

CHOCOLATES

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OBJECTIVES

- **To analyze the consumers brand preferences for Chocolates**
- **To evaluate consumers attitude towards the usage of Chocolates**
- **To evaluate consumers perception about the important factors pertaining to Chocolates purchase decision**

HYPOTHESES

- **Sales of different brand of Chocolates are uniformly distributed i.e. there is no significant difference in the sales of different Chocolates brands.**
- **There is no significant difference among the consumers of Chocolates on the factors like age, gender etc towards their attitude about the usage of chocolate.**

- **Different factors which are important in the purchase decision of Chocolates for consumers do not differ significantly.**
- **There is no significant difference in the ranking of different chocolate brands by consumers**

HYPOTHESIS (1)

To test hypothesis 1, chi square test was applied.

<u>Brand</u>	<u>Count</u>
Cadbury	51
Nestle	23
Amul	17
Total	101

- **Chi square value (calculated) = 21.71**
- **Critical Chi square value (0.05, 2) = 5.995**
- **Chi square value (calculated) is greater than critical chi square value, hence hypothesis 1 is rejected and it can be concluded that sales of different brand of chocolates are not uniformly distributed**

HYPOTHESIS (2)

Hypothesis 2 (a): Consumers of the different age group do not differ significantly on their attitude towards consumption of chocolates.

To test this hypothesis ANOVA was applied with following results.

Anova Single Factor

<u>Groups</u>	<u>Count</u>	<u>Sum</u>	<u>Average</u>	<u>Variance</u>
<i>Under 18-25</i>	59	3443	58.35593	32.26768
<i>26-35</i>	19	1059	55.73684	26.539801
<i>36-45</i>	9	498	55.3333	40.5
<i>46-55</i>	7	398	56.85714	104.8095

Anova

<u>Source of Variation</u>	<u>SS</u>	<u>Df</u>	<u>F</u>	<u>P-value</u>	<u>F-crit.</u>
<i>Between Groups</i>	146.9119	3	1.334727	0.268099	2.705838
<i>Within Groups</i>	3302.067	90			
<i>Total</i>	3448.979	93			

Since F calculated is less than F critical at 95% significance level, hence Null hypothesis is accepted.

So, it can be concluded that consumes of the different age group do not differ significantly on their attitude towards consumption of chocolates.

Hypothesis 2 (b): Male and female consumers do not differ significantly in their attitude towards consumption of chocolate

To test this hypothesis z test was applied with following results

Contd.....

	<u>Mean</u>	<u>n</u>	<u>Z value</u>	<u>Z-critical</u>	<u>Result</u>
<i>Male</i>	57	49	-0.706	1.95	<i>Insignificant</i>
<i>Female</i>	57.88	45			<i>Accept the null hypothesis</i>

Since the calculated z value is less than z critical (two tailed) at .05 significance level, hence null hypothesis is accepted and it can be said that there is no significant difference in the attitude of male and female consumers on their attitude towards consumption of chocolates

Hypothesis 2 (c): Married and unmarried consumers do not differ significantly in their attitude towards consumption of chocolate.

To test this hypothesis z test was applied with following results

	<u>Mean</u>	<u>N</u>	<u>Z value</u>	<u>Z critical</u>	<u>Result</u>
<i>Married</i>	56.61	36	-0.99	1.95	Insignificant
<i>Unmarried</i>	57.93	58			Accept the null hypothesis

Since the calculated z value is less than z critical (two tailed) at .05 significance level, hence null hypothesis is accepted and it can be said that there is no significant difference in the attitude of married and unmarried consumers on their attitude towards consumption of chocolates

HYPOTHESIS (3)

Different factors which are important in the purchase decision of Chocolates for consumers do not differ significantly

To test this hypothesis ANOVA was applied with following results

Anova Single Factor

<u>Groups</u>	<u>Count</u>	<u>Sum</u>	<u>Average</u>	<u>Variance</u>
<i>Price</i>	94	394	4.191489	0.737131
<i>Brand</i>	94	420	4.468085	0.509723
<i>Taste</i>	94	421	4.478723	0.617822
<i>Package Design</i>	94	353	3.755319	1.004004

ANOVA						
<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P-value</u>	<u>F crit</u>
<i>Between Groups</i>	32.44681	3	10.8156	15.08095	2.78E-09	2.628903
<i>Within Groups</i>	266.7872	372	0.71717			
<i>Total</i>	299.234	375				

Since F calculated is greater than F critical at 95% significance level,

hence Null hypothesis is rejected.

