PROJECT REPORT ON

A data driven analysis on public awareness and preferences in General Insurance

DEPARTMENT OF STATISTICS, FACULTY OF SCIENCE
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

YEAR 2024-25

GUIDE:

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RUTVEE SHAH
KRUPA VALAND
ARPIT BHARWAD
NOORE M. MAHIR PATEL

DECLARATION

We hereby declare that the work presented in this project titled "A data driven analysis on public awareness and preferences in General insurance" is the result of our independent work, submitted to the Department of Statistics, at The Maharaja Sayajirao University of Baroda, as a part of our journey towards earning our Bachelor of Science degree, we undertook an exciting project under the expert guidance of Dr. Mangala N. Shah.

This project showcases our original research efforts and represents a significant milestone in our academic journey. Importantly, the findings presented here have not been shared with any other University or Institute.

Place: Vadodara

Duration: 07 July 2024 to 24 April 2025

CERTIFICATE

This is to certify that Manya Gupta, Ritika Patel, Rutvee Shah, Krupa Valand, Arpit Bharwad, Noore M. Mahir Patel have successfully and satisfactorily completed the project titled:

"A DATA DRIVEN ANALYSIS ON PUBLIC AWARENESS AND PREFERNCE IN GENERAL INSURANCE"

As a team for the academic year 2024-25 have submitted the work to the Department of Statistics as a partial fulfilment of the requirement of the Bachelor's Degree in Statistics and have represented their original work under the supervision and guidance of Dr. Mangala N. Shah and Sheetal Prasad.

I wish them grand success in the future

Sheetal Prasad
Guide

Dr. Mangala N. Shah
Guide

Prof. V.A. Kalamkar
Head of Department

ACKNOWLEDGMENT

First and foremost, we would like to thank our guides, Dr. Mangala N. Shah and Ms. Sheetal Prasad, who always helped us, welcomed our questions, kept us motivated and gave us a lot of recommendations and suggestions. We would not have reached this phase, if it were not for their permanent support, advice, and guidance.

We also would like to express our gratitude to our Head Dr. Vipul Kalamkar for their support, guidance and helpful feedback.

We would also thank our university to provide us with such great faculties, library, environment to grow ourselves, and for the platform to explore ourselves and showcase our skills.

Our sincere thanks to our parents for guiding us decently and supporting us at every stage in our life also their wishes for successful completion of this project.

We are also thankful to all the respondents who took the time to participate in the survey, making this study possible.

Finally, we would like to express our eternal gratitude to our seniors and friends for their support, appreciation and patience. We would like to dedicate this report to them all.

ABSTRACT

This project explores the landscape of general insurance awareness and usage in Vadodara city. The primary aim is to assess insurance literacy, study insurance density, and evaluate the relationship between knowledge and ownership of insurance products. Through data collection across different demographic segments, the study also investigates key factors influencing insurance purchase decisions. This study employs both descriptive and inferential statistical methods, using parametric and non-parametric approaches. Data analysis was conducted with tools like MS Excel to identify patterns, correlations, and insights. The findings are expected to provide a comprehensive understanding of public behaviour toward general insurance and suggest pathways to enhance insurance penetration through improved awareness and accessibility.

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INTRODUCTION

In today's fast-paced world, where uncertainties and risks have become inevitable companions of modern life, insurance has emerged as one of the most vital financial tools to safeguard individuals and families against unforeseen events. Yet, despite its critical importance, public awareness and understanding of insurance—especially general insurance—remains worryingly low in many parts of India.

General insurance, which includes coverage for health, motor vehicles, property, travel, and more, plays a significant role in providing protection from financial shocks. However, the public's knowledge about various insurance products, premium mechanisms, claim procedures, and legal obligations often falls short of what is required to make informed decisions.

This study takes a data-driven approach to assess and analyse the level of insurance literacy, the penetration of different types of general insurance, and the factors influencing insurance purchase decisions among the people of Vadodara city, Gujarat. With the growing interest in insurance products and the evolving demographics, understanding the level of insurance literacy and the factors driving insurance purchase decisions is essential.

OBJECTIVES OF STUDY

1. To assess the level of insurance awareness among people in Vadodara

2. To analyse the purchasing behaviour of individuals in Vadodara with respect to general insurance policies.

3. To examine the relationship between insurance literacy and ownership

4. To identify the factors influencing insurance purchase decisions

METHODOLOGY AND DATA

1) SAMPLING METHODS:

LOCATION: Vadodara city

TARGET POPULATION: Respondents of age 18 and above

SAMPLING PROCEDURE:

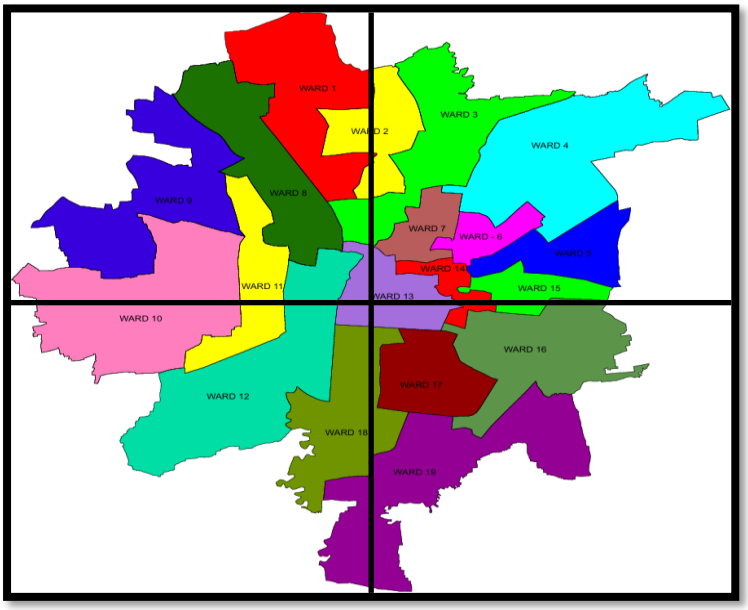
We employed Convenience Sampling but in order to increase the representativeness of the sample we incorporated it with Area sampling by dividing the map of Vadodara City into four quadrants/Zones with the help of grid lines and getting different wards in each quadrant. Further the wards were divided into societies and from those societies we selected household for our sample survey

- **Primary Sampling Units (PSUs):** Zones
- **Secondary Sampling Units:** Wards

This will lead to 4-Stage Area Sampling.

Approach: Equal allocation across wards due to lack of ward-wise population data

I. 1st-Stage: Zonal division of Vadodara



II. 2nd Stage- Wards selection

- Total number of wards: 19
- Wards selected for sampling: 4 (we randomly selected **4 wards** using the **square root method** $(\sqrt{N})$ for efficiency and representativeness.)
- Total sample size: 331
- Allocation of sample across each ward: 83 $(\frac{331}{4} = 82.79 \approx 83)$

III. 3rd Stage: Sampling within each Wards

Selection of Societies/Areas –
Random Selection: Using a random method (a random number generator) we selected a set number of societies in each ward.

IV. 4th Stage: Sampling within Society

Household Selection –

- Within Selected Societies: Once the societies were chosen, random route sampling will be used to select households.
- Random Route Sampling (Convenience Sampling): use a random route where we will follow a predetermined path and select households at regular intervals (e.g., every 3rd or 4th house).

2) SAMPLE SIZE DETERMINATION:

Sample size is the number of observations or measurements taken in a study, influencing the reliability and precision of research findings.

The population of this study is the total number of individuals in Vadodara city of Working Age.

- We conducted pilot study with a small sample of size 35 and refined the questionnaire structure based on the pilot study.

For Sample Size Determination:

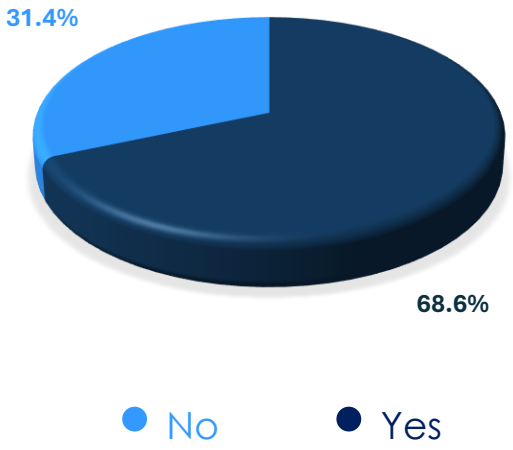
The question required for our p calculation was:

Q. Have you ever purchased a general insurance policy?

From the pilot study we gathered 35 responses and calculated the value of p and q.

- Value of p = 0.686
- Value of q = 0.314

Q. Have you ever purchased a general insurance policy?



- Collecting information from the entire population is not feasible for this study so a subset of population will be considered instead.
- Using the standard formula (Cochran's formula for large population and unknown population variance) for a simple random sample

$$n = \frac{Z^2 \times p(1-p)}{\varepsilon^2}$$

$$n = \frac{(1.96)^2.(0.686)(1-0.686)}{0.05^2} \approx 331$$

REQUIRED PARAMETERS	VALUES
Z	1.96 (95% CI)
p	0.686
q (1-p)	0.314
ε	0.05

So, our determined sample size is 324.

- This means that for a simple random sample, we need roughly **331 respondents**

3) QUESTIONNAIRE DESIGNING

To gather diverse insights, we designed a comprehensive questionnaire and conducted a survey among individuals from various socio-economic and demographic backgrounds across Vadodara city, ultimately collecting a total of 331 responses.

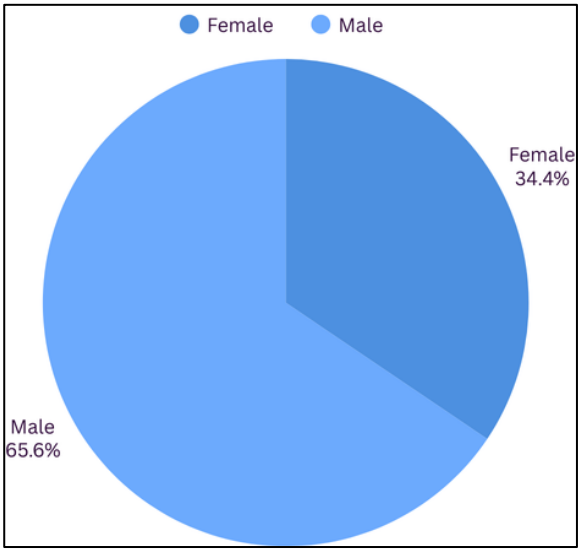
For the purpose of data collection, a structured questionnaire was developed, focusing on three key areas:

- **Insurance literacy**
- **Penetration of various general insurance products**
- **Factors influencing insurance purchase decisions**

The questionnaire was organized into six distinct sections to ensure comprehensive coverage and ease of analysis:

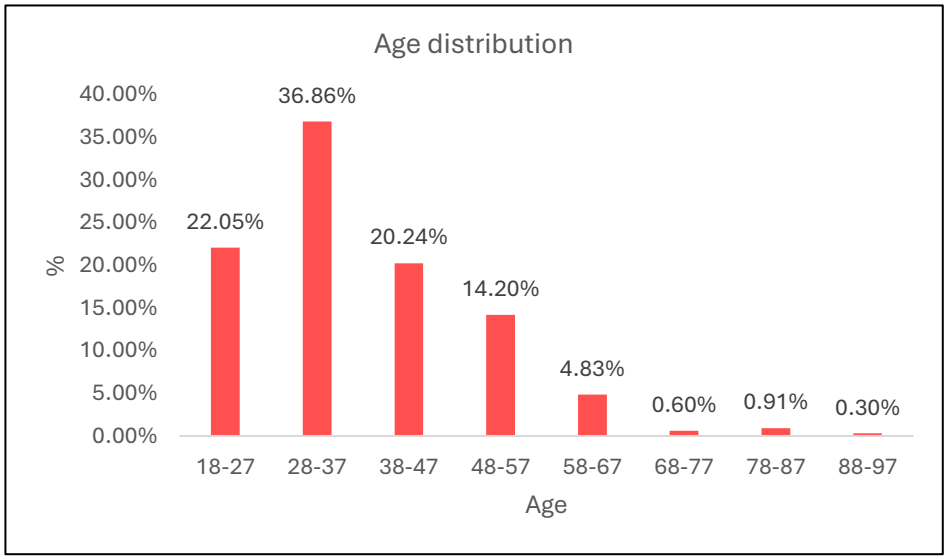
1. **Basic Details**: Captures demographic information such as gender, age, locality, and occupation.
2. **Insurance Literacy**: Includes questions designed to evaluate the respondent's understanding of insurance concepts.
3. **General Insurance**: Explores awareness and ownership of general insurance products, reasons for purchasing or not purchasing them, and overall perceptions.
4. **Health Insurance**: Gathers information on whether respondents have purchased health insurance, reasons for not purchasing (if applicable), and the types of health insurance held.
5. **Motor Insurance**: Assesses motor insurance ownership, reasons for non-purchase, and the types of motor insurance purchased.
6. **Home Insurance**: Investigates ownership of home insurance, reasons for not purchasing it, and the kinds of home insurance bought.

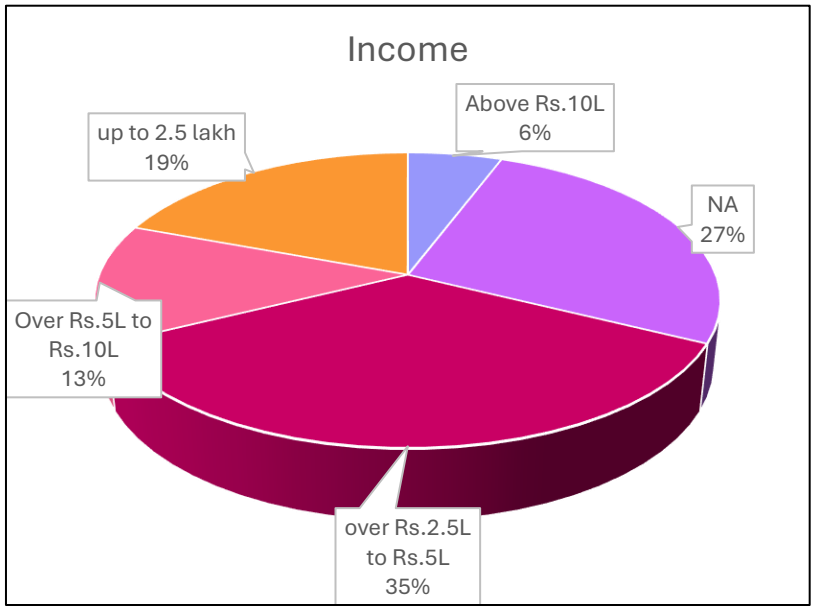
EXPLORATORY DATA ANALYSIS



In our sample, 65.6% of respondents are Males, and the remaining 34.4% are Females.

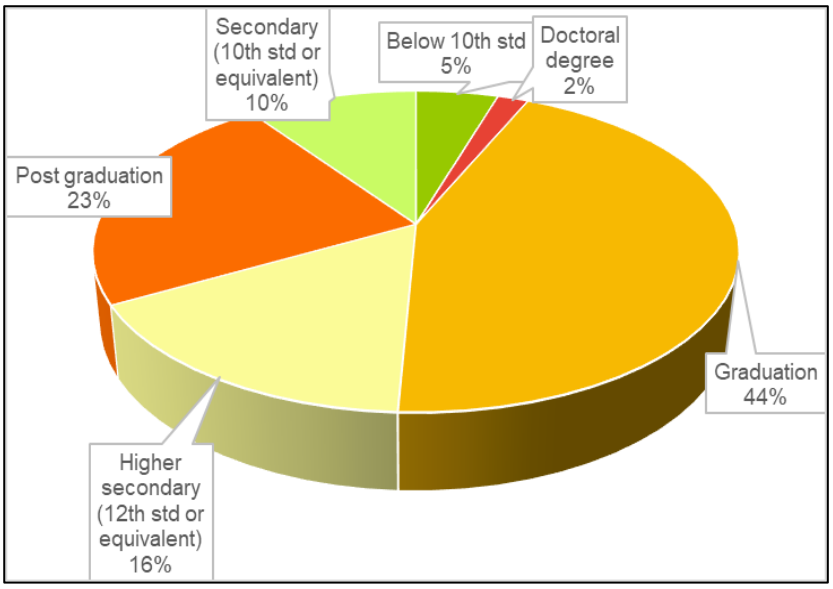
The majority of the total 331 respondents are from the age group 27 to 37.





We observe that 35% of the total respondents belong to over Rs 2.5L to Rs.5L .

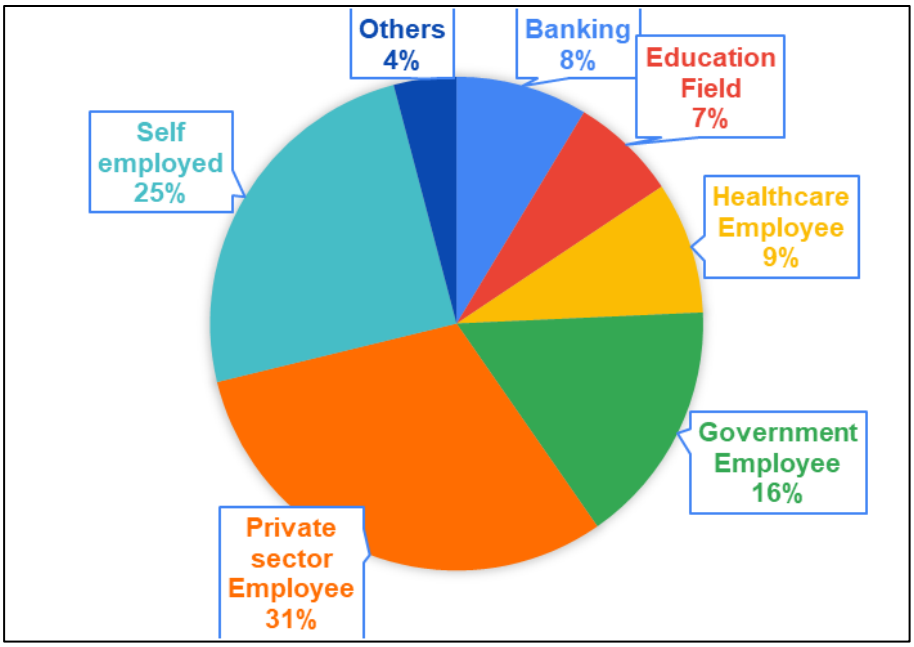
27% belong to No Income Group (Unemployed).

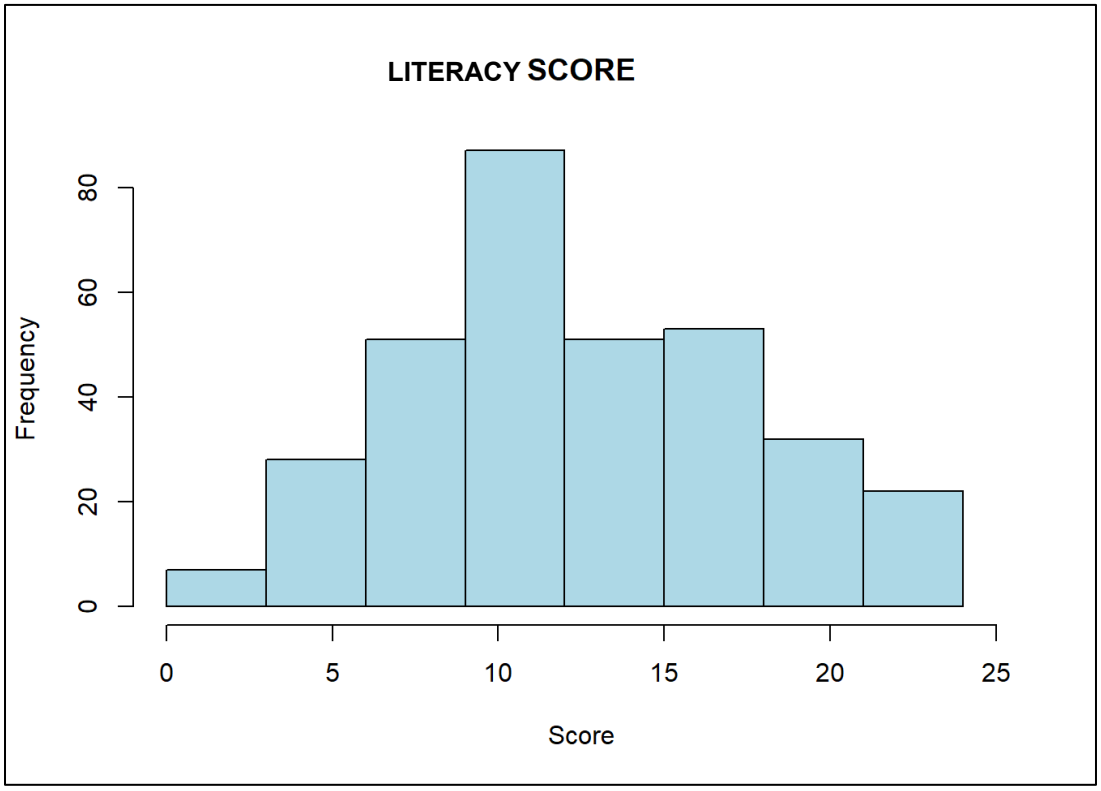


44% of the total respondents are Graduates,
23% are post graduates and 2% of the sample have a doctorates degree.

