation. The mean value for number of policies for the respondents is 1.6046 policies. The mean value of premium paid is 188.8431 per month. The mean value for sum assured is Rs.16,868. The average maturity period of MI policies are 10.2846 years.

Table 4.17
Conventional Life Policies of LIC
(No of policy holders 144)

Particulars	Mean	SD
No of policies	1.1111	0.3368
Premium paid (month)	623.124	1282.6313
Sum assured (Rs.)	154319.4444	79788.0630
Maturity period (years)	16.7917	3.6563

Source : Computed from Primary data

The above table depicts the mean of other regular policies taken by the respondents. Conventional policy details like numbers, premium, sum assured and maturity period using the mean and Standard deviation were presented in the above table. Out of 650 LIC MI respondents, 144 of them are holding LIC's conventional policy also. The mean value for number of policies for the respondents is 1.1111 policies. The mean value of premium paid is Rs.623.124 per month. The mean

value for sum assured is Rs.154319.4444. The average maturity periods of regular policies are 16.7917 years.

It was found out that around 144 (22%) of the LIC MI policy holders hold in addition, conventional LIC policies also. It indicates that conventional LIC policy holders also have a tendency and high possibility of purchasing the suitable MI policies also.

Relationship between the numbers of policy, premium paid, sum assured, maturity period and type of MI intermediaries.

H0 : There is no significant relationship between numbers of MI Policy, premium paid, sum assured, maturity period and the type of MI Intermediaries.

H1 : There is asignificant relationship between numbers of MI Policy, premium paid, sum assured, maturity period and the type of MI Intermediaries.

Table 4.18

Numbers of MI Policy, Premium Paid, Sum Assured, Maturity Period and Type of MI Intermediaries

Factor	t	df	Sig.
Numbers of MI policy	3.581	648	S at 1% level (2.583)
Premium paid	11.993	648	S at 1% level (2.583)
Sum assured	2.913	648	S at 1% level (2.583)
Maturity period	8.370	648	S at 1% level (2.583)

Source : Primary data

The t-test was applied to find out whether there is any significant relationship between numbers of MI Policy, premium paid, sum assured, maturity period and the type of MI Intermediaries. The calculated t-test value for MI (number of policies,

premium paid, sum assured and maturity period) is greater than the table values of 2.583 at 1% level of significance. Since the calculated value is higher than the table value it is inferred that there is a significant relationship between numbers of MI Policy, premium paid, sum assured, maturity period and the type of MI Intermediaries. Hence the null hypothesis (H₀) is rejected. Alternate hypothesis accepted.

The number of MI policies taken, premium paid, sum assured, maturity period of the policy definitely influence the type of intermediaries (NGO or MI Agent).

Table 4.19
Term and Mode of Premium Payment

S.No	Criteria	No. of respondents	Percentage
	Term of Premium Payment		
1	Single premium	5	0.8
2	Fortnightly	2	0.2
3	Monthly	473	73
4	Quarterly	65	10
5	Half yearly	78	12
6	Yearly	27	4
	Total responses	650	100
	Mode of Premium Payment		
1	Through NGO	86	13
2	Through SHG	329	51
3	Micro insurance Agents	235	36
	Total	650	100

Source : Primary data

The above table depicts that majority (73%) of the respondents are paying premium on monthly basis, 12 percent choose to pay the premium on half yearly basis, 10 percent of them paid their premium as quarterly, 4 percent of the respondents are paying their premium on yearly basis. Only very meagre percent 0.8 and 0.2 are paying premium in single term and fortnight respectively.

When the method of paying premium is concerned, the majority 51 percent are paying through SHG members, 36 percent are paying through micro insurance agents and remaining 13 percent are paying through NGO's directly.