So, it can be concluded that different factors which are important in the purchase decision of Chocolates for consumers differ significantly

HYPOTHESIS (4)

There is no significant difference in the ranking of different chocolate brands by consumers.

To test this hypothesis, Friedman Test of Non – Parametric statistic was applied

**Chi square value (calculated by Friedman equation)
= 34.10**

Critical Chi square value (0.05, 2) = 5.995

Chi square value (calculated) is greater than critical chi square value, hence this hypothesis is rejected and it can be concluded that there is significant difference in the ranking of different chocolate brands by consumers

DESCRIPTIVE STATISTICS ANALYSIS

Most popular brand:

Cadbury

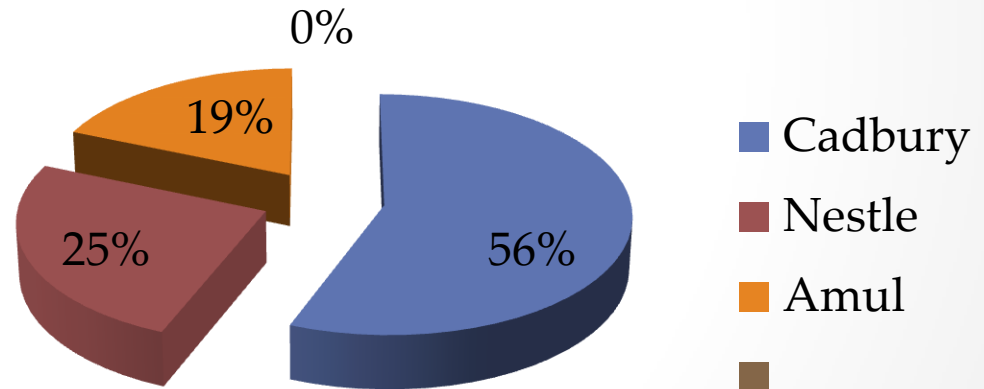
<u>Brand</u>	<u>Count</u>
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• Cabdury	51
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• Nestle	23
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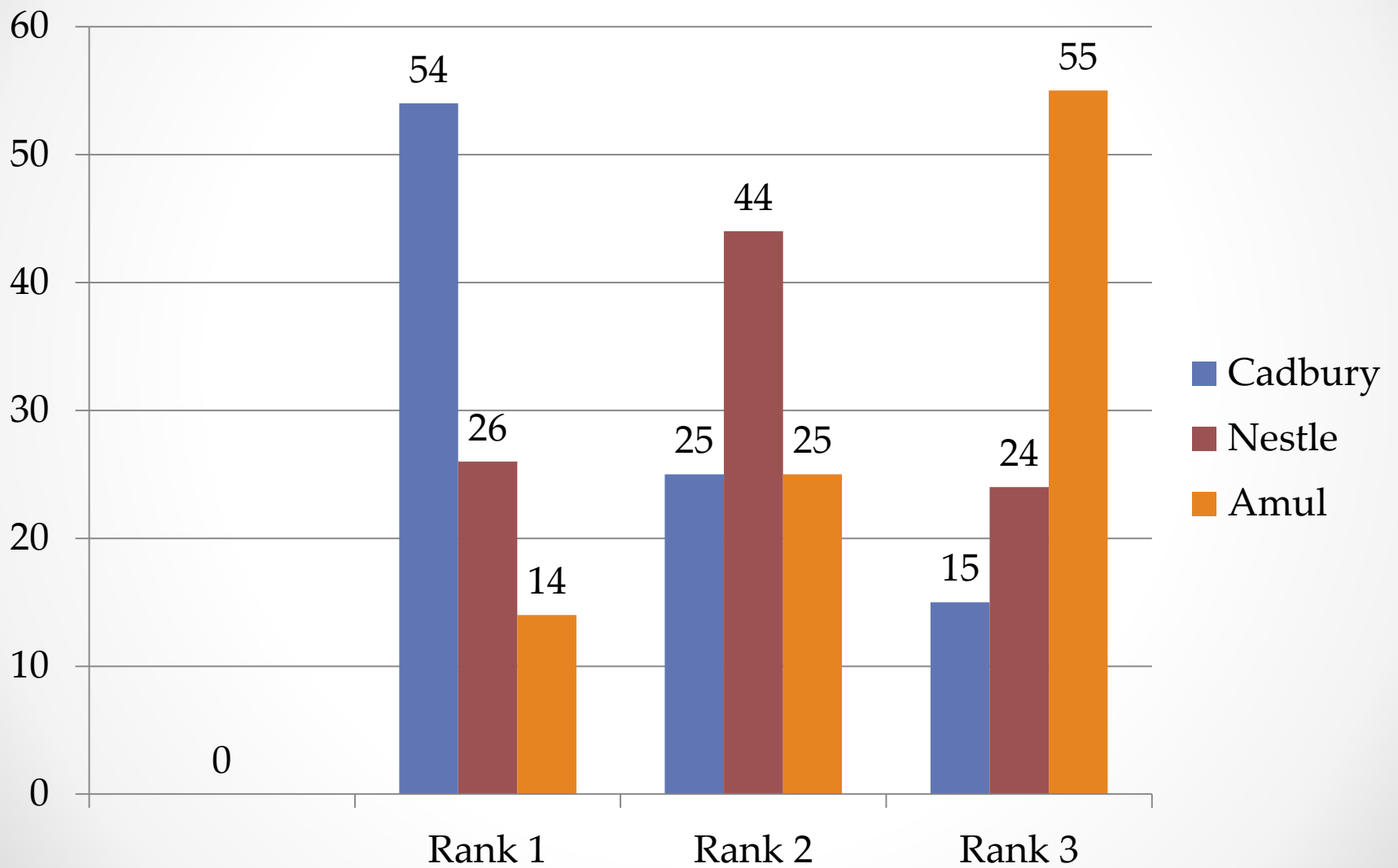
• Amul	17
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Total	91
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RANKING PERFORMANCE