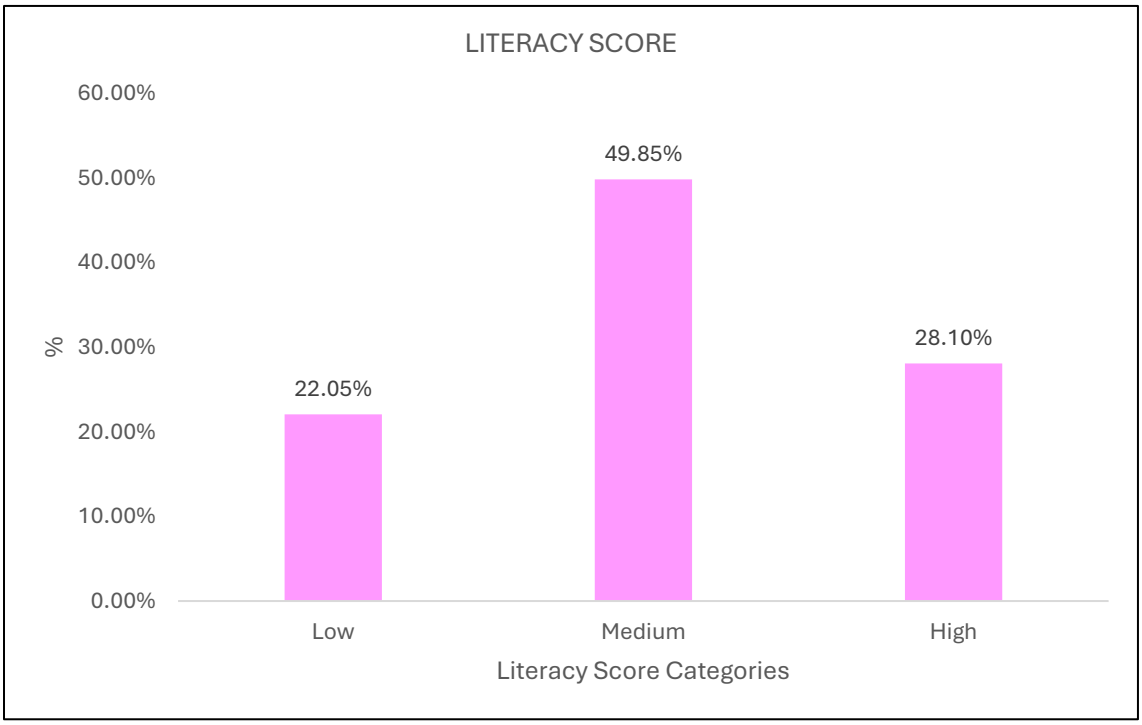
This pie chart shows distribution of occupations of the respondents.

We can observe that 31% of the respondents are employed in the private sector, whereas 25% are self-employed.

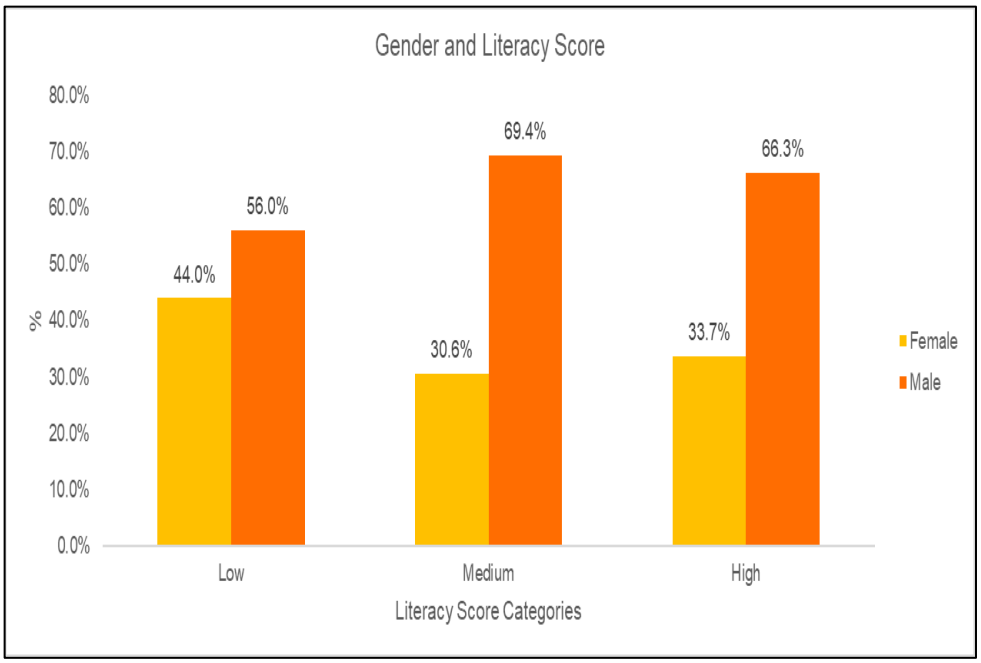




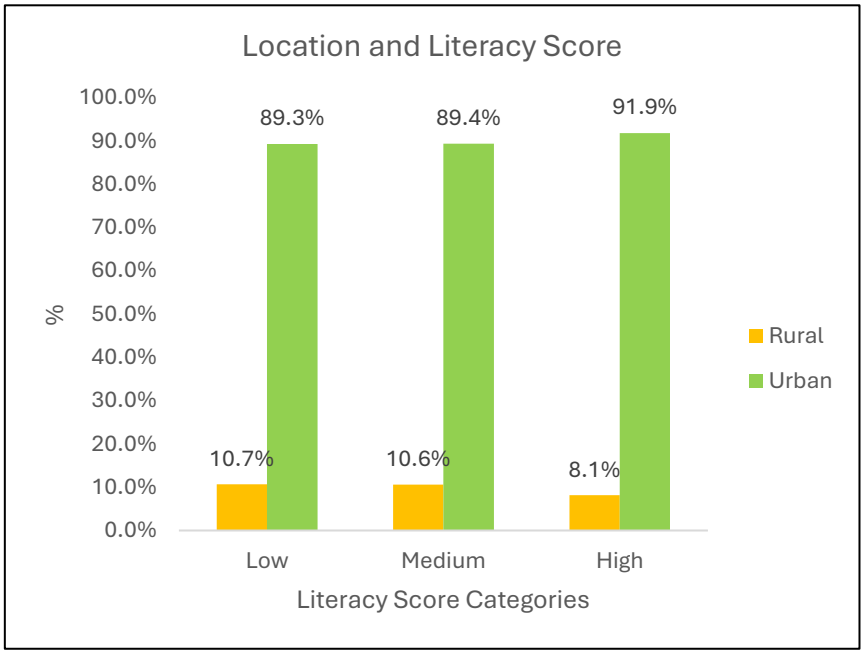
The above histogram shows percentage of scores in various categories.



The above bar chart shows percentage of scores in low, medium and high categories.

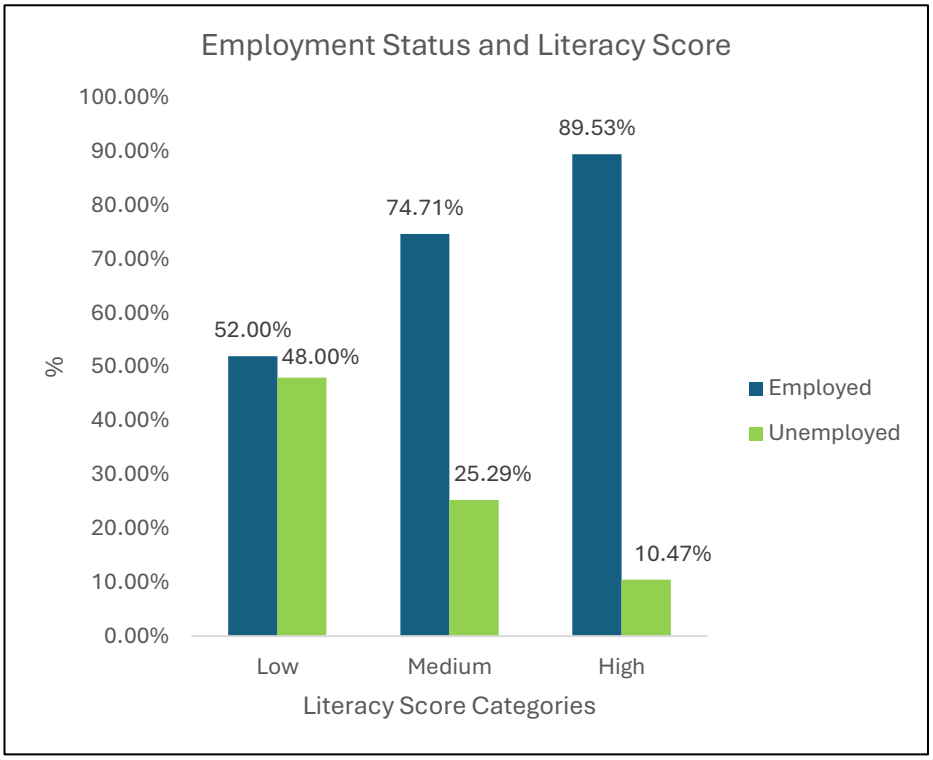


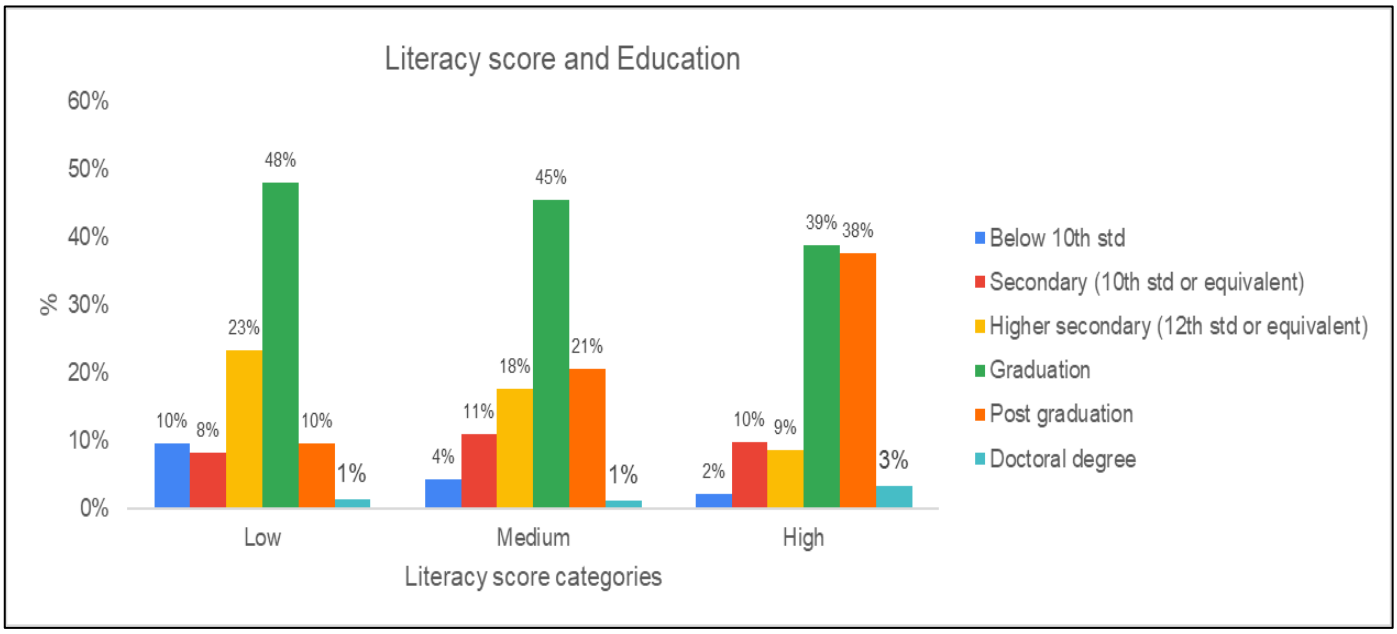
We can observe that percentage of male's literacy score is more than female in all three score categories.



In the graph, we can see that urban respondents have high percentage of literacy score than rural respondents.

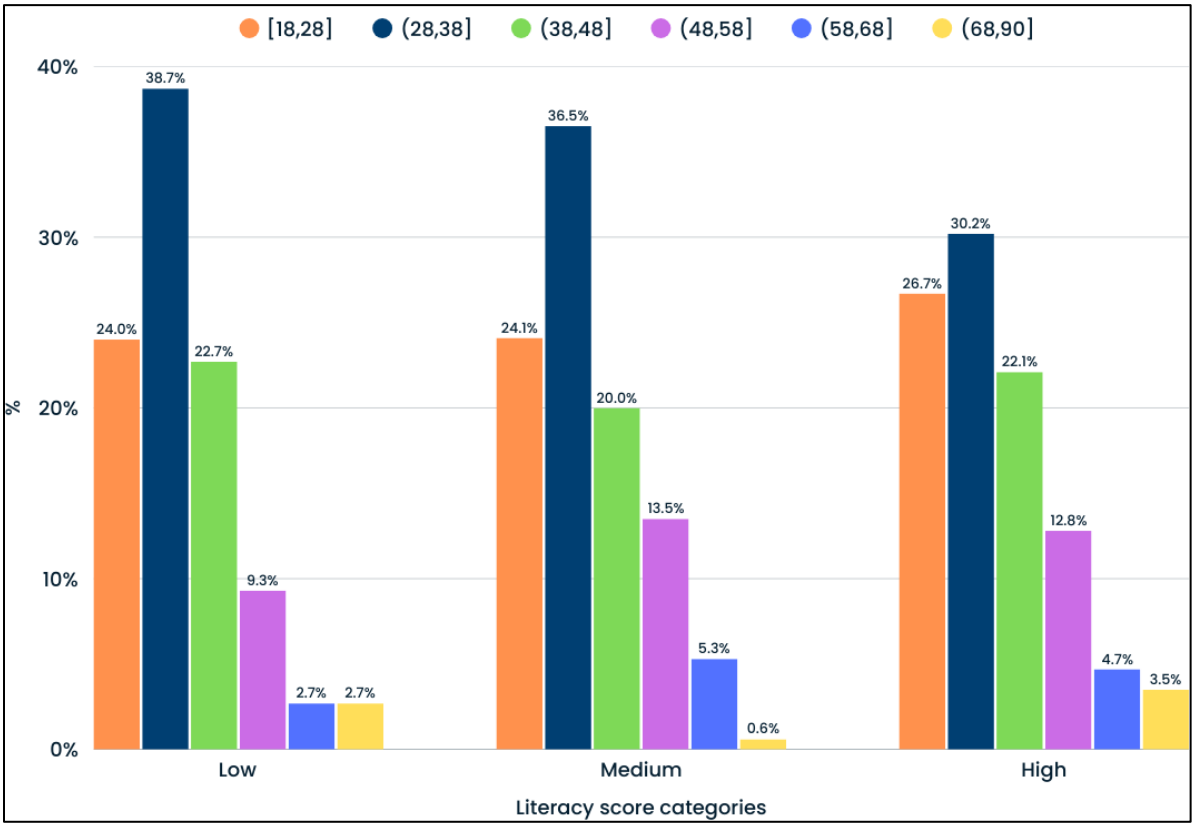
We can observe that employed respondents have high percent of literacy score than unemployed respondents in all three score categories.



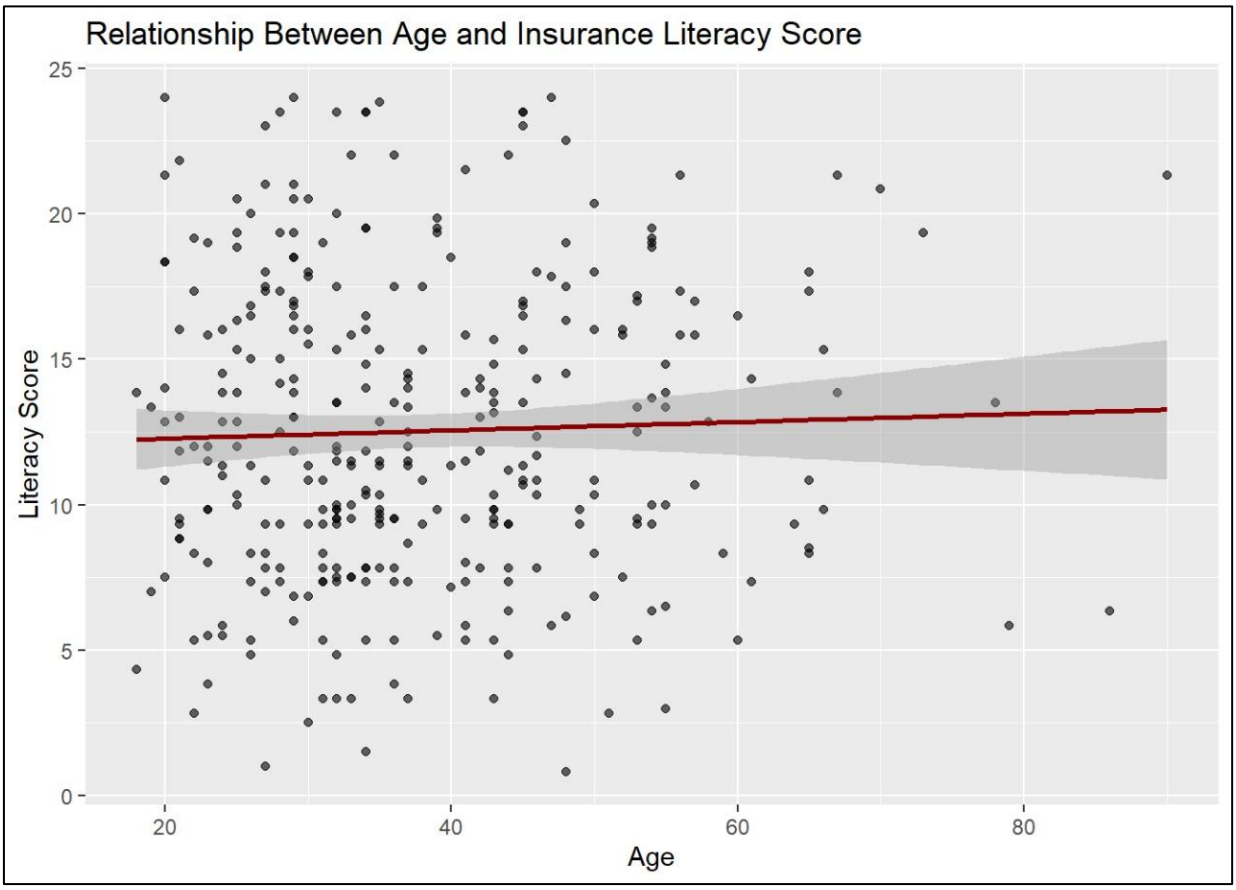


The graduated respondents have high literacy score in all three categories.

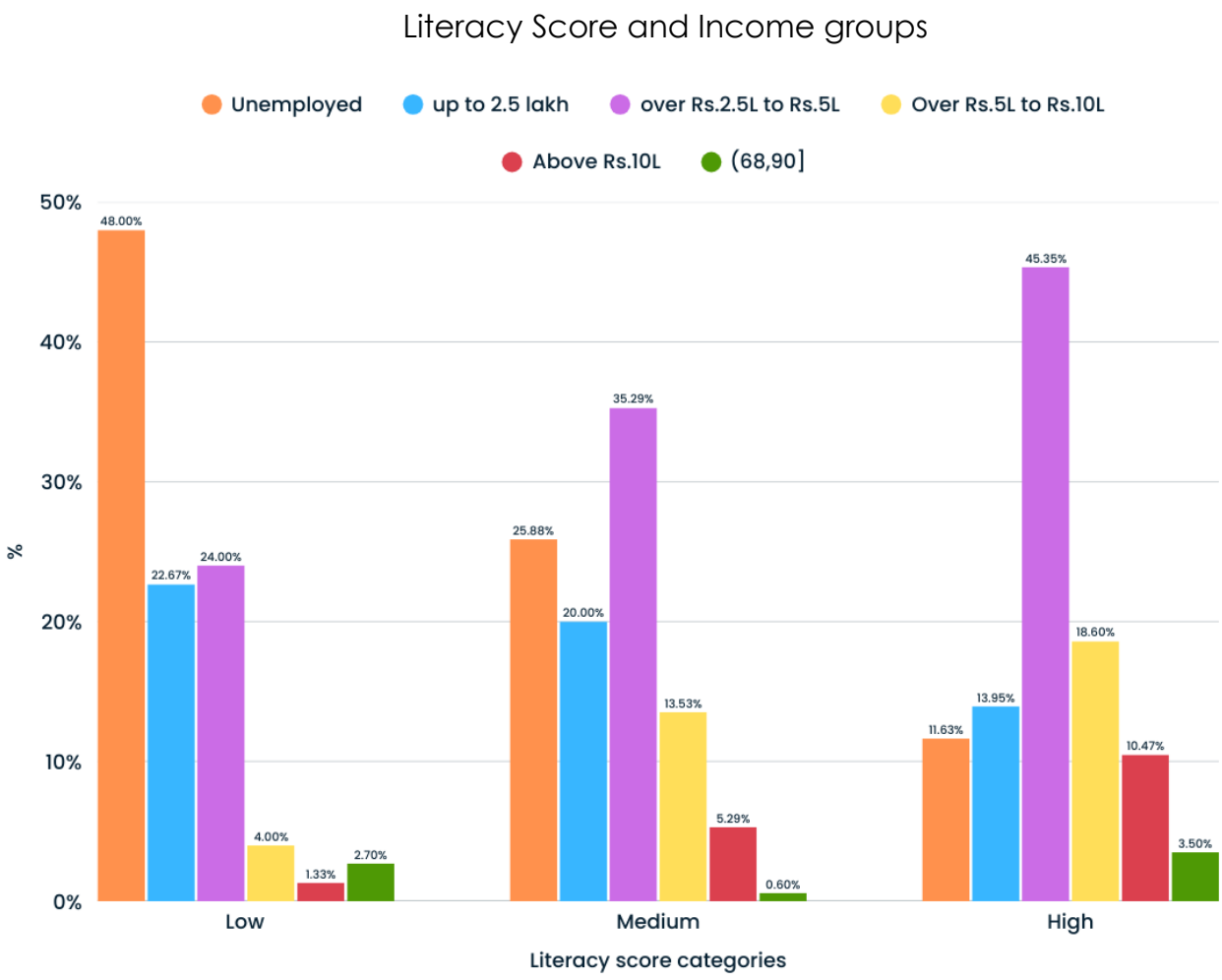
Literacy Score and Age

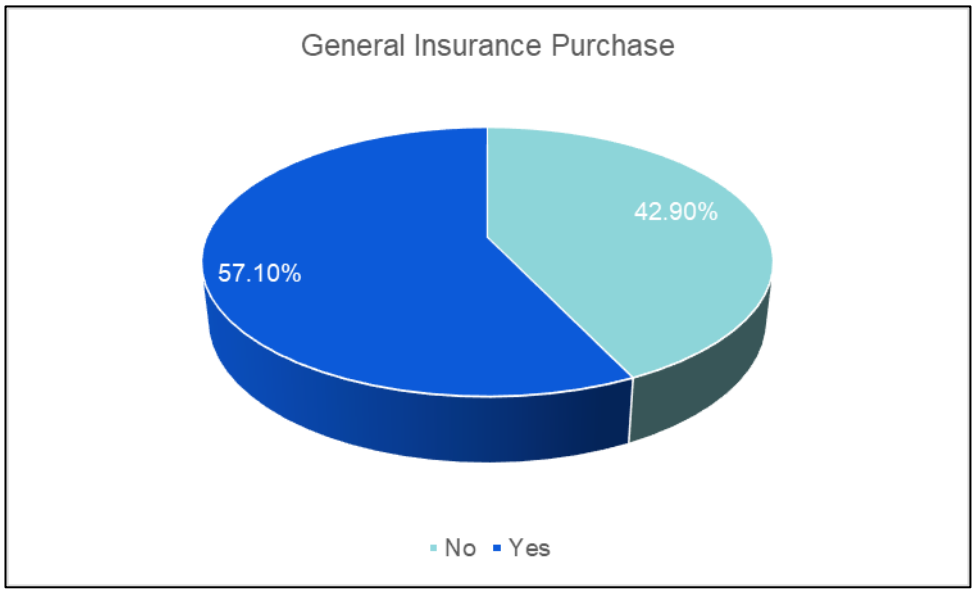


The age group (28,38] have higher percentage.