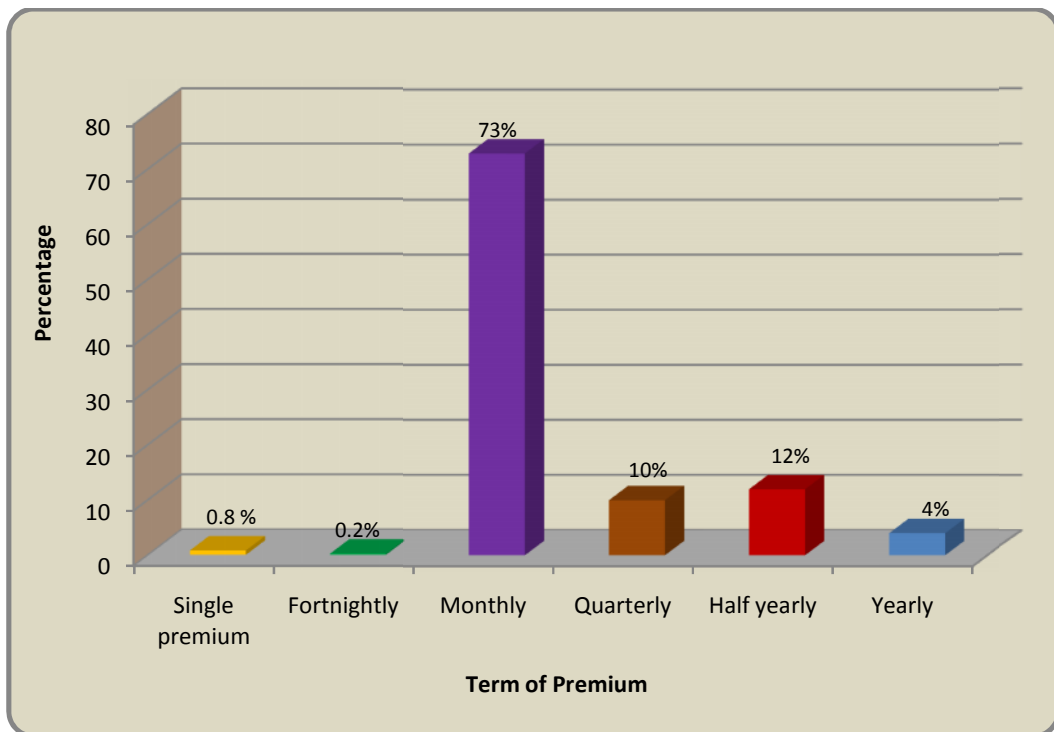


CHART 4.3

TERM OF PREMIUM PAYMENT

Relationship between Socio Economic Factors and Mode of Premium payment

H0 : There is no significant relationship between socio economic factors (gender, age, education, occupation, monthly income, marital status, and location) and mode of premium payment.

H1 : There is a significant relationship between socio economic factors (gender, age, education, occupation, monthly income, marital status, and location) and mode of premium payment.

Table 4.20

Socio Economic Factors and Mode of Premium Payment

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI intermediary	534.068	2	9.210	S at 1% level	Rejected
Gender	.883	2	5.991	NS	Accepted
Age	13.541	6	12.592	S at 5% level	Rejected
Education	7.866	8	15.507	NS	Accepted
Occupation	11.567	6	12.592	NS	Accepted
Monthly income	5.804	6	12.592	NS	Accepted
Marital status	2.515	6	12.592	Ns	Accepted
Location	1.707	2	5.991	Ns	Accepted

Source : Primary data

Chi square test was applied to find out whether there is significant relationship between the type of MI intermediaries, socio economic factors (gender, age, education, occupation, monthly income, marital status, and location) and mode of premium payment. The calculated value of chi-square for gender, education, occupation, monthly income, marital status, and location is less than the table value at 5% level of significance. Since the calculated value is less than the table value it is inferred that there is no significant relationship between mode of premium payment and these socio economic factors. Hence the null hypothesis (H0) is

accepted. Hence it can be concluded that whatever be the socio economic factors, like gender, education, occupation, monthly income, marital status and location all MI policy holders use all modes of premium payment invariably.

Whereas the calculated value of chi-square for type of MI intermediary and Age has higher value than the table values. Hence the null hypothesis (H₀) is rejected. There is a significant relationship between the type of intermediary, age and mode of premium payment. It is established that according to the type of MI intermediary and the age of MI policy holder, the mode of of premium payment differs.

Services of MI Intermediaries

An attempt has been made to know about the various services provided by MI intermediaries to their policy holders. The services of the intermediaries are an important factor for the success of the MI business. It has been classified in two categories namely frequency of meeting their policy holders and preference of MI intermediaries services by the policy holders. This is further analysed by using Chi-square test, Mean Rank and Kendall co-efficient of Concordance.