	Cadbury	Nestle	Amul
<i>Rank</i> <i>1</i>	54	26	14
<i>Rank</i> <i>2</i>	25	44	25
<i>Rank</i> <i>3</i>	15	24	55

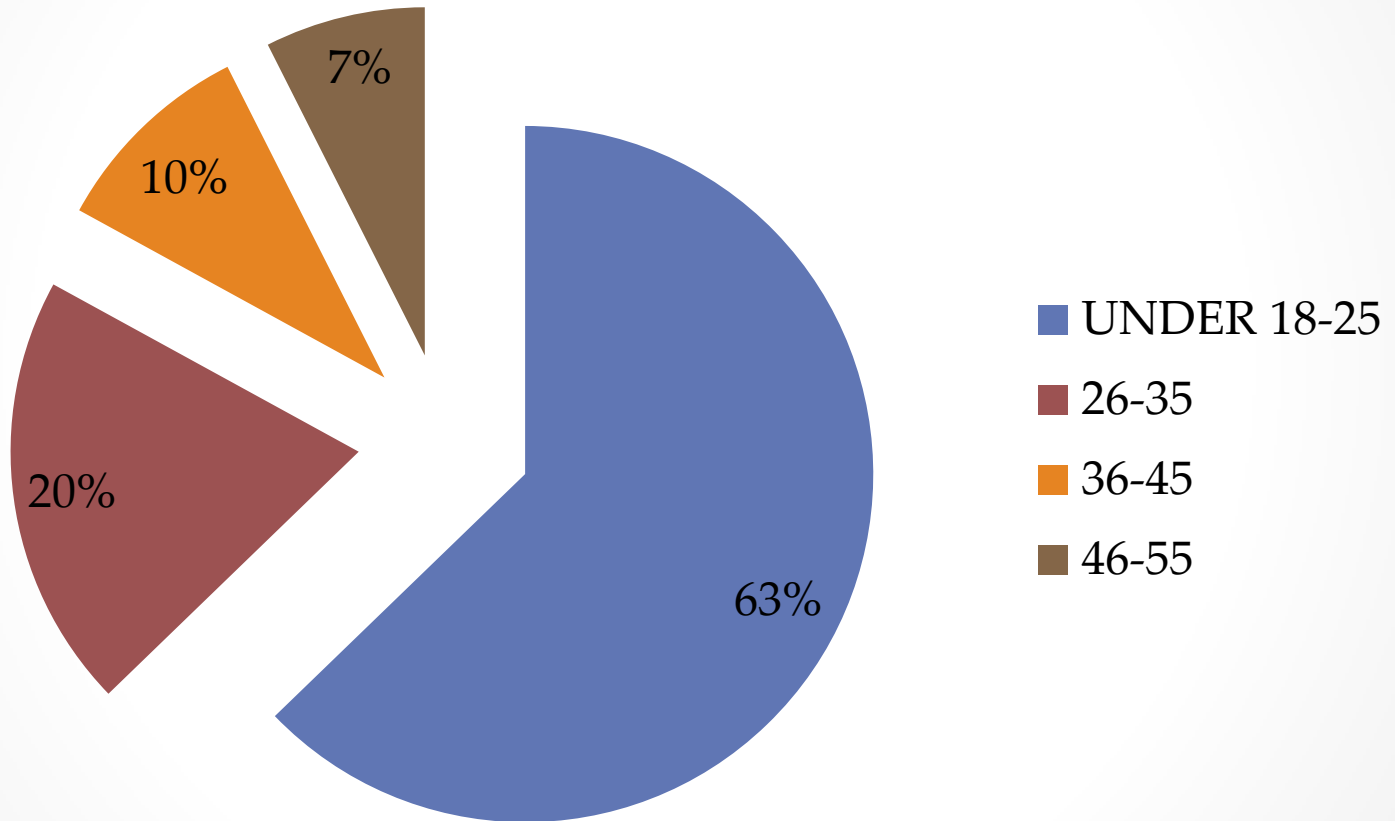