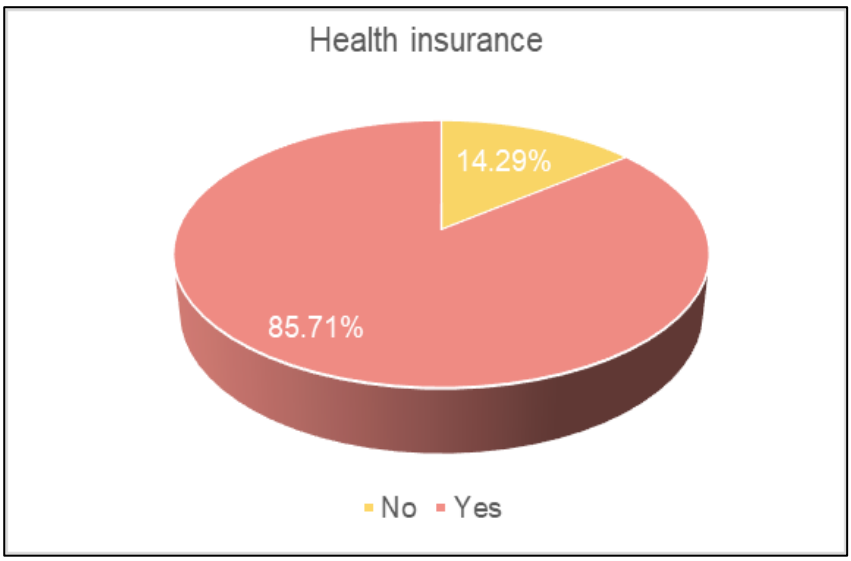


This graph shows that there is no relationship between Age and their Insurance Literacy Score.

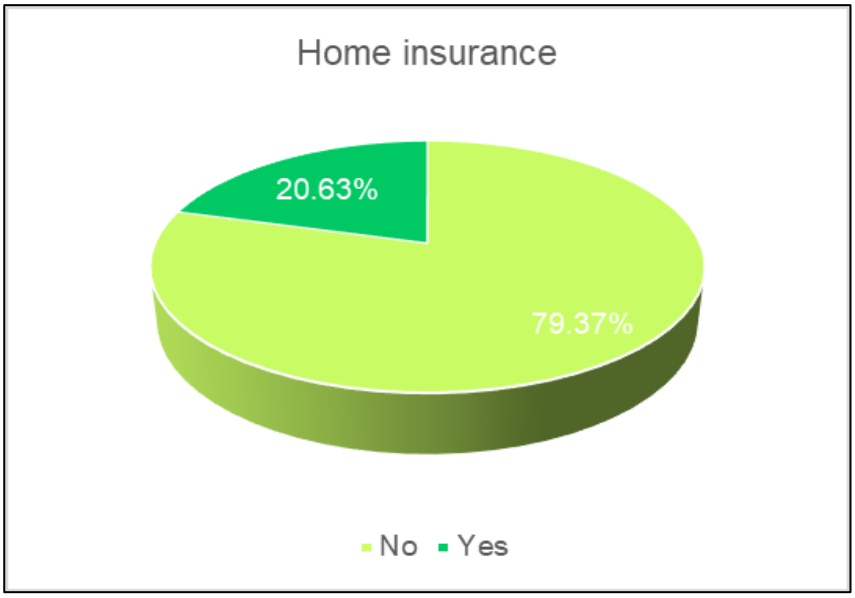




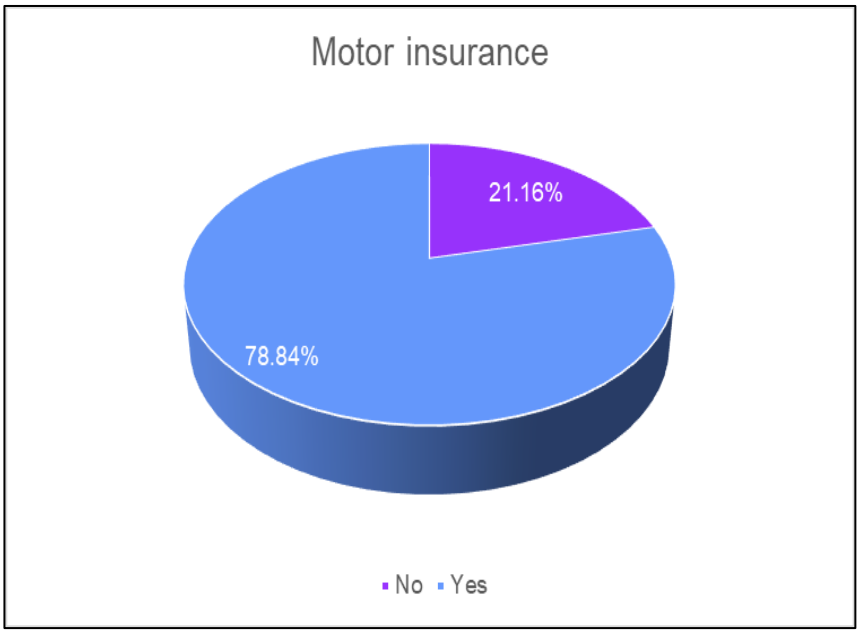
We observe that 57.10% have purchased General Insurance policy.



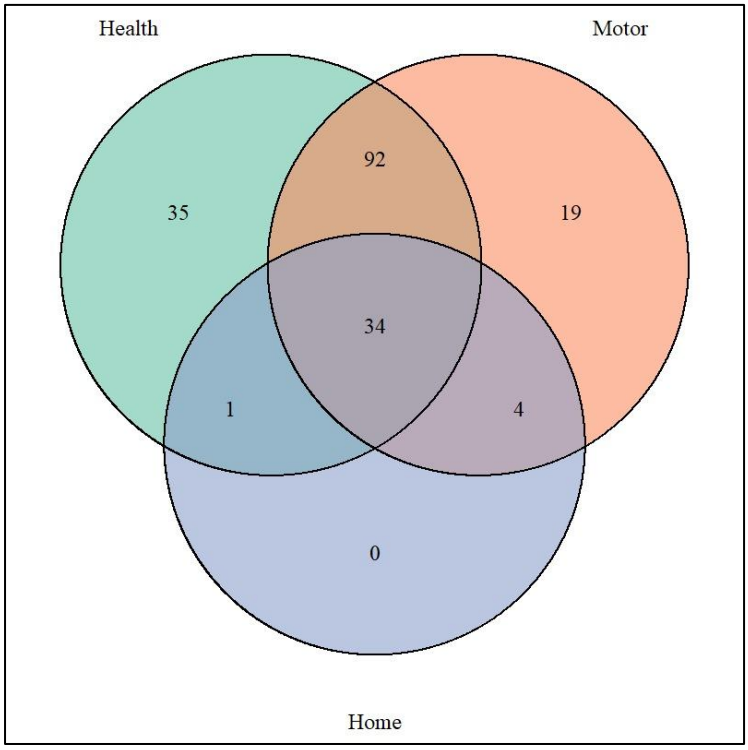
Out of the total who purchased general insurance 85.71% purchased health insurance



Out of the total who purchased general insurance 20.63% purchased home insurance



Out of the total who purchased general insurance 78.84% purchased motor insurance



Total Respondents: 331

Total No of Respondents who purchased General Insurance: 189

Total No of Respondents who purchased Health Insurance: 162

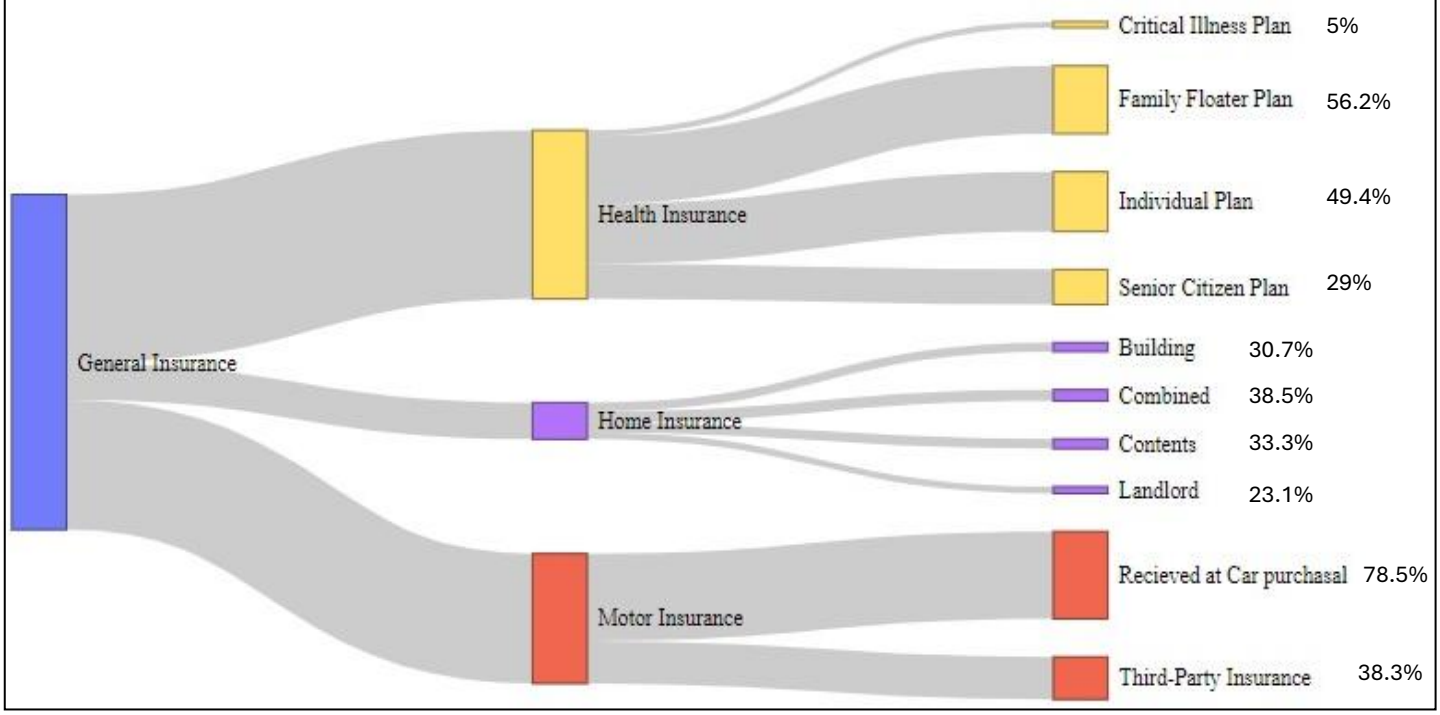
Total No of Respondents who purchased Home Insurance: 39

Total No of Respondents who purchased Motor Insurance: 149

These are the counts of major 3 types of General Insurance.

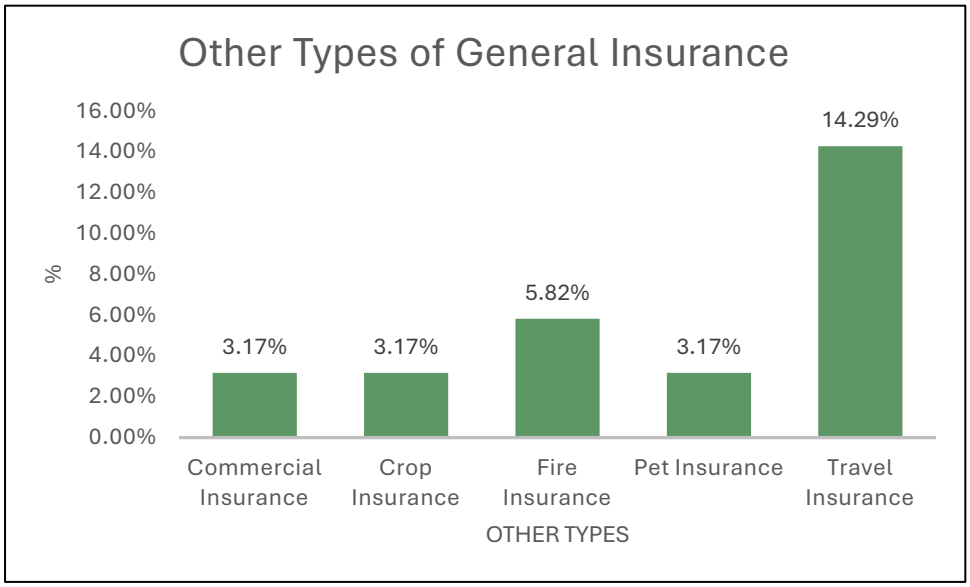
This also shows the multiple choices of the types of General Insurance taken by the respondents.

SANKEY Diagram

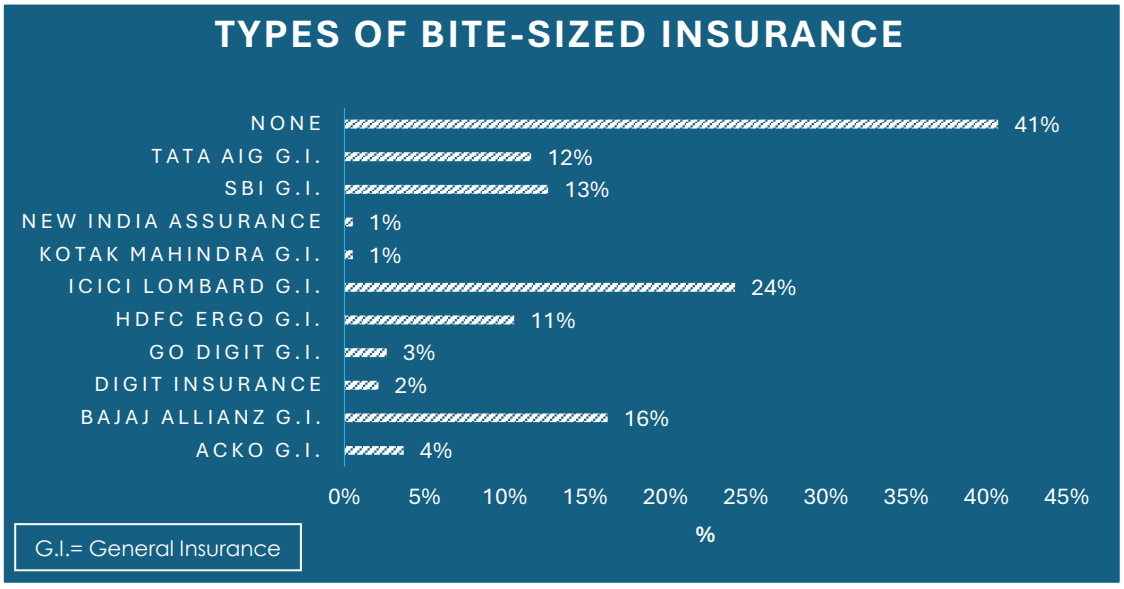


The percentages represent the various sub-category of types of General Insurance.

*Remark- Multiple Options were chosen.



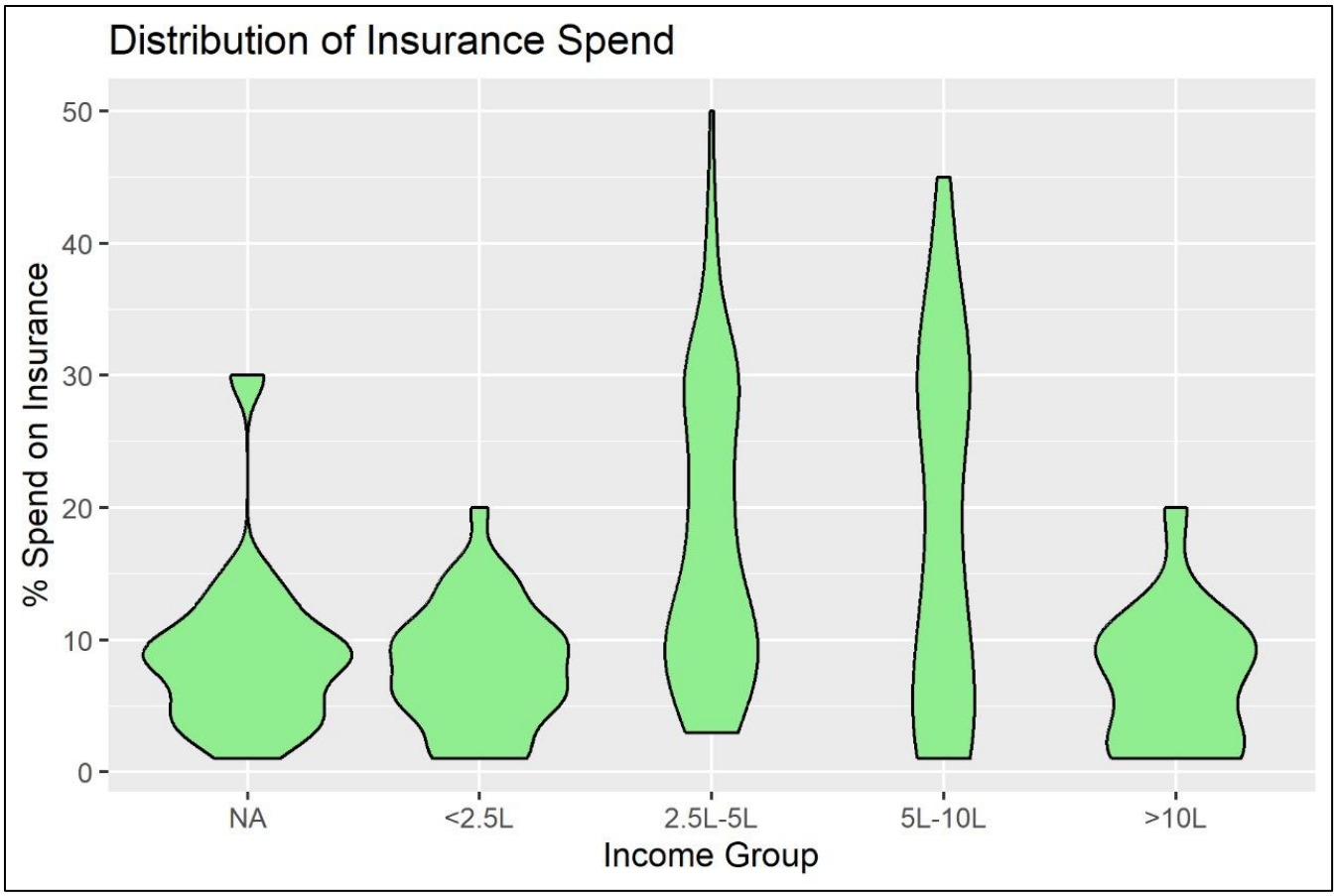
These are the other various types of General Insurance purchased apart from the major ones (Health, Motor & Home).



59% of the people who have General Insurance are aware about Bite-Sized Insurance policy.