Table 4.21
Frequency of Meeting with Intermediary

		Frequently		Occasionally		Rarely		Never		No.	%
		No.	%	No.	%	No.	%	No.	%		
MI intermediary	NGO	113	28	212	53	66	17	9	2	400	100
	Agent	130	52	100	40	18	7	2	1	250	100
Total		243	37	312	48	84	13	11	2	650	100

Source : Primary data

The above table shows that out of total respondents, 48 percent of the respondents meet their intermediaries occasionally. 37 percent of them meet frequently, 13 percent of them meet rarely and 2 percent of them had never met their intermediary at all. Whereas majority 53 percent of the NGO's policy holders

meet their intermediary occasionally and majority 52 percent of the MI Agents policy holders meet frequently. Among MI, most of the NGO's meet their policyholders occasionally and most of the agents meet them frequently. This shows the effective communication between MI Intermediaries and policyholders which indicates efficient administration.

Relationship between type of MI intermediaries and frequency to meet intermediaries

H0 : There is no significant relationship between the type of MI intermediaries and frequency of meeting with intermediaries

H1 : There is a significant relationship between the type of MI intermediaries and frequency of meeting with intermediaries.

Table 4.22

Type of MI Intermediaries and Frequency of Meetings with Intermediaries

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI Intermediaries	40.837	3	11.345	S at 1% level	rejected

Source : Primary data

Chi-square test was applied to find out whether there is significant relationship between frequency of meeting intermediaries and the type of MI intermediary. The calculated value of chi square is 40.837, which are greater than the table value of 11.345 at 1% level of significance. Since the calculated value is greater than table value it is inferred that there is a significant relationship between frequency of meeting intermediaries and the type of MI intermediary. Hence null hypothesis (H0) is rejected. The nature and type of MI intermediary definitely decides about the frequency of meetings with the policy holders.

Preference of Services

An attempt made to find the opinion on services rendered by the MI intermediaries to their MI policy holders. The details are furnished in the following table using Rank Analysis.

TABLE 4.23
**MI Policy Holders opinion on Services Rendered
by MI Intermediaries**

Services	Mean Rank
Convincing explanation regarding policy features and its benefits	4.33
Collecting premium	2.48
Intimates about the premium	3.81
Prompt payment of premium	3.39
Services of the policy	2.78
Intimates about Lapse/Revival of policy	4.89
Claim process - maturity/ death/surrender	6.33

Source : Primary data

The above table represents respondents' opinion on the services rendered by their intermediary. As per the opinion of MI policy holders on the various services rendered, highest preference goes to collecting premium. Followed by the various services related to policies namely policy document maintenance. Prompt payment of premium is ranked at the third place, intimation given about the premium is at the fourth rank. It is followed by the convincing explanation regarding policy features and its benefits. Intimation given about the lapse/revival of policy is at sixth rank and quick claim process i.e maturity claim, death claim and surrender claim is placed at the last, in the seventh rank.

Thus the LIC's MI intermediaries' the most important service as perceived by their policy holders are collection of premium and services of the policy. Least important service is claim process. The following tool is used to measure the similarity between the various services rendered by the MI.

TABLE 4.24
Services Rendered by MI Intermediaries
(Kendall's Coefficient of Concordance)

Kendall's W	0.377
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Source : Primary data

The calculated value of Kendall's co efficient of concordance is 0.377. It lies between 0 to 1. It shows that there is a moderate level similarity existing in various services rendered by MI intermediaries of LIC.

Discontinuance of Policy

An attempt has been made to know the discontinuance of the MI policies. For the purpose the study, the number of policies discontinued, surrender and claimed the discontinued policy, reasons for non surrender and reason for discontinuance of the policy were collected. This is further analysed by using Chi-square test and Mean Rank.

Table 4.25
Number of Policies Discontinued

S.No	Number of policies	No.	Percentage
1	None	401	62
2	One	211	32
3	Two	32	05
4	More than two	06	01
	Total	650	100

Source : Primary data

The above table indicates that among the total respondents the majority (62%) of the respondents are continuously paying their premium amount to continue

their MI policy. The major problem is 32 percent discontinuation of one of their policies. Five percent of them discontinued two of their policies. Only 1 percent of them come under discontinuance of more than two policies. In this research study efforts are taken to find out the causes for discontinuance of MI policies and suggestions to rectify it.