CONSUMER PROFILE

AGE PROFILE

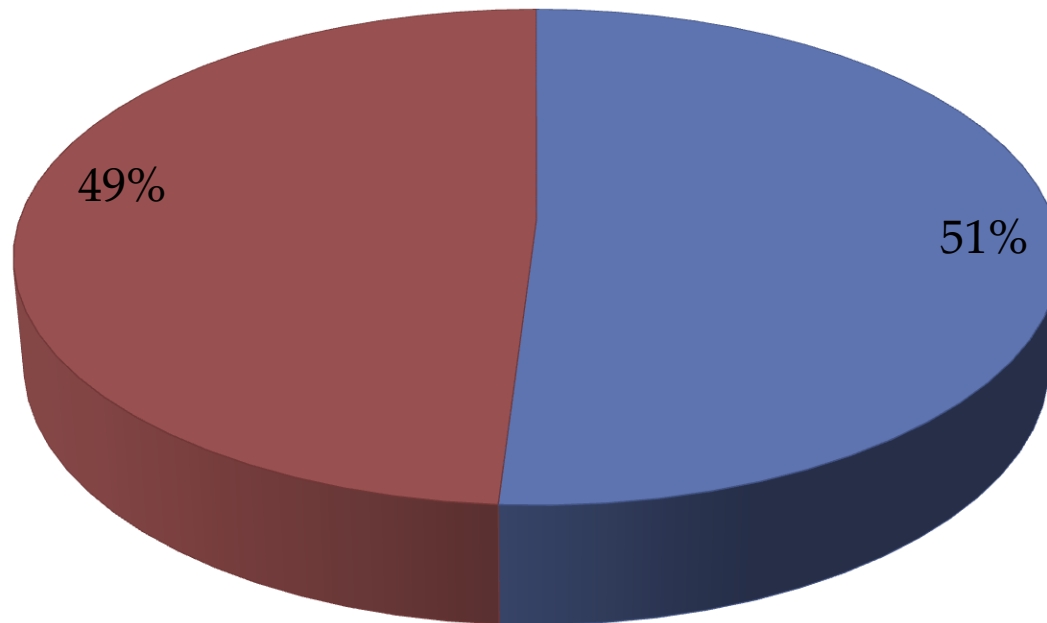
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UNDER 18-25	59
26-35	19
36-45	9
46-55	7