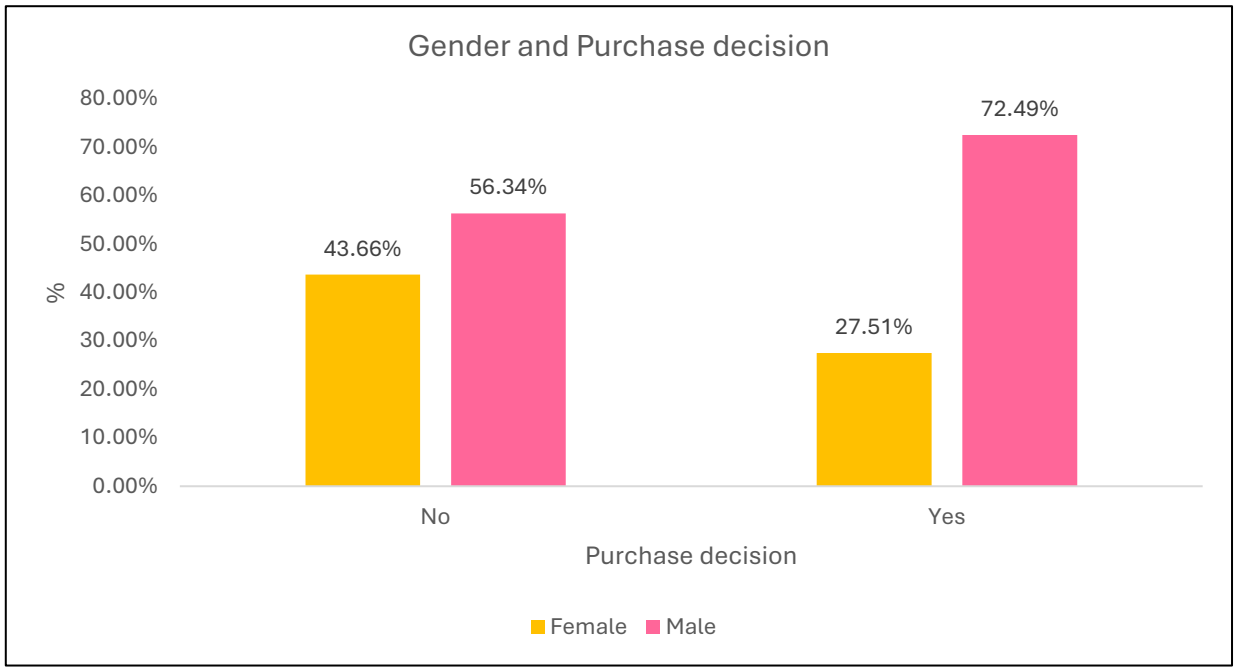
Maximum people (24%) have purchased Bite-Sized Insurance from ICICI Lombard General Insurance, followed by Bajaj Allianz General Insurance (16%).

*Remark- Multiple Options were chosen.

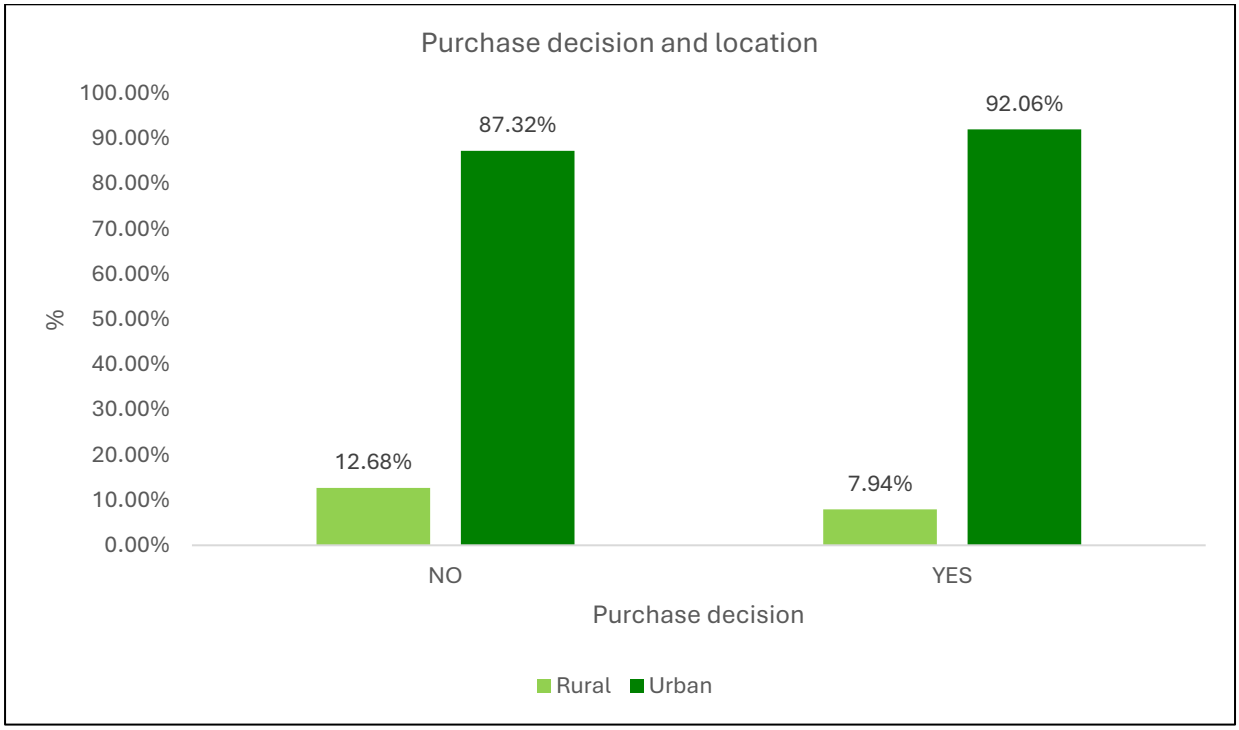


A violin plot shows the distribution of the percentage of income spent on insurance across different income groups.

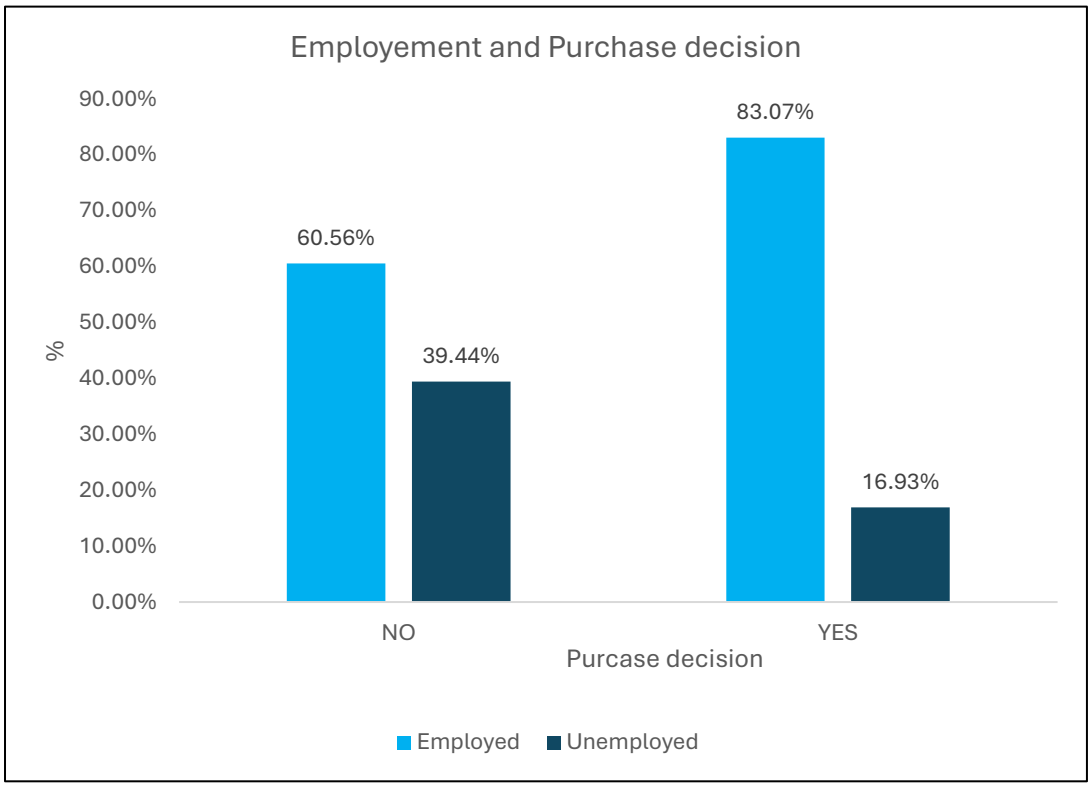
- <2.5L and >10L Income group spend a relatively small proportion (mostly under 15%) of their income on insurance.
- Individuals in the 2.5L-5L and 5L-10L groups show greater variation in insurance spending, with some spending up to 50% of their income.
- The NA group (Unemployed) also clusters around lower insurance spending, similar to the <2.5L group.



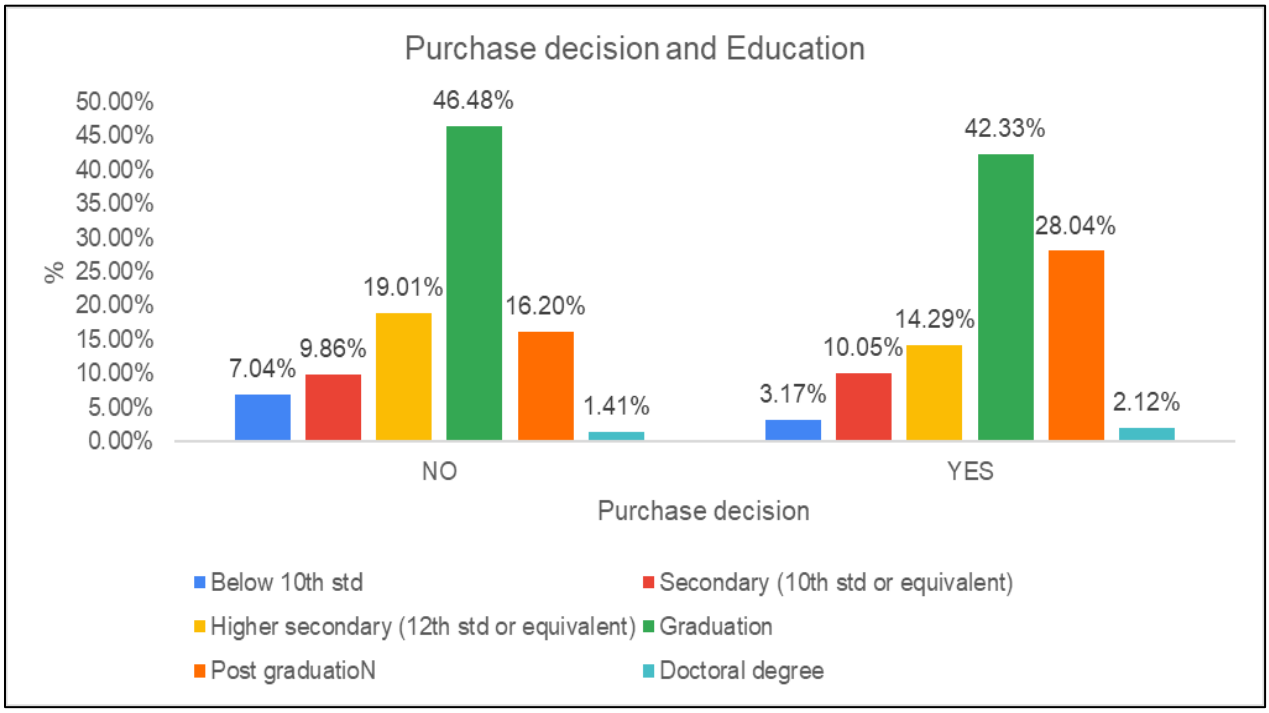
We can observe that percentage of male's purchasing General Insurance is more than female.



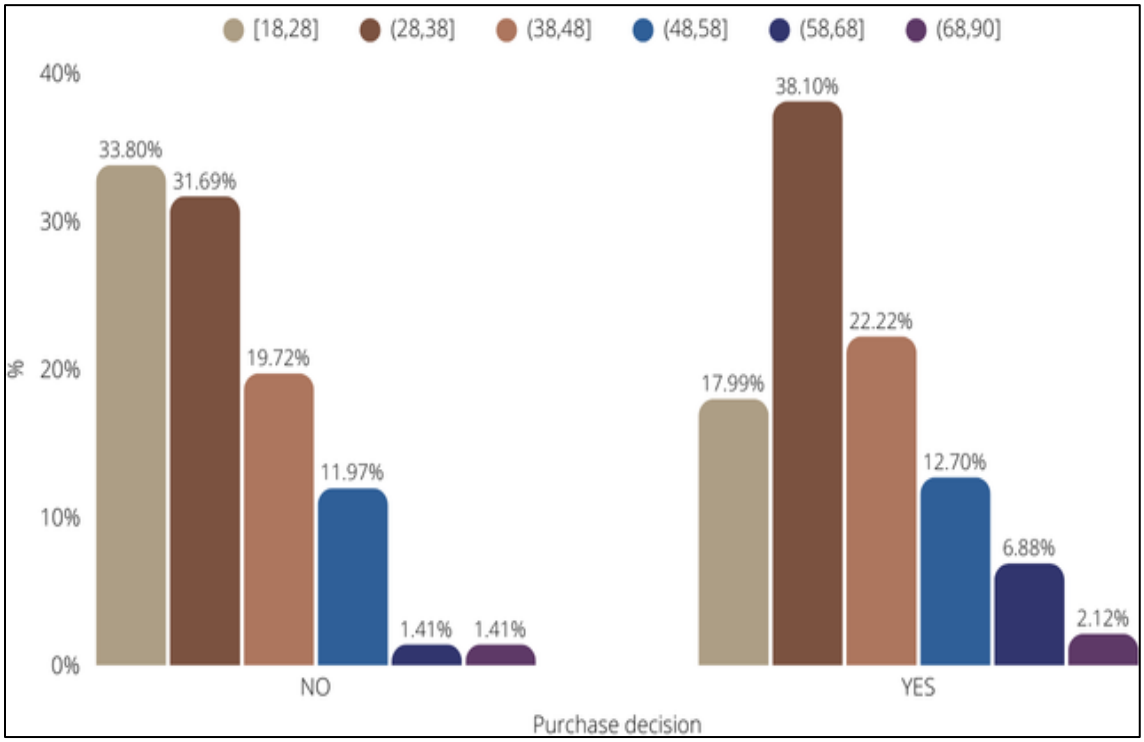
We can observe that percentage of respondents purchasing insurance in urban location is more than respondents in rural location.



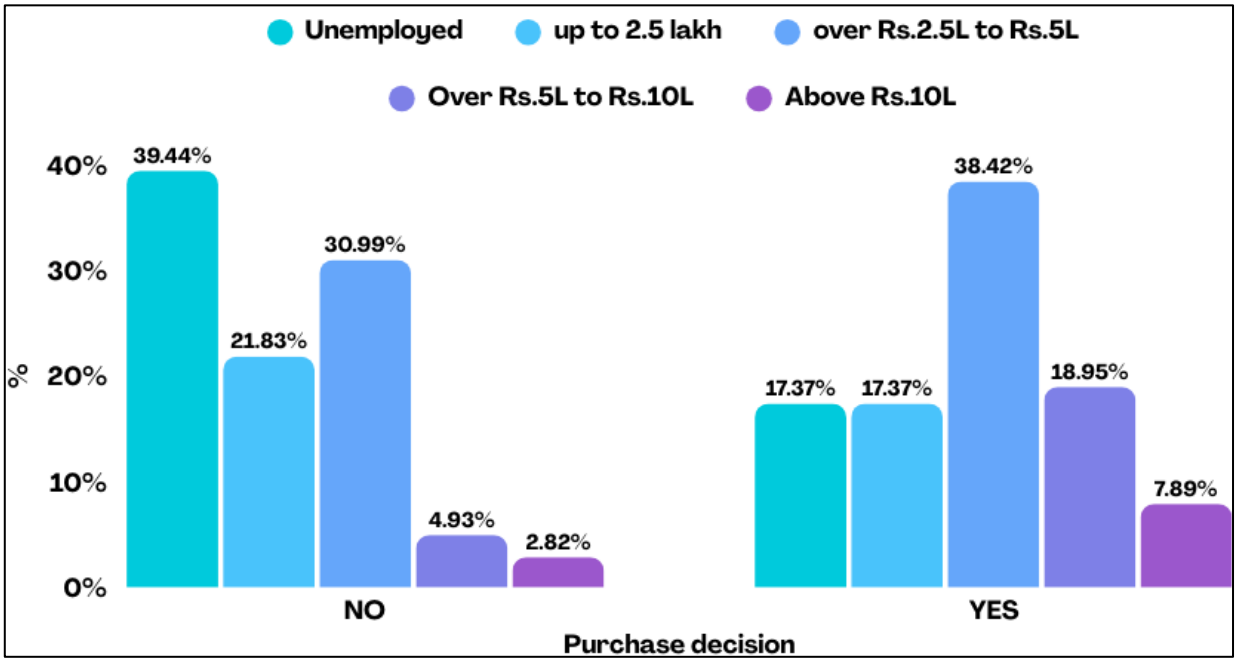
We can observe that percentage of employed respondents are purchasing General Insurance more than the unemployed respondents.

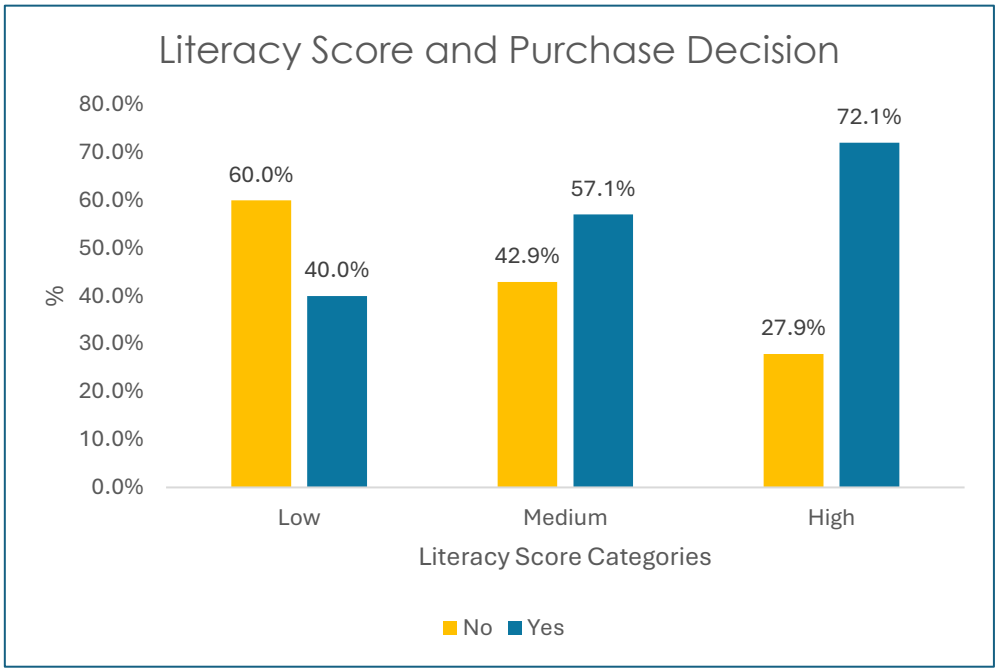


Age and Purchase decision



Income and Purchase decision




Literacy Score and Purchase Decision
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
%
60.0%
40.0%
42.9%
57.1%
27.9%
72.1%
Low
Medium
High
Literacy Score Categories
No
Yes

OBJECTIVE 1: TO ASSESS THE LEVEL OF INSURANCE AWARENESS AMONG PEOPLE IN VADODARA

Insurance literacy refers to the awareness and understanding that individuals have about general insurance products, their benefits, terms, conditions, and the process of availing such services. In the context of Vadodara, a culturally and economically diverse city, this objective aims to evaluate the current level of awareness among residents across various age groups, income brackets, and educational backgrounds.

This analysis seeks to understand the general awareness of insurance, identify misconceptions, and evaluate differences across demographics such as gender, education, income, and location

For Categorical Data Analysis of Insurance Literacy Score, we have categorized the Literacy Score into Low (0-8), Medium (8-16), and High (16-24).

The frequency table is as follows:

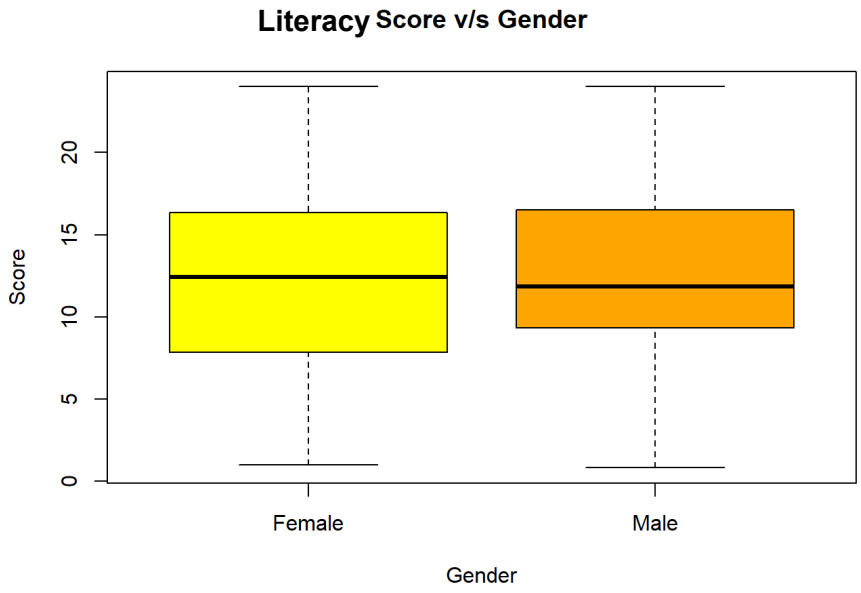
Literacy Score intervals	Percentage
Low	22.05%
Medium	49.85%
High	28.10%

WILCOXON RANK-SUM TEST

Hypothesis-1

Ho: There is no difference in the median insurance literacy scores between males and females.