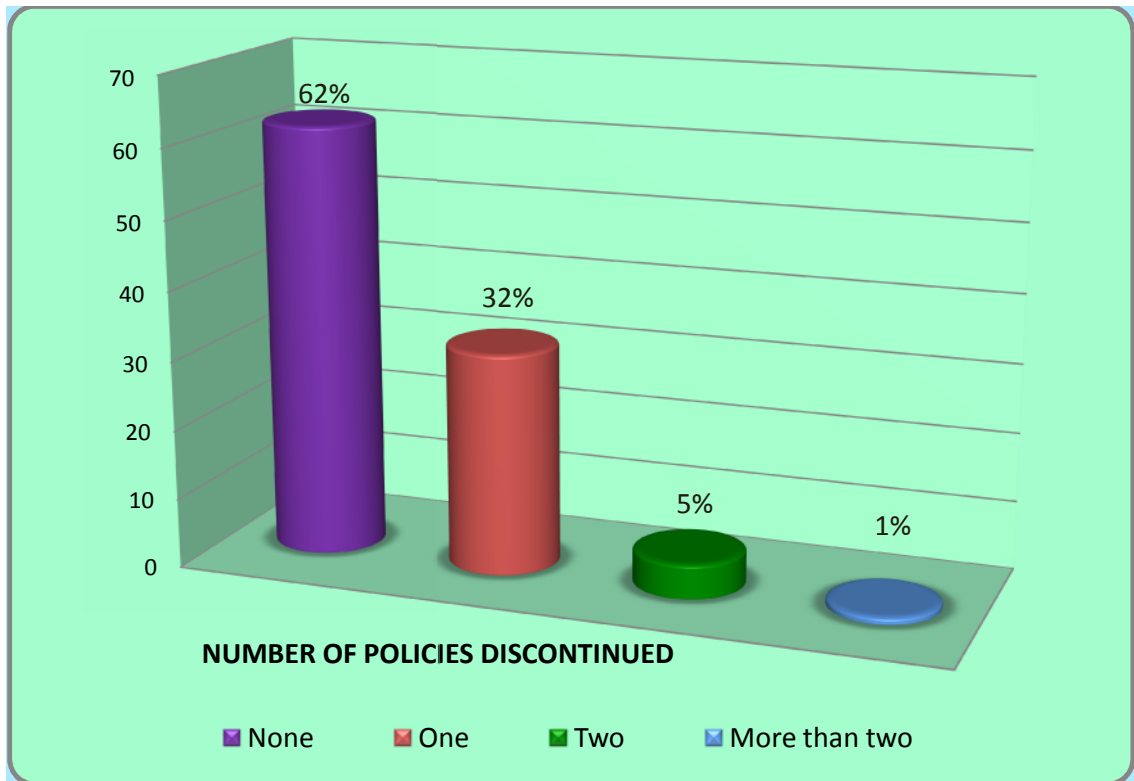


CHART 4.4

DISCONTINUANCE OF THE POLICIES

TABLE 4.26**Surrender / Claimed the Discontinued Policy**

S.No	Surrender/claimed	No. of Respondents	Percentage
1	Yes	59	24
2	No	190	76
	Total	249	100.0

Source : Primary data

Out of 262 discontinued respondents, only 24 percent of the respondents had surrendered and claimed their policy amount. The rest 76 percent of them had not surrendered and claimed their policy amount.

Relationship between the type of MI intermediaries and policies discontinued

H0 : There is no significant relationship between the type of MI intermediaries and policies discontinued

H1 : There is a significant relationship between the type of MI intermediaries and policies discontinued

Table 4.27**Type of MI Intermediaries and Policies Discontinued**

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI intermediaries	25.246	3	11.345	S at 1% level	rejected

Source : Primary data

Chi-square test was applied to find out whether there is significant relationship between the type of MI intermediary and policies discontinued. The calculated value of chi square is 25.246 which are greater than the table value of 11.345 at 1% level of significance. Since the calculated value is greater than table value it is inferred that there is a significant relationship between the type of MI intermediary and policies discontinued. Hence null hypothesis (H0) is rejected. The nature and type of MI intermediary definitely has impact on the number of policies discontinued.

Reasons for not surrender and non receipt of claims of discontinued policy

An attempt has been made to find the reasons for not surrendering / non receipt of claims of discontinued policies.