H1: There is a difference in the median scores between males and females.



p-value: 0.3516

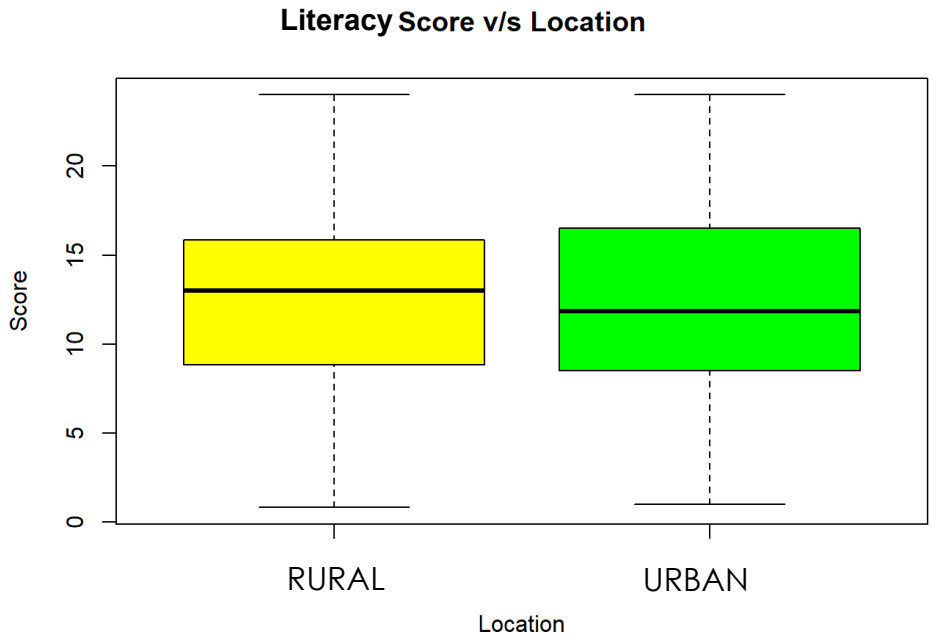
W = 13140

Interpretation: Since the p-value is greater, thus we fail to reject the null hypothesis. There is no significant difference in insurance literacy between the two groups.

Hypothesis-2

Ho: The median insurance literacy scores of rural respondents is equal to that of urban respondents.

H1: The median insurance literacy scores of rural respondents is not equal to that of urban respondents.



p-value: 0.8804

W = 4996

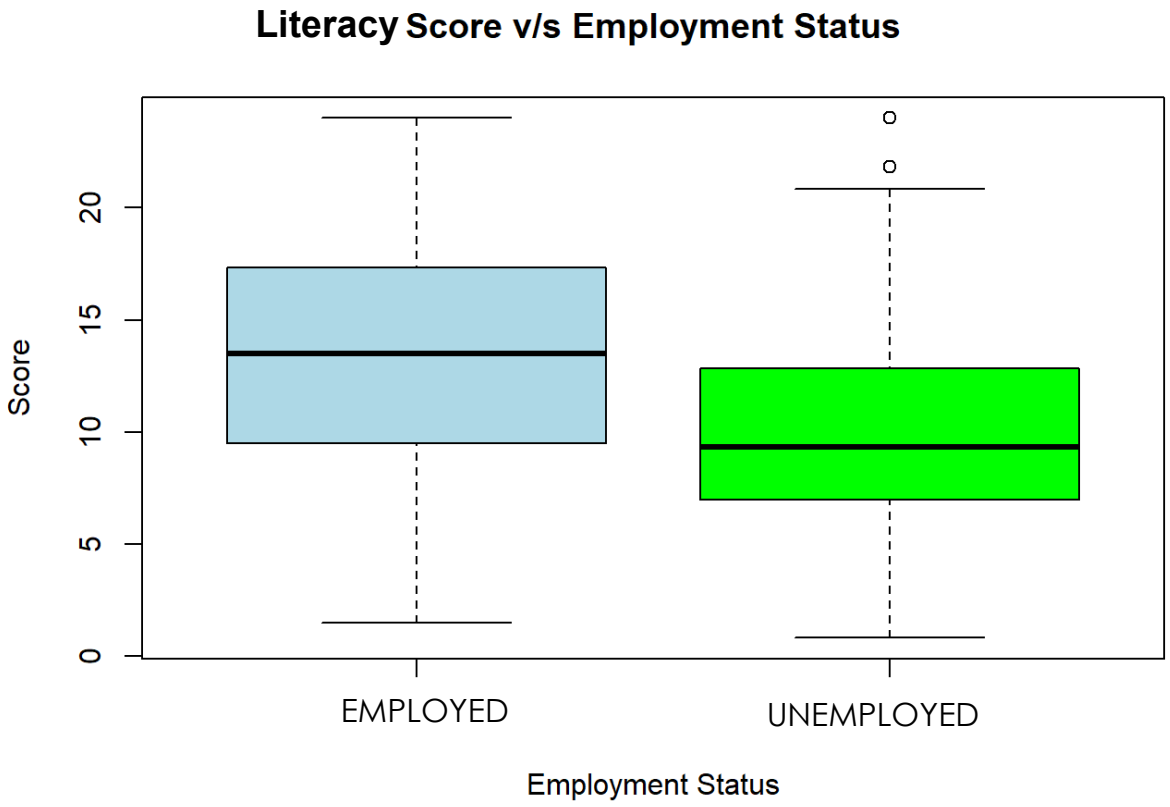
Interpretation: Since the p-value is greater, we fail to reject the null hypothesis. There is no significant difference in insurance literacy between the two groups (i.e., rural and urban).

Hypothesis-3

(A)

Ho: The median insurance literacy score is the same for employed and unemployed individuals

H1: The median insurance literacy score differs between employed and unemployed individuals.



p-value: 0.00000001292 ≈ 0

W = 6318

Interpretation: Since p value is very less, we reject the null hypothesis and conclude that there is a significant difference in the median insurance literacy scores between employed and unemployed individuals.

Median score (Employed) ≠ Median score (Unemployed)

(B)

Ho: The median score of employed respondents is equal to that of unemployed respondents

H1: The median score of employed respondents is greater than that of unemployed respondents.

p-value: 0.000000006462 ≈ 0

W = 6318

Interpretation: Since, the p-value is very less, we reject the null hypothesis. We conclude that the median insurance literacy score of employed individuals is significantly higher than that of unemployed individuals.

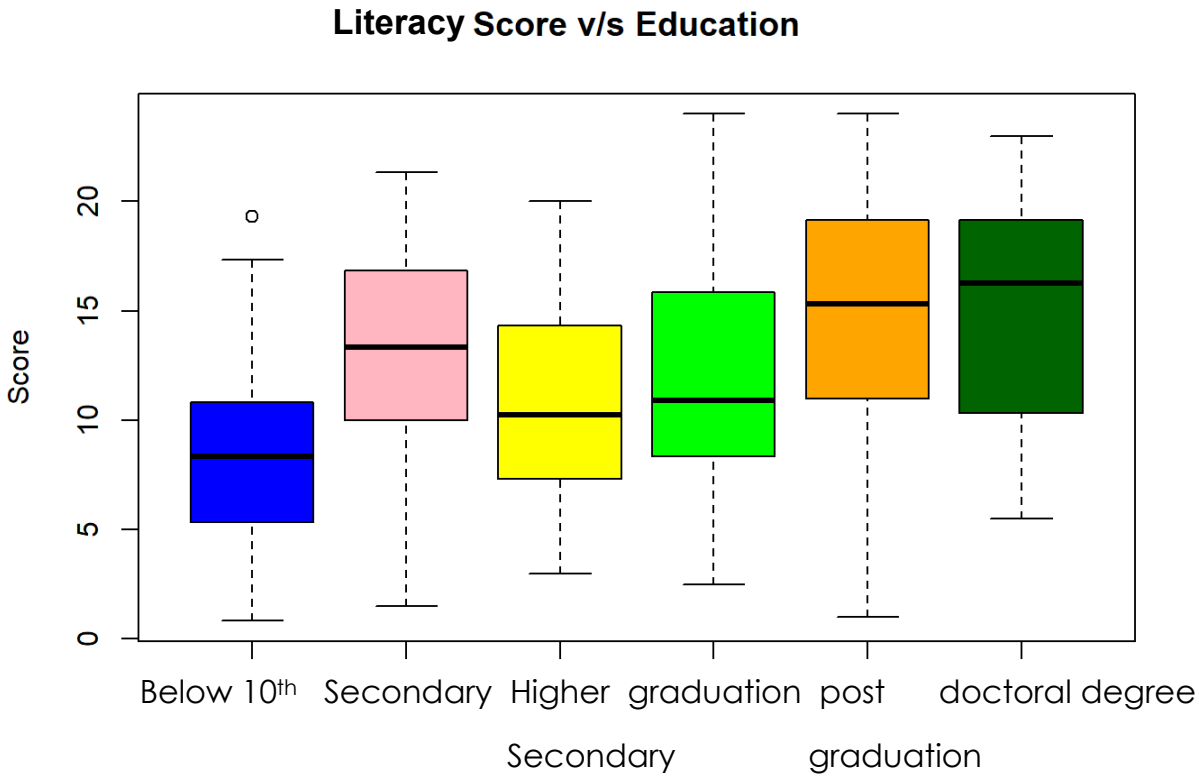
Median score (Employed) > Median score (Unemployed)

KRUSKAL WALLIS RANK SUM TEST

Hypothesis-1. A

Ho: The median insurance literacy score is the same for all educational groups

H1: The median insurance literacy score differs in at least one education group



p-value: 0.00000363 ≈ 0

Kruskal-Walli's chi squared = 33.076

Interpretation: Since p value is very less, we reject the null hypothesis and conclude that there is a significant difference in the median insurance literacy scores across education groups.

Median score (Employed) ≠ Median score (Unemployed)

JONCKHEERE-TERPSTRA TEST

Hypothesis-1. B

Ho: There is no trend in the median insurance literacy scores across education levels.

i.e. Medians are the same across all groups.

H1: There is a monotonic increasing trend

i.e. As education level increases, median scores also increase.

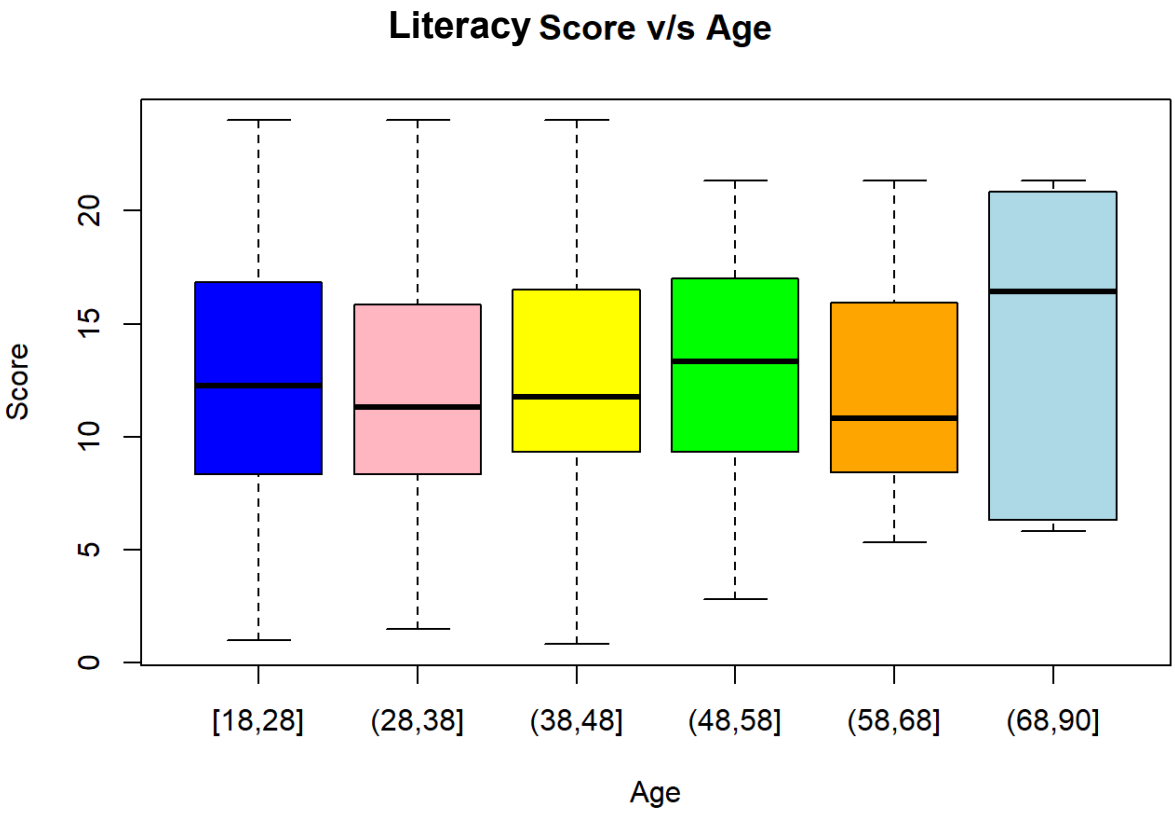
p-value: 0.0001

Interpretation: Since, p-value is very small, so we reject the null hypothesis (Ho). This means that as the education level increases, there is a consistent increase in the median insurance literacy score

Hypothesis-2

Ho: The median insurance literacy score is the same for all age groups.

H1: The median insurance literacy score differs in at least one age group.



p-value: 0.151

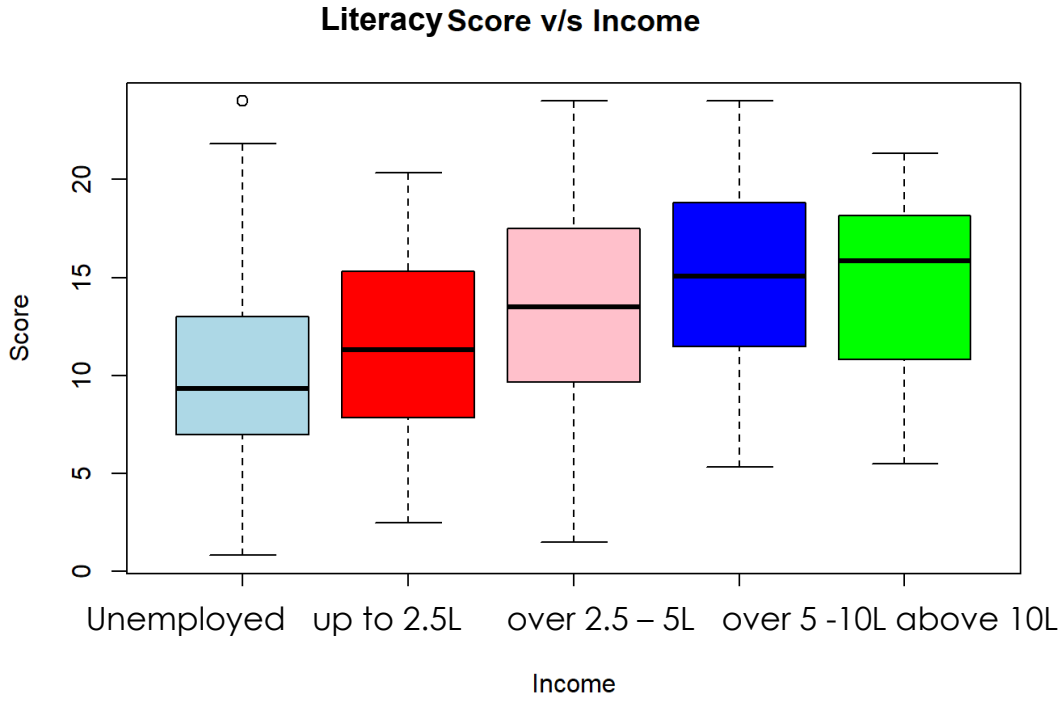
Kruskal-Walli's chi squared = 63.605

Interpretation: Since, p-value is large, so we do not reject the null hypothesis (Ho). This means we have strong evidence to say that there are no significant differences in median insurance literacy scores across each age groups.

Hypothesis-3. A

Ho: The median insurance literacy score is the same for all income groups

H1: The median insurance literacy score differs in at least one income group



p-value: 0.000000007609

Kruskal-Walli's chi squared = 43.643

Interpretation: Since, p-value is very less, so we reject the null hypothesis (Ho). This means that the median insurance literacy score differs in at least one income group.

JONCKHEERE-TERPSTRA TEST

Hypothesis-3. B

Ho: There is no trend in the median insurance literacy scores across income levels.

i.e. Medians are the same across all groups.

H1: There is a monotonic increasing trend

i.e. As income level increases, median literacy scores also increase.

p-value: 0.0001

Interpretation: Since, p-value is very less, so we reject the null hypothesis (Ho). This means that as the income level increases, there is a consistent increase in the median insurance literacy score.

CHI-SQUARE TEST OF INDEPENDENCE

Hypothesis-1

Ho: Gender and Insurance literacy scores are independent.

H1: Gender and Insurance literacy scores are not independent.

Gender	Low	Medium	High	Total
Female	33	52	29	114
Male	42	118	57	217
Total	75	170	86	331

Variables

X: Gender

Y: Literacy score Intervals

Output

χ^2_{cal} = 4.1725

Degree of freedom = 2

p-value = 0.1242

Interpretation: Since p-value is larger, we will not reject our Null Hypothesis at 5% level of significance.

Hence, there does not exist a significant association between Gender and Literacy scores.

Hypothesis-2

Ho: Location and Insurance literacy scores are independent.

H1: Location and Insurance literacy scores are not independent.

Location	Low	Medium	High	Total
Rural	8	18	7	33
Urban	67	152	79	298
Total	75	170	86	331

Variables

X: Location

Y: Literacy score Intervals

Output

χ^2_{cal} = 0.43398

Degree of freedom = 2

p-value = 0.8049

Interpretation: Since p-value is larger, we will not reject our Null Hypothesis at 5% level of significance.

Hence, there does not exist a significant association between Location and Literacy scores.

Hypothesis-3

Ho: Employment status and Insurance literacy scores are independent.

H1: Employment status and Insurance literacy scores are not independent.

Employment Status	Low	Medium	High	Total
Employed	39	127	77	243
Unemployed	36	43	9	88
Total	75	170	86	331

Variables

X: Employment Status

Y: Literacy score Intervals

Output

χ^2_{cal} = 29.27

Degree of freedom = 2

p-value = 0.0000004525 ≈ 0

Interpretation: Since p-value is very less, we reject our Null Hypothesis

Thus, Employment status and Literacy scores are not independent.

Hence, there exists a significant association between Educational Status and Literacy score.

As association exists, we calculate Cramer's V.

Cramer V = 0.2971013

This value shows that there is a moderate association between Employment Status and Literacy Scores.

GOODMAN-KRUSKAL TEST OF ASSOCIATION

"Goodman-Kruskal Gamma Test for Ordinal Categorical Variables" is an alternative to the Chi-Square Test of association and is used to test whether there exists a significant association between two ordinal variables or not.

Gamma: The Goodman-Kruskal Gamma value lies between -1 and +1. The nature of the association is interpreted by the sign (negative or positive association) and the strength is given by the absolute value of gamma as follows:

0.00 – 0.10	**Negligible**
0.10 – 0.20	Weak
0.20 – 0.40	Moderate
0.40 – 0.60	Relatively Strong
0.60 – 0.80	Strong
0.80 – 1.00	Very Strong

Hypothesis-1

Ho: There is no association between education level and insurance literacy score

H1: There is a statistically significant association between education level and insurance literacy score

EDUCATION	[0,8]	(8,16]	(16,24]	TOTAL
Below 10th std	7	7	2	16
Secondary (10th std or equivalent)	6	18	9	33
Higher secondary (12th std or equivalent)	18	28	8	54
Graduation	35	79	32	146
Post graduation	8	36	32	76
Doctoral degree	1	2	3	6
TOTAL	75	170	86	331

p-value: 0.00007198 ≈ 0

Significance Level: α = 0.05

Gamma value (γ) = 0.2807958

Interpretation: If the p-value is very less, we reject the null hypothesis and conclude that the relationship is statistically significant.
The gamma value of 0.2808 suggests a positive but moderate association between education level and insurance literacy score.

In simpler words, respondents with higher educational qualifications tended to score higher on the insurance literacy scale.

Hypothesis-2

Ho: There is no association between age group and insurance literacy score

H1: There is a statistically significant association between age group and insurance literacy score

Age Group	Low	Medium	High	Total
[18,28]	18	41	23	82
(28,38]	29	62	26	117
(38,48]	17	34	19	70
(48,58]	7	23	11	41
(58,68]	2	9	4	15
(68,90]	2	1	3	6
Total	75	170	86	331

p-value: 0.6389

Significance Level: α = 0.05

Gamma value (γ) = 0.03284872

Interpretation: If the p-value is greater, we do not reject the null hypothesis and conclude that the relationship is statistically significant.

The gamma value of 0.03284874 suggests no association between age group and insurance literacy scores.

Hypothesis-3

Ho: There is no association between income group and insurance literacy score

H1: There is a statistically significant association between income group and insurance literacy score

INCOME GROUP	[0,8]	(8,16]	(16,24]	TOTAL
Unemployed	36	44	10	90
up to 2.5 lakh	17	34	12	63
over Rs.2.5L to Rs.5L	18	60	39	117
Over Rs.5L to Rs.10L	3	23	16	42
Above Rs.10L	1	9	9	19
TOTAL	75	170	86	331

p-value: $7.823e^{-12} \approx 0$

Significance Level: a = 0.05

Gamma value (γ) = 0.4276429

Interpretation: Since the p-value is less, we reject the null hypothesis and conclude that the relationship is statistically significant.

The gamma value of 0.428 suggests a positive strong association between Income group and Insurance Literacy score.

In simpler words, respondents with higher income level tended to score higher on the Insurance Literacy scale.

OBJECTIVE 2: TO ANALYSE THE PURCHASING BEHAVIOUR OF INDIVIDUALS IN VADODARA WITH RESPECT TO GENERAL INSURANCE POLICIES

FISHER'S EXACT TEST

Hypothesis-1

Ho: There is no association between gender and the purchase decision of General Insurance.

H1: There is an association between gender and the purchase decision of General Insurance.

Gender	No	Yes	Total
Female	62	52	114
Male	80	137	217
Total	142	189	331

p-value: 0.002438

Interpretation: Since the p-value is less, we reject the null hypothesis. This indicates that there is a statistically significant association between the gender of the respondent and their decision to purchase a general insurance policy.

Yule's coefficient = 0.3425

This signifies that there is moderate positive association between Gender and the purchase decision of General Insurance.

Hypothesis-2

Ho: There is no association between location and the purchase decision of General Insurance.

H1: There is an association between location and the purchase decision of General Insurance.

LOCATION	NO	YES	Total
Rural	18	15	33
Urban	124	174	298
Total	142	189	331

p-value: 0.1943

Significance Level: a = 0.05

Interpretation: Since the p-value is greater than 0.05, we do not reject the null hypothesis.

This indicates that there is not a statistically significant association between the location of the respondent and their decision to purchase a general insurance policy

Hypothesis-3

Ho: There is no association between employment status and the purchase decision of General Insurance.

H1: There is an association between employment and the purchase decision of General Insurance

EMPLOYMENT STATUS	NO	YES	Total
Unemployed	56	32	88
Employed	86	157	243
TOTAL	142	189	331

p-value: 0.000005455 ≈ 0

Interpretation: Since the p-value is less, we reject the null hypothesis.

This indicates that there is a statistically significant association between the gender of the respondent and their decision to purchase a general insurance policy.

Yule's coefficient = 0.523215

This signifies that there is relatively strong positive association between Employment Status and the purchase decision of General Insurance.

CHI-SQUARE TEST OF INDEPENDENCE

Hypothesis-1

Ho: Education and Insurance Purchase decision are independent.

H1: Education and Insurance Purchase decision are not independent.

Education	No	Yes	Total
Below 10th std	10	6	16
Secondary (10th std or equivalent)	14	19	33
Higher secondary (12th std or equivalent)	27	27	54
Graduation	66	80	146
Post graduation and above	25	57	82
Total	142	189	331

Output

χ^2_{cal} = 9.0976

p-value = 0.05871

Interpretation: Since p-value > 0.05, we will not reject our Null Hypothesis at 5% level of significance.

Hence, there does not exist a significant association between education and Purchase decision.

Hypothesis-2

Ho: Age group and Insurance Purchase decision are independent.

H1: Age group and Insurance Purchase decision are not independent.

AGE GROUPS	NO	YES	Total
[18,28]	48	34	82
(28,38]	45	72	117
(38,48]	28	42	70
(48,90]	21	41	62
TOTAL	142	189	331

Output

χ^2_{cal} = 11.429

p-value = 0.009617

Interpretation: Since p-value is very less, we will reject our Null Hypothesis

Hence, there exists a significant association between age and Purchase decision.

Cramer's V = 0.185822

This value shows that there is a moderate association between Age groups and Insurance Purchase decision.

Hypothesis-3

Ho: Income Level and Insurance Purchase decision are independent.

H1: Income Level and Insurance Purchase decision are not independent.

INCOME	NO	YES	Total
Unemployed	57	33	90
up to 2.5 lakh	30	33	63
over Rs.2.5L to Rs.5L	44	73	117
Over Rs.5L	11	50	61
Total	142	189	331

Output

χ^2_{cal} = 32.65

p-value = $3.188e^{-7}$

Interpretation: Since p-value is very less, we reject our Null Hypothesis

Hence, there does exist a significant association between income and Purchase decision

Cramer's V = 0.3140703

This value shows that there is a moderate association between Income Level and Insurance Purchase decision.

PROPORTION TEST

TEST-1

Ho: The proportion of insurance purchasers among females is equal to that of males

H1: The proportion of insurance purchasers among females is less than that of males.

Gender	No	Yes	Total
Female	62	52	114
Male	80	137	217
Total	142	189	331

Output

χ^2_{cal} = 8.6631

Degree of freedom = 1

p-value = 0.001624

Interpretation: Thus, we reject the null hypothesis and conclude that female respondents are significantly less likely to purchase insurance compared to male respondents.

TEST-2

Ho: The proportion of insurance purchasers among different age group is same

H1: At least one proportion of insurance purchaser in an age group is different

AGE GROUPS	NO	YES	Total
[18,28]	48	34	82
(28,38]	45	72	117
(38,48]	28	42	70
(48,58]	17	24	41
(58,68]	2	13	15
(68,90]	2	4	6

Output

χ^2_{cal} = 14.278

Degree of freedom = 4

p-value = 0.006459

Interpretation: Since p value is very less, thus we reject the null hypothesis and conclude that at least one proportion of insurance purchaser in age group is different.

PEARSON'S STANDARDIZED RESIDUALS

Pearson's Standardized Residual is given by the following formula:

nij = observed frequency for (i,j)th cell

uij = expected frequency for (i,j)th cell

Association between Age Groups(X) and Purchase Decision(Y)

$$\frac{n_{ij} - \hat{\mu}_{ij}}{\left[\hat{\mu}_{ij}(1 - p_{i+})(1 - p_{+j})\right]^{1/2}}.$$

AGE GROUPS	NO	YES	Total
[18,28]	48	34	82
(28,38]	45	72	117
(38,48]	28	42	70
(48,58]	17	24	41
(58,68]	2	13	15
(68,90]	2	4	6
Total	142	189	331

Age group	Outcome	Observed	Expected	Std Residual
[18,28]	No	48	35.18	3.3
(28,38]	No	45	50.19	-1.21
(38,48]	No	28	30.03	-0.55
(48,58]	No	17	17.59	-0.2
(58,68]	No	2	6.44	-2.37
(68,90]	No	2	2.57	-0.48
[18,28]	Yes	34	46.82	-3.3
(28,38]	Yes	72	66.81	1.21
(38,48]	Yes	42	39.97	0.55
(48,58]	Yes	24	23.41	0.2
(58,68]	Yes	13	8.56	2.37
(68,90]	Yes	4	3.43	0.48

Interpretation: Age group [18,28] are less likely to buy insurance, whereas age groups (28,38], (38,48], (48,58], (58,68] and (68,90] are more associated with buying insurance.

TEST-3

Ho: The proportion of insurance purchasers among employed individuals is equal to that of unemployed individuals

H1: The proportion of insurance purchasers among employed individuals is greater than that of unemployed individuals.

EMPLOYMENT STATUS	NO	YES	Total
Employed	86	157	243
Unemployed	56	32	91

Output

χ^2_{cal} = 19.904

Degree of freedom = 1

p-value = 0.000004072 ≈ 0

Interpretation: Since p value is very less, thus we reject the null hypothesis and conclude that the employed individuals are significantly more likely to purchase insurance compared to unemployed individuals.

TEST-4

Ho: The proportion of insurance purchasers among different income group is same

H1: At least one proportion of insurance purchaser in an income group is different.

INCOME	NO	YES	Total
Unemployed	57	33	90
up to 2.5 lakh	30	33	63
over Rs.2.5L to Rs.5L	44	73	117
Over Rs.5L to Rs.10L	7	35	42
Above Rs.10L	4	15	19
Total	142	189	331

Output

χ^2_{cal} = 32.753

Degree of freedom = 4

p-value = 0.000001342 ≈ 0

Interpretation: Since p value is very less, thus we reject the null hypothesis and conclude that at least one proportion of insurance in an income group is different.

PEARSON'S STANDARDIZED RESIDUALS

Pearson's Standardized Residual is given by the following formula:

nij = observed frequency for (i,j)th cell

uij = expected frequency for (i,j)th cell

Association between Income groups(X) and Purchase Decision(Y)

$$\frac{n_{ij} - \hat{\mu}_{ij}}{\left[\hat{\mu}_{ij}(1 - p_{i+})(1 - p_{+j})\right]^{1/2}}.$$

INCOME	NO	YES	Total
Unemployed	57	33	90
up to 2.5 lakh	30	33	63
over Rs.2.5L to Rs.5L	44	73	117
Over Rs.5L to Rs.10L	7	35	42
Above Rs.10L	4	15	19
Total	142	189	331

Group	Outcome	Observed	Expected	Std Residual
Unemployed	No	57	38.61	4.59
up to 2.5 lakh	No	30	27.03	0.84
over Rs.2.5L to Rs.5L	No	44	50.19	-1.44
Over Rs.5L to Rs.10L	No	7	18.02	-3.68
Above Rs.10L	No	4	8.15	-1.98
Unemployed	Yes	33	51.39	-4.59
up to 2.5 lakh	Yes	33	35.97	-0.84
over Rs.2.5L to Rs.5L	Yes	73	66.81	1.44
Over Rs.5L to Rs.10L	Yes	35	23.98	3.68
Above Rs.10L	Yes	15	10.85	1.98

Interpretation: Unemployed and Income group up to 2.5 Lakhs are less likely to buy insurance, whereas income group over 2.5 lakhs to 5 lakhs, over 5 lakhs to 10 lakhs and above 10 lakhs are more associated with buying insurance.

OBJECTIVE 3: TO EXAMINE THE RELATIONSHIP BETWEEN INSURANCE LITERACY AND INSURANCE OWNERSHIP

This objective aims to investigate the extent to which an individual's level of insurance literacy influences their likelihood of owning insurance.

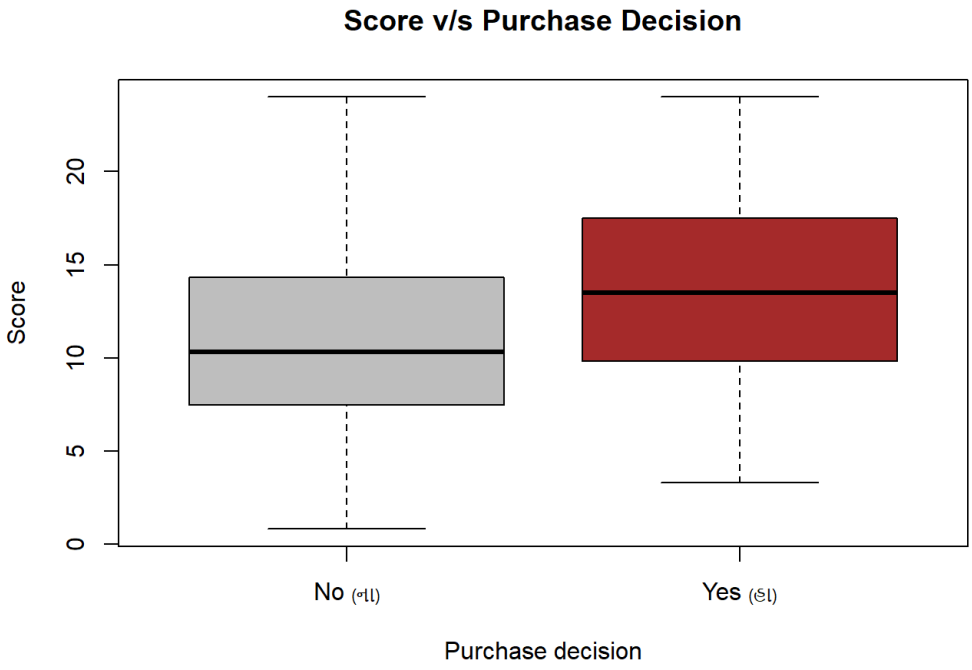
By examining this relationship, the study seeks to shed light on whether increasing insurance-related awareness could be a viable strategy to improve insurance penetration across different segments of the population.

WILCOXON RANK-SUM TEST

Hypothesis-1

Ho: The median Insurance Literacy score is the same for individual having General Insurance and individuals not having General Insurance.

H1: The median Insurance Literacy score of individuals having having General



p-value: 0.00001777 ≈ 0

W=9721.5

Interpretation: Since p value is less, we reject the null hypothesis and conclude that there is a significant difference in the median insurance literacy score for individual having general insurance and individuals not having general insurance

Median score (having general insurance) ≠ Median score (not having general insurance)

Hypothesis-2

Ho: The median Literacy score of individuals having general insurance equal to that of individuals not having general insurance

H1: The median Literacy score of individuals having general insurance is greater than individuals not having general insurance

p-value: 0.000008886 ≈ 0

W=9721.5

Interpretation: Since, the p-value is less hence, we reject the null hypothesis. We conclude that the median insurance literacy score of individuals having general insurance is greater than individuals not having general insurance

Median score (having General Insurance) > Median score (not having General Insurance)

CHI-SQUARE TEST OF INDEPENDENCE

Hypothesis-1

Ho: Purchase decision and Insurance literacy scores are independent.

H1: Purchase decision and Insurance literacy scores are not independent.

Purchase	Low	Medium	High	Total
No	45	73	24	142
Yes	30	97	62	189
Total	75	170	86	331

Variables

X: Purchase decision

Y: Literacy score Intervals

Output

χ^2_{cal} = 16.845

Degree of freedom = 2

p-value = 0.0002199

Interpretation: Since p-value is very less so we will reject our Null Hypothesis.

Hence, there does exist a significant association between purchase decision and Literacy scores.

Cramer's V = 0.2255898

This value signifies that there is moderate association between Purchase Decision and Literacy Scores.

PROPORTION TEST

Ho: The proportions of insurance purchasers among different literacy scores are same.

H1: At least one proportion of insurance purchaser in a literacy score interval is different.

Purchase	Low	Medium	High	Total
No	45	73	24	142
Yes	30	97	62	189
Total	75	170	86	331

Output

χ^2_{cal} = 16.845

Degree of freedom = 2

p-value = 0.0002199

Interpretation: Since the p-value is very less, so we reject the null hypothesis and conclude that at least one proportion of insurance purchaser in a literacy score interval is different.

PAIR WISE PROPORTION TEST

Ho: The proportion of insurance purchaser is same over all literacy score intervals

H1: The proportion of individuals purchasing insurance is significantly greater in individuals with high literacy scores compared to those with low

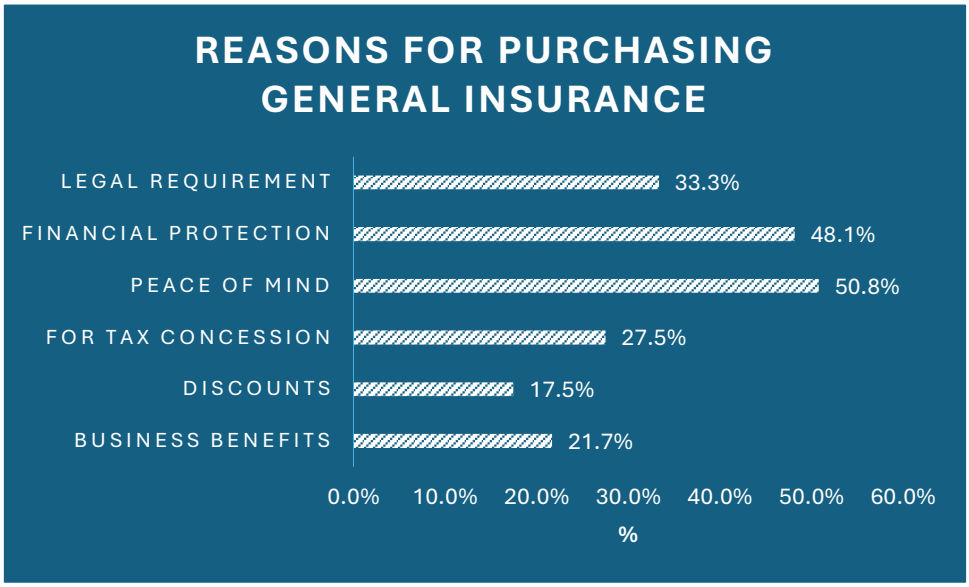
COMPARISON OF LITERACY SCORE	P-VALUE	INTERPRETATION
Moderate (8–16] vs Low (0–8]	0.02012	Significant difference — people with moderate literacy have higher insurance ownership than those with low literacy.
High (16–24] vs Low (0–8]	0.00012	Highly significant difference — people with high literacy are way more likely to have insurance than those with low literacy.
High (16–24] vs Moderate (8–16]	0.02012	Significant again — even moderate vs. high literacy shows a jump in ownership.

Conclusion:

The pairwise proportion test revealed a significant relationship between levels of insurance literacy and the likelihood of owning insurance. Individuals with higher literacy levels [16,24] showed significantly greater insurance ownership compared to both moderately literate (8,16] and low-literacy groups [0,8], with p-values of 0.00012 and 0.02012 respectively. Even the difference between moderately and low-literate individuals was significant (p = 0.02012).

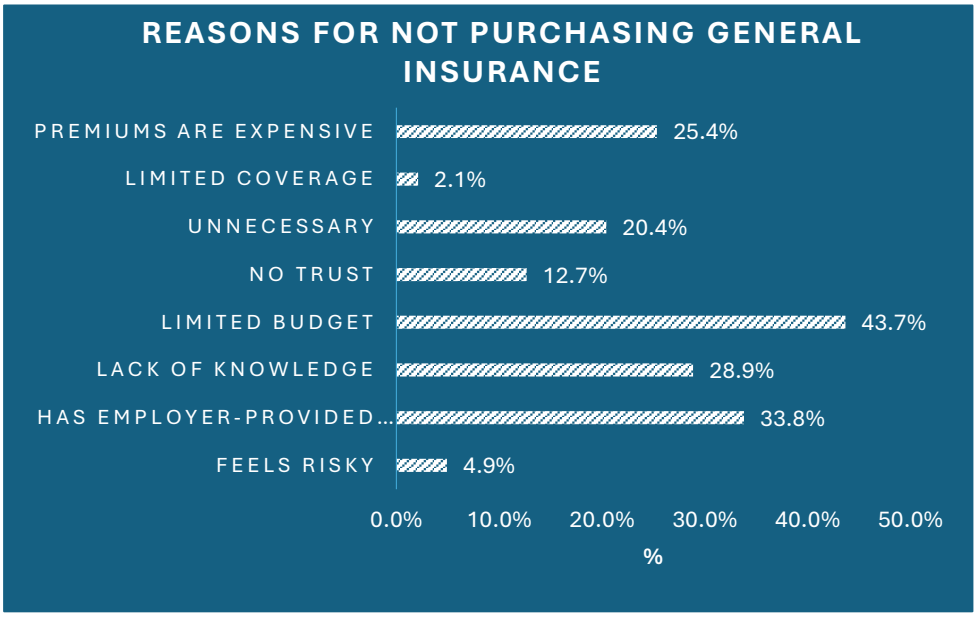
This shows that greater the Insurance Literacy Score, more are the chances that they own a General Insurance Policy.

OBJECTIVE 4: TO STUDY THE REASONS FOR INSURANCE PURCHASE DECISION



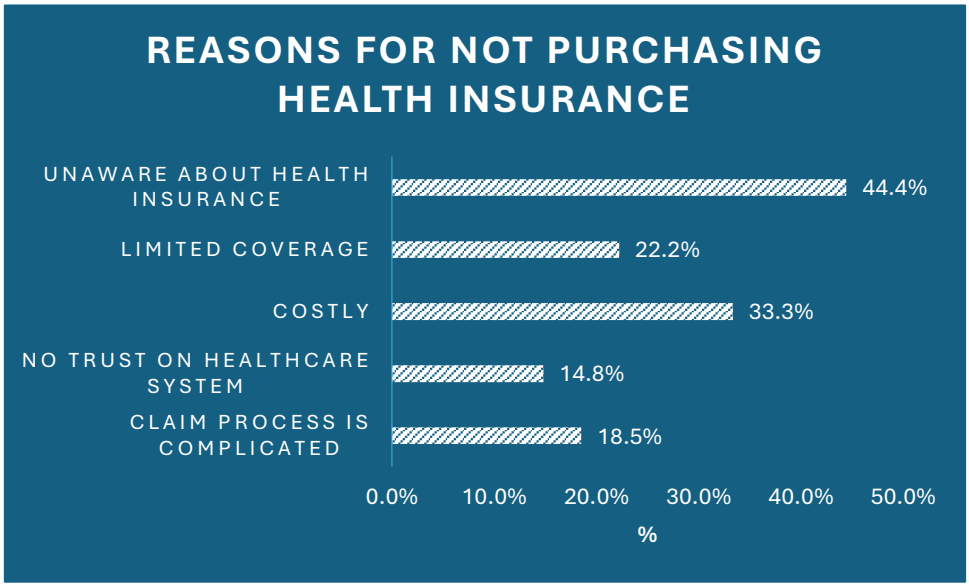
Most common reason we found for purchasing General insurance is "*Peace of mind*", "*Financial Protection*", which shows that people are aware of benefits of insurance policy.

Another major reason is that "*Some policies are legally required*".



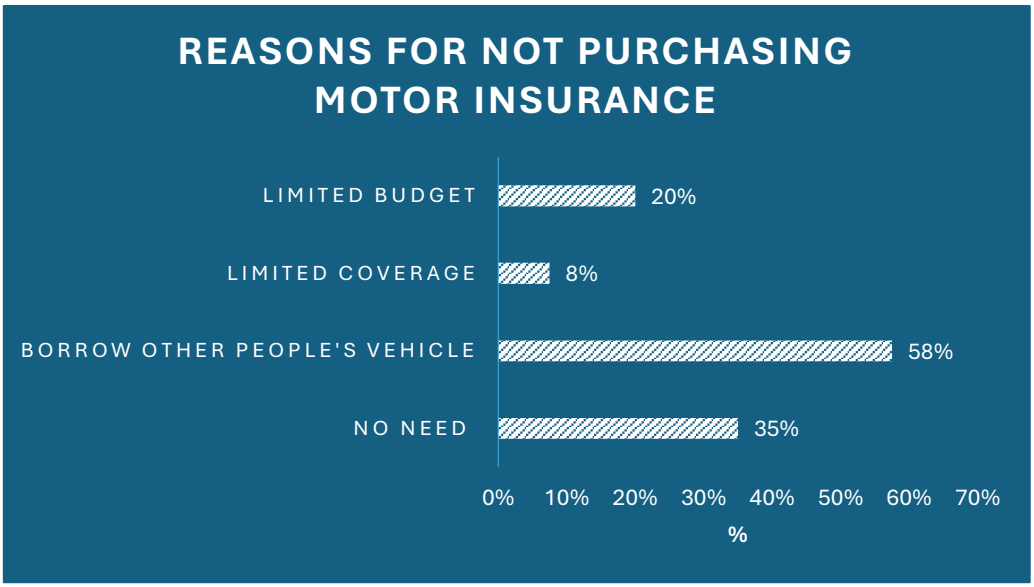
Most common reason found from our collected data for not purchasing General Insurance is "*Limited Budget*". Many People are also not buying insurance because they *already have insurance provided by their employer*.