Table 4.28

Reasons for not Surrender and non Receipt of Claim*

S.No	Reasons	No. of Respondents
1	Paid few premium amounts	151
2	No response from Intermediaries	65
3	Formalities are not known	30
4	Others	16

Source : Primary data

*Multiple Responses

One hundred and fifty one respondents had paid few premium amounts only, and that disqualified them to surrender and receive the claim. The intermediaries had not properly responded regarding the surrender of the policy to 65 of the respondents. Thirty respondents had no knowledge about the surrender and 16 of them had other problems like loss of policy documents, distance, unable to reach and claim.

Table 4.29
Causes for Discontinuance of the Policy

S.No	Reasons	Mean rank
1	Mode of payment is inconvenient	2.51
2	Financial difficulties	3.25
3	Unwillingness to continue	2.42
4	Intermediaries are not reachable	3.28
5	Lack of communication regarding policy lapse/revival	4.16
6	Others(problems in SHG, Migration,etc)	5.38

Source : Primary data

The above table shows that the reasons for discontinuing the policy. The major reason (2.42 mean ranks) is the unwillingness of the policy holders to continue the policy due to very little amount of premium loss. It is followed by the reason inconvenient mode of payment of their premium and financial difficulties. The fourth reason is that intermediaries are not easily reachable. At last other reasons like migration from their residential place, problems in SHG, lack of motivation to revive etc.

Relationship between the type of MI Intermediary and discontinued policies (Surrender / Claim)

H0 : There is no significant relationship between the type of MI intermediary and policies discontinued (Surrender / Claim).

H1 : There is a significant relationship between the type of MI intermediary policies discontinued (Surrender / Claim).

Table 4.30**Type of MI Intermediaries and Discontinued Policies**

Factors	Chi-square value	DF	Table value	Significance	H0
Type of MI intermediaries	16.209	1	6.635	S at 1% level	Rejected

Source : Primary data

Chi-square test was applied to find whether there is significant relationship between the type of MI intermediary and policies discontinued (surrender / claim). The calculated value of chi square is 16.209, which is greater than the table value of 6.635 at 1% level of significance. Since the calculated value is greater than table value it is inferred that there is a significant relationship between the type of MI intermediary and the policies discontinued (surrender / claim). Hence null hypothesis (H0) is rejected.

The nature and type of MI intermediary has significant influence on the surrender and receipt of claims of the discontinued policies.

III. LEVEL OF SATISFACTION OF LIC MI POLICY HOLDERS

The level of satisfaction of the respondents towards LIC's MI products was assessed based on their opinion on the features of the MI policy, services of MI intermediaries, promotional activities of LIC and Claim process. The responses were scored by Likert five point scaling technique like score 5 for highly satisfied, 4 for satisfied, 3 for Neutral, 2 for dissatisfied and 1 for highly dissatisfied.

TABLE 4.31
Level of Satisfaction of LIC MI Policy Holders

Factors	5	4	3	2	1	Mean	SD	Rank
Premium Amount	380	181	53	23	13	4.372	0.59	1
Premium mode	183	162	180	82	43	3.554	1.17	8
Maturity period	50	103	169	127	201	2.498	1.14	11
Calculating correct premium	38	71	121	210	210	2.257	1.15	12
Prompt payment of premium & its receipt	232	163	118	79	58	3.665	1.11	7
Response and access	218	251	95	43	43	3.858	1.13	6
Faster claim settlement	190	120	194	122	24	3.508	1.13	9
Advertisements about the micro policies	25	34	53	322	216	1.969	0.87	13
Public relations by the company	117	78	249	85	121	2.977	1.51	10
Procedure in issuing the policy	230	218	129	46	29	3.892	0.92	5
Timely claim settlement	311	223	63	23	30	4.172	0.89	4
Easy procedures for claims	322	228	78	15	7	4.297	0.77	2
Full amount of claim - settlement	346	188	69	42	5	4.274	0.89	3

Source : Computed from Primary data

As per the application of likert scale technique (5 point scale) to assess the level of satisfaction about all the services rendered by MI intermediary, MI policy holders are mostly satisfied about the smaller premium amount, easy procedures for claims, payment of full amount in claim settlement and timely claim settlements. They are satisfied regarding procedure in issuing the policy, responses and accessibility, promptness in payment of premium and issue of receipt and mode of premium payment.