*Remark- Multiple Options were chosen.



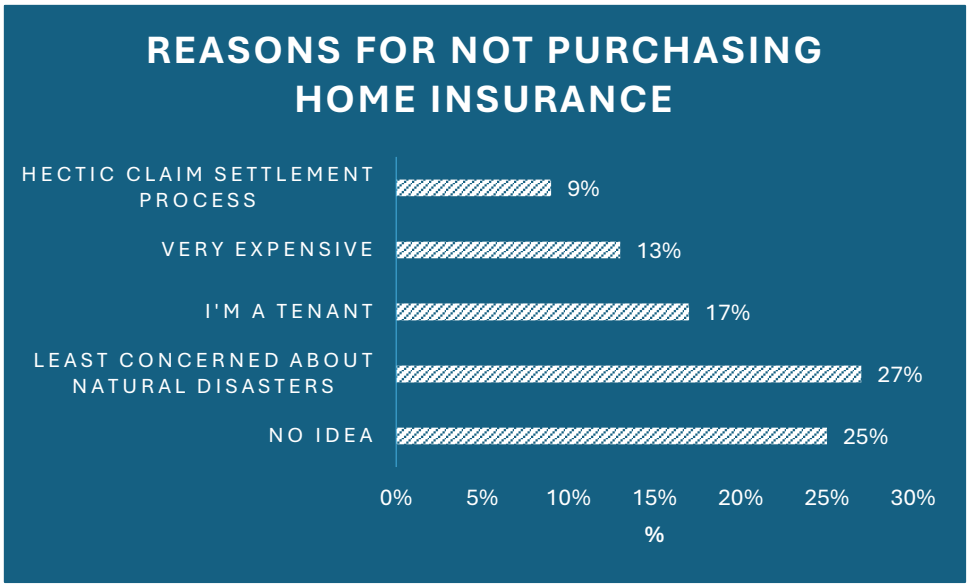
Most common reason found from our collected data for not purchasing Health Insurance is people are "*Unaware*" about the health insurance policy.

And another reason we found is "*Costly*" among the people who did purchase General Insurance but did not purchase Health Insurance.



Most common reasons found from our collected data for not purchasing Motor Insurance is "Borrowed other people vehicle".

*Remark- Multiple Options were chosen.



Most common reasons found from our collected data for not purchasing Home Insurance is "*Least concerned about Natural Disaster*" and "*Unawareness*" about Home Insurance policy.

*Remark- Multiple Options were chosen.

FINDINGS AND CONCLUSIONS

OBJECTIVE 1

Findings:

To assess the level of insurance literacy among respondents, questions were included in the survey to test their conceptual understanding of insurance

- Respondents were asked whether **life insurance falls under general (non-life) insurance**—a common point of confusion in public perception.
  Surprisingly, **51.9% of respondents incorrectly believed** that life insurance is a part of general insurance, highlighting a **critical misconception**.

- It was observed that **only 44.1%** of the respondents were able to correctly recognize the compulsory form of General Insurance.

- 45.92% of the respondents believe that hospitalization for at least one day is necessary to avail Health Insurance benefits.

- Only 22.9% of respondents correctly identified that hospitalization for less than a day can be sufficient to avail Health Insurance benefits.

- Approximately 70.69% of respondents correctly recognized that Health Insurance policies typically have a waiting period, and that benefits cannot be availed from the very first day of purchase, except in the case of accidental claims.

Conclusions:

WILCOXON RANK TEST ~

Variable	p-value	W	Hypotheses	Decision (at 5%)	Interpretation
Gender vs Literacy score	0.3516	13140	H_0: No Difference in median H_1: Difference in median	Fail to reject H_0	No difference in median between gender and Literacy score
Location vs Literacy score	0.8804	4996	H_0: No Difference in median H_1: difference in median	Fail to reject H_0	No difference in median between Location and Literacy score
Employment status vs Literacy score	0.00000001292 ≈ 0	6318	H_0: No Difference in median H_1: difference in median	Reject H_0	Median literacy score of employed individuals is higher than unemployed individuals

CHI-SQUARED TEST ~

Variable	χ^2 (Chi-square)	Degrees of Freedom	p-value	Hypothesis	Decision (at 5%)	Interpretation
Gender vs Literacy score	4.1725	2	0.1242	H_0: No association H_1: Association exists	Fail to Reject H_0	No significant association exists between Gender and Literacy score
Location vs Literacy score	0.43398	2	0.8409	H_0: No association H_1: Association exists	Fail to Reject H_0	No significant association exists between Location and Literacy score
Employment status vs Literacy Score	29.27	2	4.525E-07	H_0: No association H_1: Association exists	Reject H_0	significant association exists between Location and Literacy score

KRUSKAL WALLIS TEST ~

Variable	p-value	χ^2 (Chi-square)	Hypotheses	Decision (at 5%)	Interpretation
Education vs Literacy score	0.00000363	33.076	H_0: No Difference in median H_1: difference in median	Reject H_0	Difference in median between education and Literacy score
Education vs Literacy score (Jonckheere test)	0.0001	-	H_0: No Difference in median H_1: monotonic increasing trend	Reject H_0	As education level increases median literacy score also increases
Age vs Literacy score	0.151	63.605	H_0: No Difference in median H_1: difference in median	Fail to reject H_0	No difference in median between age and Literacy score
income vs Literacy score	0.0000000007609	43.643	H_0: No Difference in median H_1: difference in median	Reject H_0	Difference in median between income and Literacy score
income vs Literacy score (Jonckheere test)	0.0001	-	H_0: No Difference in median H_1: monotonic increasing trend	Reject H_0	As income level increases median literacy score also increases

GK GAMMA TEST ~

Variable	Gamma value	p-value	Cramér's V	Hypotheses	Decision (at 5%)	Interpretation
Education vs Literacy score	0.2807958	0.00007198	0.1980546	H_0: No association H_1: Association exists	Reject H_0	A significant association exists between Education and Literacy score
Income vs Literacy score	0.4276429	Approx. 0	-	H_0: No association H_1: Association exists	Reject H_0	A significant association exists between Income and Literacy score
Age vs Literacy score	0.03284872	0.6389	-	H_0: No association H_1: Association exists	Fail to Reject H_0	No significant association exists between age and Literacy score

OBJECTIVE 2

Conclusions:

FISHERS TEST ~

Variable	p-value	Yules coefficient	Hypotheses	Decision (at 5%)	Interpretation
Gender vs Purchase	0.002438	0.3425	H_0: No association H_1: Association exists	Reject H_0	Statistically significant association between gender and purchase decision
Location vs Purchase	0.1943	—	H_0: No association H_1: Association exists	Fail to reject H_0	No significant association between location and purchase decision
Employment status vs Purchase (	0.000005455 ≈ 0	0.523215	H_0: No association H_1: Association exists	Reject H_0	Statistically significant association between gender and purchase decision

CHI-SQUARE TEST ~

Variable	χ^2 (Chi-square)	p-value	Cramér's V	Hypotheses	Decision (at 5%)	Interpretation
Education vs Purchase decision	9.0976	0.05871	—	H_0: No association H_1: Association exists	Fail to reject H_0	No significant association between education and purchase decision
Income vs Purchase	32.65	$3.818e^{-7}$	0.31407	H_0: No association H_1: Association exists	Reject H_0	A significant association exists between income and purchase decision
Age vs Purchase	11.429	0.009617	0.185822	H_0: No association H_1: Association exists	Reject H_0	A significant association exists between age and purchase decision

PROPORTION TEST ~

Variable	X^2 (Chi-square)	Degrees of Freedom	p-value	Hypotheses	Decision (at 5%)	Interpretation
Gender vs Purchase decision (Proportion)	8.6631	1	0.001624	H_0: No difference in proportions H_1: At least one group differs	Reject H_0	Female respondents are significantly less likely to purchase insurance
Age vs Purchase (Proportion)	14.278	4	0.006459	H_0: No difference in proportions H_1: At least one group differs	Reject H_0	At least one age group differs in insurance purchasing proportion
Employment vs Purchase (Proportion)	19.904	1	0.000004072 ≈ 0	H_0: No difference in proportions H_1: At least one group differs	Reject H_0	Employed individuals are significantly more likely to purchase insurance
Income vs Purchase (Proportion)	32.753	4	0.000001342 ≈ 0	H_0: No difference in proportions H_1: At least one group differs	Reject H_0	At least one income group differs in insurance purchasing proportion

OBJECTIVE 3

Conclusions:

Test Type	Test statistic	p-value	Hypothesis	Decision (at 5%)	Interpretation
Wilcoxon test	W = 9721.5	approx. 0	H_0: No Difference in median H_1: difference in median	Reject H_0	Difference in median between literacy score and purchase decision
Wilcoxon test	W = 9721.5	approx. 0	H_0: No Difference in median H_1: Difference in median.	Reject H_0	Median literacy score of individuals having general insurance is greater than not having general insurance
Chi-Square test	chi-square = 16.845	0.0002199	H_0: No association H_1: Association exists	Reject H_0	significant association exists between Purchase and Literacy score
Proportion test	chi-square = 16.845	0.0002199	H_0: No difference in proportions H_1: At least one group differs	Reject Ho	One proportion of insurance purchaser in a literacy score interval is different

OBJECTIVE 4
Conclusions:

Based on the analysis of the collected data, the following major insights were observed regarding the reasons for purchasing or not purchasing various types of General Insurance:

- Motivations for Purchasing General Insurance:

The most frequently cited reasons for purchasing General Insurance were "peace of mind" and "financial protection," reflecting a strong awareness among respondents about the essential benefits that insurance policies offer. Another significant factor motivating purchase decisions was the understanding that "some insurance policies are legally mandated," indicating compliance-driven behaviour among the insured population.

- Barriers to Purchasing General Insurance:

The most common barrier identified was a "limited budget," suggesting that affordability remains a major concern for many individuals. Additionally, several respondents indicated that they chose not to purchase separate insurance policies because they were already covered under "employer-provided insurance schemes."

- Barriers to Purchasing Health Insurance:

A major obstacle for Health Insurance adoption was found to be a "lack of awareness" about available health insurance policies and their benefits. Among those who had purchased General Insurance but not Health Insurance, the reason often cited was the "high cost" associated with health insurance plans.

- Barriers to Purchasing Car Insurance:

Respondents who reported not purchasing Car Insurance primarily did so because they "borrowed vehicles" from others and did not personally own a vehicle, making the acquisition of Car Insurance unnecessary for them.

- Barriers to Purchasing Home Insurance:

In the case of Home Insurance, the most common reasons for non-purchase were "low concern about natural disasters" and a general "lack of awareness" regarding the existence and advantages of Home Insurance policies.

Overall Conclusion:

The findings underline that while there is an appreciable awareness of the advantages and legal necessities associated with General Insurance, high costs and limited awareness remain critical barriers to full insurance penetration across different sectors (health, car, and home). Addressing these barriers through targeted financial education initiatives and affordable policy structures could potentially improve insurance coverage levels within the community.

APPENDIX

A	Collected data
B	Questionnaire
C	Statistical Tests, R Codes, and Their Use
D	References

Section A: Collected data (head)

Timestamp	Score	1.Gender	2.Age	3.Education	4.Location	5.Ward	6.Status of Employment	1.Occupation type	2.Income per annum	1. Which of the following is a gen
3-3-2025 16:36:21	9 / 18	Male	57	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Government Employee (સરકારી કર્મચા	Above Rs.10L(રૂ.10L થી ઉપર	Life Insurance (જીવન વીમો), Health In
3-3-2025 14:37:16	10 / 18	Male	22	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-3-2025 14:39:51	5 / 18	Female	55	Post graduation (પોસ્ટ ગ્રે	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-3-2025 14:47:02	5 / 18	Male	18	Secondary (10th std or e	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-3-2025 14:47:09	5 / 18	Female	25	Post graduation (પોસ્ટ ગ્રે	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Education Field (શિક્ષણ ક્ષેત્ર)	over Rs.2.5L to Rs.5L(રૂ.2.5	Life Insurance (જીવન વીમો), Health In
3-3-2025 15:02:20	6 / 18	Female	23	Graduation (ગ્રેજ્યુએશન)	Rural (ગ્રામ્ય)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-3-2025 15:09:25	8 / 18	Male	47	Secondary (10th std or e	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	over Rs.2.5L to Rs.5L(રૂ.2.5	Life Insurance (જીવન વીમો), Health In
3-3-2025 16:07:53	8 / 18	Female	46	Below 10th std (10 થી ની	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-3-2025 16:14:48	9 / 18	Male	25	Higher secondary (12th s	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	over Rs.2.5L to Rs.5L(રૂ.2.5	Life Insurance (જીવન વીમો), Motor Ins
3-3-2025 16:25:40	10 / 18	Male	21	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો)
3-4-2025 12:22:00	3 / 18	Male	22	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Motor Ins
3-4-2025 12:26:13	6 / 18	Male	28	Post graduation (પોસ્ટ ગ્રે	Rural (ગ્રામ્ય)	9	Unemployed (બેરોજગાર)		0	Motor Insurance (મોટર વીમો)
3-4-2025 12:31:10	3 / 18	Female	37	Secondary (10th std or e	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Pension
3-4-2025 12:34:49	4 / 18	Male	24	Post graduation (પોસ્ટ ગ્રે	Rural (ગ્રામ્ય)	9	Employed (નોકરી કરે છે)	Freelencing	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Health In
3-4-2025 12:43:41	3 / 18	Male	21	Graduation (ગ્રેજ્યુએશન)	Rural (ગ્રામ્ય)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો)
3-4-2025 12:55:13	6 / 18	Male	65	Below 10th std (10 થી ની	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Travel Insurance (યાત્રા વીમો)
3-4-2025 12:57:04	7 / 18	Male	58	Secondary (10th std or e	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો)
3-4-2025 13:14:41	12 / 18	Female	54	Doctoral degree (ડોક્ટરલ	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Education Field (શિક્ષણ ક્ષેત્ર)	Above Rs.10L(રૂ.10L થી ઉપર	Life Insurance (જીવન વીમો), Health In
3-4-2025 13:35:45	6 / 18	Female	50	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Government Employee (સરકારી કર્મચા	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Health In
3-5-2025 12:05:04	4 / 18	Male	23	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-5-2025 14:23:50	10 / 18	Male	20	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	9	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	Above Rs.10L(રૂ.10L થી ઉપર	Motor Insurance (મોટર વીમો), Pensio
3-5-2025 15:54:40	4 / 18	Female	40	Higher secondary (12th s	Rural (ગ્રામ્ય)	3	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-5-2025 16:12:52	7 / 18	Male	53	Post graduation (પોસ્ટ ગ્રે	Rural (ગ્રામ્ય)	3	Employed (નોકરી કરે છે)	Education Field (શિક્ષણ ક્ષેત્ર)	Above Rs.10L(રૂ.10L થી ઉપર	Motor Insurance (મોટર વીમો), Travel I
3-5-2025 16:20:11	1 / 18	Male	30	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Health Insurance (આરોગ્ય વીમો), Pen
3-5-2025 16:36:06	10 / 18	Female	29	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	3	Unemployed (બેરોજગાર)		0	Life Insurance (જીવન વીમો), Health In
3-8-2025 9:37:44	12 / 18	Male	25	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	over Rs.2.5L to Rs.5L(રૂ.2.5	Motor Insurance (મોટર વીમો), Pensio
3-8-2025 10:08:55	4 / 18	Male	27	Secondary (10th std or e	Rural (ગ્રામ્ય)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Health In
3-8-2025 10:23:21	7 / 18	Male	19	Secondary (10th std or e	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Travel Ins
3-8-2025 10:30:04	7 / 18	Male	38	Higher secondary (12th s	Rural (ગ્રામ્ય)	3	Employed (નોકરી કરે છે)	Police	Over Rs.5L to Rs.10L(રૂ.5L	Life Insurance (જીવન વીમો), Motor Ins
3-8-2025 10:35:53	6 / 18	Male	26	Graduation (ગ્રેજ્યુએશન)	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	Over Rs.5L to Rs.10L(રૂ.5L	Life Insurance (જીવન વીમો), Health In
3-8-2025 10:43:02	8 / 18	Male	43	Secondary (10th std or e	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	up to 2.5 lakh (2.5 લાખ સુધી)	Pension plans (પેન્શન યોજનાઓ)
3-8-2025 10:50:19	6 / 18	Male	24	Higher secondary (12th s	Rural (ગ્રામ્ય)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો), Motor Ins
3-8-2025 10:57:53	6 / 18	Male	35	Graduation (ગ્રેજ્યુએશન)	Rural (ગ્રામ્ય)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	Over Rs.5L to Rs.10L(રૂ.5L	Life Insurance (જીવન વીમો), Health In
3-8-2025 11:02:56	6 / 18	Male	21	Higher secondary (12th s	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો)
3-8-2025 11:10:34	4 / 18	Female	50	Secondary (10th std or e	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	up to 2.5 lakh (2.5 લાખ સુધી)	Life Insurance (જીવન વીમો)
3-8-2025 11:17:42	4 / 18	Male	33	Higher secondary (12th s	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Private sector Employee (ખાનગી ક્ષેત્ર	up to 2.5 lakh (2.5 લાખ સુધી)	Health Insurance (આરોગ્ય વીમો)
3-8-2025 11:28:40	7 / 18	Male	57	Higher secondary (12th s	Urban (શહેરી)	3	Employed (નોકરી કરે છે)	Self employed (સ્વરોજગાર)	over Rs.2.5L to Rs.5L(રૂ.2.5	Life Insurance (જીવન વીમો), Health In

Appendix Section B: Survey Questionnaire

INSURANCE

For project purpose only

* Indicates required question

1. 1.Gender (જાતિ) *

   Mark only one oval.

   - ◯ Male
   - ◯ Female

2. 2.Your age (તમારી ઉંમર) *

   _____

3. 3.Education (શિક્ષણ) *

   Mark only one oval.

   - ◯ Below 10th std (10 થી નીચે ધો.)
   - ◯ Secondary (10th std or equivalent) માધ્યમિક (10મું ધોરણ અથવા સમકક્ષ))
   - ◯ Higher secondary (12th std or equivalent) (ઉચ્ચતર માધ્યમિક (12મું ધોરણ અથવા સમકક્ષ))
   - ◯ Graduation (ગ્રેજ્યુએશન)
   - ◯ Post graduation (પોસ્ટ ગ્રેજ્યુએશન)
   - ◯ Doctoral degree (ડોક્ટરલ ડિગ્રી)
   - ◯ Other: _____

4. 4.Location (સ્થળ) *

Mark only one oval.

- ◯ Urban (શહેરી)
- ◯ Rural (ગ્રામ્ય)

5. 5.Status of Employment (રોજગારની સ્થિતિ) *

Mark only one oval.

- ◯ Employed (નોકરી કરે છે) *Skip to question 6*
- ◯ Unemployed (બેરોજગાર) *Skip to question 8*

Occupation information (વ્યવસાય માહિતી)

6. 1.Occupation type (વ્યવસાય પ્રકાર) *

Mark only one oval.

- ◯ Agriculture (કૃષિ)
- ◯ Animal Husbandry (પશુપાલન)
- ◯ Banking (બેંકિંગ)
- ◯ Education Field (શિક્ષણ ક્ષેત્ર)
- ◯ Government Employee (સરકારી કર્મચારી)
- ◯ Healthcare Employee (હેલ્થકેર કર્મચારી)
- ◯ Home maker (ઘર બનાવનાર)
- ◯ Private sector Employee (ખાનગી ક્ષેત્રના કર્મચારી)
- ◯ Self employed (સ્વરોજગાર)
- ◯ Student (વિદ્યાર્થી)
- ◯ Other: _____

7. 2.Income per annum (આવક) *

Mark only one oval.

- ◯ up to 2.5 lakh (2.5 લાખ સુધી)
- ◯ over Rs.2.5L to Rs.5L(રૂ.2.5L થી રૂ.5L)
- ◯ Over Rs.5L to Rs.10L(રૂ.5L થી રૂ.10L)
- ◯ Above Rs.10L(રૂ.10L થી ઉપર)

Insurance Literacy (વીમા સાક્ષરતા)

8. 1. Which of the following is a general insurance? (નીચેનામાંથી કયો સામાન્ય વીમો છે?) * 4 points

Tick all that apply.

- ☐ Life Insurance (જીવન વીમો)
- ☐ Health Insurance (આરોગ્ય વીમો)
- ☐ Motor Insurance (મોટર વીમો)
- ☐ Pension plans (પેન્શન યોજનાઓ)
- ☐ Travel Insurance (યાત્રા વીમો)
- ☐ Fire Insurance (આગ વીમો)

9. 2. Does General Insurance plan helps boost tax savings? (શું સામાન્ય વીમા યોજના કર બચત વધારવામાં મદદ કરે છે?) * 1 point

Mark only one oval.

- ◯ Yes (હા)
- ◯ No (ના)

10. 3. Which of the below personal general insurance are compulsory to be bought according to government? (નીચેનામાંથી કયો વ્યક્તિગત સામાન્ય વીમો સરકાર અનુસાર ખરીદવો ફરજિયાત છે?) * 1 point

Mark only one oval.

- ◯ Life Insurance (જીવન વીમો)
- ◯ Health Insurance (આરોગ્ય વીમો)
- ◯ Motor Insurance (મોટર વીમો)
- ◯ Pension plans (પેન્શન યોજનાઓ)
- ◯ Travel Insurance (યાત્રા વીમો)
- ◯ Fire Insurance (આગ વીમો)
- ◯ I am not aware (હું વાકેફ નથી)

11. 4. Where can you complain about your insurance company against their unfair behavior? (તમે તમારી વીમા કંપનીને તેમના અન્યાયી વર્તન સામે ક્યાં ફરિયાદ કરી શકો?) * 2 points

Tick all that apply.

- ☐ National consumer distributes redressal commission (રાષ્ટ્રીય ઉપભોક્તા નિવારણ કમિશનનું વિતરણ કરે છે)
- ☐ Insurance Ombudsman (વીમા લોકપાલ)
- ☐ Health Centre (આરોગ્ય કેન્દ્ર)
- ☐ Registrar of Companies (રજીસ્ટ્રાર ઓફ કંપનીઝ)

12. 5. Does Health Insurance cover only hospitalization expenses? (શું આરોગ્ય વીમો માત્ર હોસ્પિટલમાં દાખલ થવાના ખર્ચને આવરી લે છે?) * 1 point

Mark only one oval.

- ◯ Yes, only hospitalization costs are covered. (હા, માત્ર હોસ્પિટલમાં દાખલ થવાના ખર્ચને આવરી લેવામાં આવે છે.)
- ◯ Depends on the insurance policy you bought. (તમે ખરીદેલી વીમા પૉલિસી પર આધાર રાખે છે.)
- ◯ No, it covers only if you have a severe disease or got into an accident (ના, જો તમને ગંભીર રોગ હોય અથવા અકસ્માત થયો હોય તો જ તે આવરી લે છે)

13. 6. What is the minimum time period to be in the hospital in order to avail Health Insurance benefits? (આરોગ્ય વીમા લાભો મેળવવા માટે હોસ્પિટલમાં રહેવાનો લઘુત્તમ સમયગાળો કેટલો છે?) * 1 point

Mark only one oval.

- ◯ Less than a day in the hospital (હોસ્પિટલમાં એક દિવસ કરતાં પણ ઓછો સમય)
- ◯ At least 1 day in the hospital (હોસ્પિટલમાં ઓછામાં ઓછો 1 દિવસ)
- ◯ At least 1 week (ઓછામાં ઓછું 1 અઠવાડિયું)
- ◯ More than 1 week 1 અઠવાડિયાથી વધુ)
- ◯ Depends (આધાર રાખે છે)

14. 7. Can you claim your health insurance policy from the 1st day of availing policy? (શું તમે પોલિસી મેળવવાના 1 દિવસથી તમારી સ્વાસ્થ્ય વીમા પૉલિસીનો દાવો કરી શકો છો?) * 2 points

Mark only one oval.

- ◯ Yes, there is no waiting period. (હા, રાહ જોવાનો સમય નથી.)
- ◯ No, there is a waiting period. (Except accidental claims) (ના, રાહ જોવાનો સમયગાળો છે. (આકસ્મિક દાવા સિવાય))

15. 8. Do you believe that premium of a Health insurance is based on your lifestyle (eating habits, smoking habits, pre-existing diseases)? (શું તમે માનો છો કે સ્વાસ્થ્ય વીમાનું પ્રીમિયમ તમારી જીવનશૈલી (ખાવાની ટેવ, ધૂમ્રપાનની ટેવ, પહેલાથી અસ્તિત્વમાં રહેલા રોગો) પર આધારિત છે?) * 1 point

Mark only one oval.

- ◯ Yes (હા)
- ◯ No (ના)

16. 9. Can 2nd hand cars be insured? (શું સેકન્ડ હેન્ડ કારનો વીમો લઈ શકાય?) * 2 points

Tick all that apply.

- ☐ You cannot reinsure 2nd hand cars. (તમે 2 હેન્ડ કારનો પુનઃવીમો કરી શકતા નથી.)
- ☐ Previous insurance is transferred. (અગાઉનો વીમો ટ્રાન્સફર કરવામાં આવે છે.)
- ☐ New policy can be purchased for a 2nd hand car. (2 હેન્ડ કાર માટે નવી પોલિસી ખરીદી શકાય છે.)

17. 10. What is an "add-on cover" in an insurance policy? (વીમા પોલિસીમાં "એડ-ઓન કવર" શું છે?) * 1 point

Mark only one oval.

- ◯ Additional benefits without paying extra money (વધારાના પૈસા ચૂકવ્યા વિના વધારાના લાભો)
- ◯ A policy upgrade that increases premiums automatically (એક પોલિસી અપગ્રેડ જે પ્રિમીયમમાં આપમેળે વધારો કરે છે)
- ◯ Additional benefits purchased at an extra cost (વધારાના લાભો વધારાના ખર્ચે ખરીદ્યા)
- ◯ A discount offered by the insurer (વીમાદાતા દ્વારા ઓફર કરાયેલ ડિસ્કાઉન્ટ)
- ◯ Don't know (ખબર નથી)

18. 11. What does the term "sum insured" refer to in a general insurance policy? (સામાન્ય વીમા પૉલિસીમાં "વીમાની રકમ" શબ્દ શું દર્શાવે છે?) * 1 point

Mark only one oval.

- ◯ The maximum amount payable by the insurer in case of a claim (દાવાના કિસ્સામાં વીમાદાતા દ્વારા ચૂકવવાપાત્ર મહત્તમ રકમ)
- ◯ The profit earned by the insurer (વીમાદાતા દ્વારા કમાયેલો નફો)
- ◯ The yearly premium amount (વાર્ષિક પ્રીમિયમની રકમ)
- ◯ Don't know (ખબર નથી)

19. 12. If an insured individual doesn't file a claim during a policy period, what benefit might they receive? (જો વીમાધારક વ્યક્તિ પોલિસીના સમયગાળા દરમિયાન દાવો દાખલ કરતી નથી, તો તેમને શું લાભ મળી શકે છે?) * 1 point

Mark only one oval.

- ◯ No-Claim Bonus (NCB) (નો-ક્લેઈમ બોનસ (NCB))
- ◯ Premium refund (પ્રીમિયમ રિફંડ)
- ◯ Early policy termination (પોલિસીની વહેલી સમાપ્તિ)
- ◯ Don't know (ખબર નથી)

Insurance Policy Holding (વીમા પૉલિસી હોલ્ડિંગ)

20. Have you ever purchased a general insurance policy? * (શું તમે ક્યારેય સામાન્ય વીમા પોલિસી ખરીદી છે?)

Mark only one oval.

- ◯ Yes (હા) *Skip to question 21*
- ◯ No (ના) *Skip to question 25*

General questions (સામાન્ય પ્રશ્નો)

21. How was the purchase of your general insurance policy? *
(તમારી સામાન્ય વીમા પૉલિસીની ખરીદી કેવી રહી?)

Tick all that apply.

- [ ] I bought it completely by myself (મેં તેને સંપૂર્ણપણે મારી જાતે ખરીદ્યું)
- [ ] I took help from family/ friend/ colleague to purchase (મેં ખરીદી માટે કુટુંબ/મિત્ર/સાથીદારની મદદ લીધી)
- [ ] I took help from Insurance agents, bank person to purchase it(મેં તેને ખરીદવા માટે વીમા એજન્ટો, બેંકના વ્યક્તિની મદદ લીધી)
- [ ] I went to online aggreegator platforms (like PolicyBazaar) to purchase (હું ખરીદી કરવા માટે ઓનલાઈન એગ્રીગેટર પ્લેટફોર્મ (જેમ કે પોલિસીબઝાર) પર ગયો)
- [ ] Other: _____

22. Earning members in your family (તમારા પરિવારમાં કમાતા સભ્યો) *

_____

23. Total members in your house (તમારા ઘરના કુલ સભ્યો) *

_____

24. What percentage of your income spend on insurance? (તમારી આવકના કેટલા ટકા વીમા પર ખર્ચો છો?) *

_____

Skip to question 26

No insurance (વીમો નથી)

25. Your reason(s) for not purchasing an insurance policy... (વીમા પૉલિસી ન ખરીદવા માટેનું તમારું કારણ...) *

Tick all that apply.

- [ ] Already has insurance provided by Employer (એમ્પ્લોયર દ્વારા પહેલેથી જ વીમો આપવામાં આવેલ છે)
- [ ] Do not trust insurance companies (વીમા કંપનીઓ પર વિશ્વાસ ન કરો)
- [ ] Don't think Insurance is necessary (વીમો જરૂરી નથી માનતા)
- [ ] Feel taking an insurance policy is too risky (વીમા પોલિસી લેવી ખૂબ જોખમી લાગે છે)
- [ ] Limited Budget(મર્યાદિત બજેટ)
- [ ] Limited coverage in the insurance policies (વીમા પોલિસીમાં મર્યાદિત વ્યાપિત)
- [ ] No idea about how insurance works (વીમો કેવી રીતે કામ કરે છે તે વિશે કોઈ ખ્યાલ નથી)
- [ ] Premiums are too expensive (હપ્તો ખૂબ ખર્ચાળ છે.)
- [ ] Unable to understand insurance policies(વીમા પોલિસી સમજવામાં અસમર્થ)
- [ ] Other: _____

Insurance purchasing (વીમા ખરીદી)

26. Your reason(s) for purchased insurance policy (ખરીદેલ વીમા પૉલિસી માટે તમારું કારણ(ઓ).) *

Tick all that apply.

- [ ] Business Benefits (Helps businesses continue operations even after unexpected events) (વ્યવસાય લાભો (અનપેક્ષિત ઘટનાઓ પછી પણ વ્યવસાયોને કામગીરી ચાલુ રાખવામાં મદદ કરે છે))
- [ ] Discounts (Insurers often offer discounts for multiple policies, loyalty, or other factors.) (ડિસ્કાઉન્ટ (વીમાદાતાઓ ઘણીવાર બહુવિધ નીતિઓ, વફાદારી અથવા અન્ય પરિબળો માટે ડિસ્કાઉન્ટ ઓફર કરે છે.))
- [ ] For Tax concession (As, some general insurance premiums may be tax-deductible.) (કર રાહત માટે (જેમ કે, કેટલાક સામાન્ય વીમા પ્રિમીયમ કર-કપાતપાત્ર હોઈ શકે છે.))
- [ ] Peace of Mind (Sense of security) (મનની શાંતિ (સુરક્ષાની ભાવના))
- [ ] Providing financial protection against unexpected events (અણધારી ઘટનાઓ સામે નાણાકીય રક્ષણ પૂરું પાડવું)
- [ ] Some Insurance policies are legally required. (eg, vehicle insurance) (કેટલીક વીમા પૉલિસીઓ કાયદેસર રીતે જરૂરી છે. (દા.ત., વાહન વીમો))
- [ ] Other: _____

27. Have you purchased HEALTH Insurance? (શું તમે આરોગ્ય વીમો ખરીદ્યો છે?) *

Mark only one oval.

- ◯ Yes (હા) *Skip to question 29*
- ◯ No (ના) *Skip to question 28*

No Health insurance (આરોગ્ય વીમો નથી)

28. Your reason(s) for not purchasing HEALTH insurance policy (આરોગ્ય વીમા પૉલિસી ન ખરીદવા માટેનું તમારું કારણ(ઓ).) *

Tick all that apply.

- ☐ Health Insurance is Supposedly Costly (આરોગ્ય વીમો કથિત રીતે ખર્ચાળ છે)
- ☐ Insurance Companies are Not to be Trusted (વીમા કંપનીઓ વિશ્વાસપાત્ર નથી)
- ☐ Health Insurance Awareness is Absent (આરોગ્ય વીમા જાગૃતિ ગેરહાજર છે)
- ☐ The Coverage Extent is Limited (વીમા દ્વારા આવરી લીધેલું જોખમ હદ મર્યાદિત છે)
- ☐ Claim Process is Complicated (દાવાની પ્રક્રિયા જટિલ છે)
- ☐ Trust Issues with the Country's Healthcare System (દેશની હેલ્થકેર સિસ્ટમ સાથે વિશ્વાસની સમસ્યાઓ)
- ☐ No idea about health insurance (આરોગ્ય વીમા વિશે કોઈ ખ્યાલ નથી)
- ☐ Other: _____

Skip to question 30

Health Insurance information (આરોગ્ય વીમા માહિતી)

29. What kind of Health insurance have you bought? (તમે કયા પ્રકારનો આરોગ્ય વીમો ખરીદ્યો છે?) *

Tick all that apply.

- [ ] Individual Health Insurance Plan (વ્યક્તિગત આરોગ્ય વીમા યોજના)
- [ ] Family Floater Health Insurance Plan (ફેમિલી ફ્લોટર હેલ્થ ઈન્સ્યોરન્સ પ્લાન)
- [ ] Senior Citizen Health Insurance Plan (વરિષ્ઠ નાગરિક આરોગ્ય વીમા યોજના)
- [ ] Critical Illness Insurance Plan (ગંભીર બીમારી વીમા યોજના)
- [ ] Other: _____

Skip to question 30

MOTOR insurance (મોટર વીમો)

30. **Have you purchased MOTOR insurance?** (શું તમે મોટર વીમો ખરીદ્યો છે?) *

Mark only one oval.

- ◯ Yes (હા) *Skip to question 32*
- ◯ No (ના) *Skip to question 31*

No Motor insurance ... (મોટર વીમો નથી...)

31. Your reason(s) for not purchasing motor insurance policy (મોટર વીમા પૉલિસી ન ખરીદવા માટેનું તમારું કારણ) *

Tick all that apply.

- [ ] Car insurance doesn't cover that much (કાર ઈન્સ્યોરન્સ આટલું કવર કરતું નથી)
- [ ] I'm a safe enough driver that I don't need car insurance (હું પૂરતો સલામત ડ્રાઈવર છું કે મને કાર વીમાની જરૂર નથી)
- [ ] I don't own a car and only borrow other people's (મારી પાસે કાર નથી અને માત્ર અન્ય લોકો પાસેથી જ ઉધાર લે છે)
- [ ] I don't drive my car so I don't need car insurance (હું મારી કાર ચલાવતો નથી તેથી મને કાર વીમાની જરૂર નથી)
- [ ] No compulsory rule in my state for motor insurance (મારા રાજ્યમાં મોટર વીમા માટે કોઈ ફરજિયાત નિયમ નથી)
- [ ] Not finding policy of less price (ઓછી કિંમતની નીતિ શોધી શકાતી નથી)
- [ ] Other: _____

Skip to question 33

Motor Insurance information (મોટર વીમા માહિતી)

32. What kind of motor insurance do you have? (તમારી પાસે કયા પ્રકારનો મોટર વીમો છે?) *

Tick all that apply.

- [ ] Given by the car company at the time of purchase (ખરીદતી વખતે કાર કંપની દ્વારા આપવામાં)
- [ ] Bought Third-party insurance (થર્ડ પાર્ટી વીમો ખરીદ્યો)
- [ ] Other: _____

Skip to question 33

HOME insurance (ઘર વીમો)

33. **Have you purchased HOME insurance?** (શું તમે હોમ વીમો ખરીદ્યો છે?) *

Mark only one oval.

- ◯ Yes (હા) *Skip to question 35*
- ◯ No (ના) *Skip to question 34*

No home insurance... (ઘરનો વીમો નથી..)

34. Your reason(s) for not purchasing HOME insurance policy (હોમ ઇન્શ્યોરન્સ પોલિસી ન ખરીદવા માટેનું તમારું કારણ) *

Tick all that apply.

- [ ] I Don't Have the Time to Buy Home Insurance (મારી પાસે હોમ ઈન્સ્યોરન્સ ખરીદવાનો સમય નથી)
- [ ] Home Insurance is Very Expensive (ઘરનો વીમો ઘણો ખર્ચાળ છે)
- [ ] Least Concerned About Natural Disasters (કુદરતી આફતો વિશે સૌથી ઓછી ચિંતા)
- [ ] Who will bear the Headache of the Claim Settlement Process? (ક્લેમ સેટલમેન્ટ પ્રક્રિયાની માથાકૂટ કોણ સહન કરશે?)
- [ ] I am a Tenant, Why Would I Need Home Insurance (હું ભાડૂત છું, મારે ઘર વીમાની જરૂર કેમ પડશે)
- [ ] No idea about home insurance (હોમ ઈન્સ્યોરન્સ વિશે કોઈ વિચાર નથી)

Skip to question 36

Home insurance information (ઘર વીમા માહિતી)

35. What kind of HOME insurance have you bought? (તમે કયા પ્રકારનો હોમ ઇન્શ્યોરન્સ ખરીદ્યો છે?) *

Tick all that apply.

- [ ] Building Insurance (Covers the structure of the home) (મકાન વીમો (ઘરની રચનાને આવરી લે છે))
- [ ] Contents Insurance (Covers personal belongings) (સામગ્રી વીમો (વ્યક્તિગત સામાન આવરી લે છે))
- [ ] Combined Building and Contents Insurance (સંયુક્ત મકાન અને સામગ્રી વીમો)
- [ ] Landlord Insurance (Covers damage to the building, including appliances and fixtures) (મકાનમાલિકનો વીમો (ઉપકરણો અને ફિક્સર સહિત મકાનને થતા નુકસાનને આવરી લે છે))
- [ ] Other: _____

Skip to question 36

Other General insurance policy.... (અન્ય સામાન્ય વીમા પૉલિસી....)

36. Which insurance policy do you have? (તમારી પાસે કઈ વીમા પૉલિસી છે?) *

Tick all that apply.

- [ ] Fire insurance (આગ વીમો)
- [ ] Crop insurance (પાક વીમો)
- [ ] Travel insurance (મુસાફરી વીમો)
- [ ] Commercial insurance (વ્યાપારી વીમો)
- [ ] Pet insurance (પાળેલું પ્રાણી વીમો)
- [ ] None(ખરીદ્યું નથી)
- [ ] Other: _____

37. Which Bite size insurance you have? (તમારી પાસે કયા ડંખના કદનો વીમો છે?) *

Tick all that apply.

- [ ] Bajaj Allianz General Insurance (બજાજ આલિયાન્ઝ જનરલ ઈન્સ્યોરન્સ)
- [ ] HDFC ERGO General Insurance (HDFC ERGO જનરલ ઈન્સ્યોરન્સ)
- [ ] Tata AIG General Insurance (ટાટા એઆઈજી જનરલ ઈન્સ્યોરન્સ)
- [ ] ICICI Lombard General Insurance (ICICI લોમ્બાર્ડ જનરલ ઈન્સ્યોરન્સ)
- [ ] SBI General Insurance (SBI જનરલ ઈન્સ્યોરન્સ)
- [ ] Digit Insurance (અંક વીમો)
- [ ] Acko General Insurance (અકો જનરલ ઈન્સ્યોરન્સ)
- [ ] Go Digit General Insurance (ગો ડિજીટ જનરલ ઈન્સ્યોરન્સ)
- [ ] None (ખરીદ્યું નથી)
- [ ] Other: _____

Appendix Section C: Statistical Tests, R Codes, and Their Use

Test Name	R Code	Use in Analysis
Chi-Square Test of Association	chisq.test(x, y)	Tests if two categorical variables are independent (large samples).
Fisher's Exact Test	fisher.test(x, y)	Tests the association between two categorical variables (small samples, expected frequency < 5).
Jonckheere-Terpstra Test	jonckheere.test(x~g) (from clinfun package)	Tests for ordered differences among three or more groups.
Wilcoxon Rank Sum Test (Mann-Whitney U Test)	wilcox.test(x ~ group)	Compares two independent groups on a continuous/ordinal variable (non-parametric alternative to t-test).
Kruskal-Wallis Test	kruskal.test(x ~ group)	Compares more than two independent groups on a continuous/ordinal variable (non-parametric alternative to ANOVA).
Goodman-Kruskal's Gamma Test	goodmankruskalGamma(x, y) (from DescTools package)	Measures the association strength between two ordinal variables.
Cramér's V	CramerV(x, y) (from lsr or DescTools package)	Measures the strength of association between two categorical variables (0 to 1 scale).
Proportion Test	prop.test(x, n)	Tests if proportions in one or more groups differ from expected values.
Pearson's Standardized Residuals	chisq.test(x)$stdres	Identifies which cells contribute most to a significant chi-square result.
Yule's Coefficient	YuleQ(x) (from psych package)	Measures the strength and direction of association between two binary (2×2) categorical variables.

Appendix Section D: References

1. Agresti, A. (2018). *Statistical Methods for the Social Sciences* (5th ed.). Pearson.
   (Covers Chi-square tests, Cramér's V, Goodman-Kruskal measures.)
2. Field, A., Miles, J., & Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications.
   (Good source for non-parametric tests like Wilcoxon, Kruskal-Wallis, Jonckheere-Terpstra.)
3. Siegel, S., & Castellan, N. J. (1988). *Nonparametric Statistics for the Behavioral Sciences* (2nd ed.). McGraw-Hill.
   (Classical reference for Wilcoxon, Kruskal-Wallis, and other non-parametric methods.)
4. R Core Team. (2024). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. Retrieved from https://www.R-project.org/
   (Reference for use of R software in statistical analysis.)
5. Harrell, F. E. (2015). *Regression Modeling Strategies: With Applications to Linear Models, Logistic and Ordinal Regression, and Survival Analysis* (2nd ed.). Springer.
   (Good reference for interpreting tests of association.)
6. DescTools Package Documentation. (2024). *CRAN - DescTools: Tools for Descriptive Statistics*. Retrieved from https://cran.r-project.org/package=DescTools
   (For Goodman-Kruskal's Gamma and Cramér's V in R.)
7. Dinno, A. (2017). *clinfun: Clinical Trial Design and Data Analysis Functions*. R package version 1.0.15. Retrieved from https://cran.r-project.org/package=clinfun
   (For Jonckheere-Terpstra Test in R.)

Selection of References

The references listed above were selected based on the specific non-parametric statistical methods and tests utilized during the project analysis. Priority was given to authoritative textbooks, peer-reviewed sources, and official R documentation directly related to the Chi-square test, Fisher's Exact Test, Jonckheere-Terpstra Test, Wilcoxon Rank Sum Test, Kruskal-Wallis Test, Goodman-Kruskal's Gamma, Cramér's V, Proportion Test, and Pearson's Standardized Residuals.