Age Profile

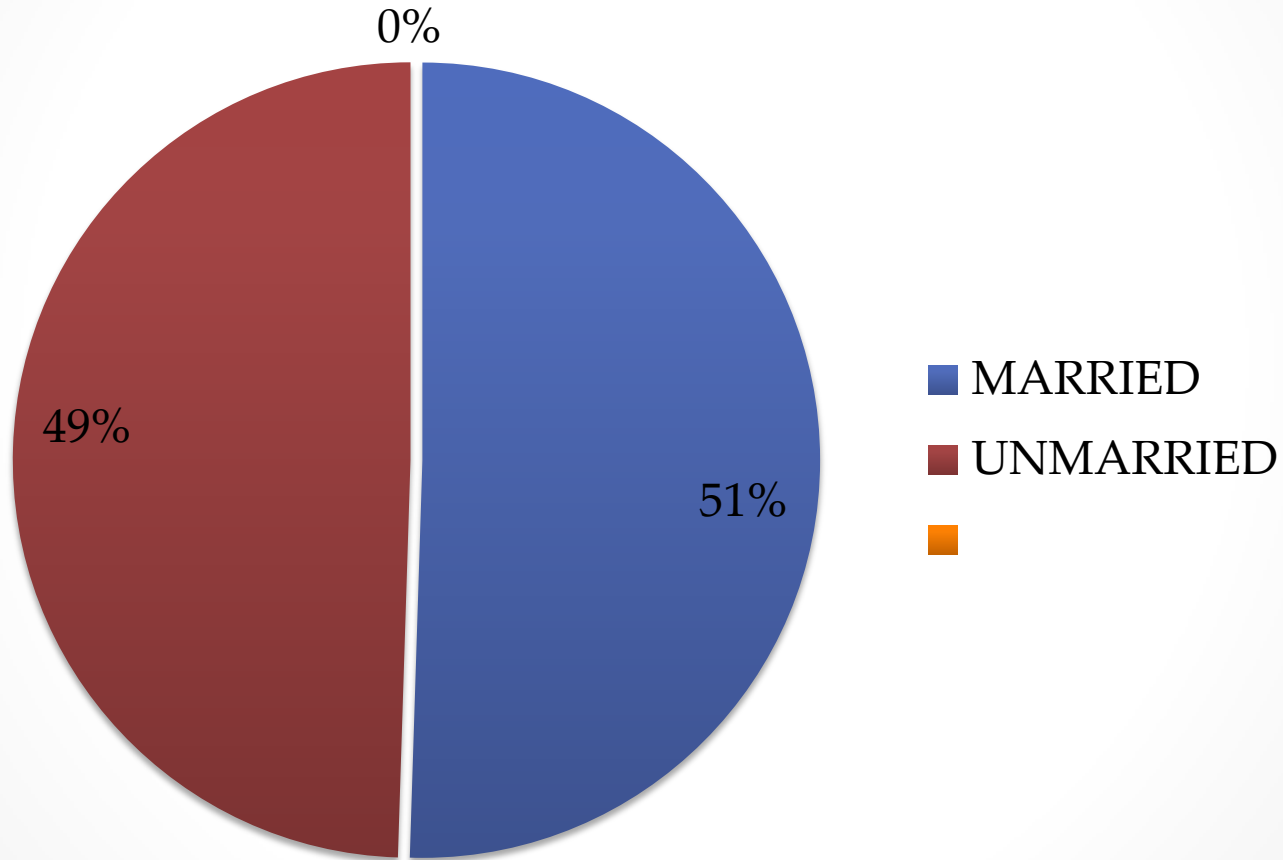


GENDER

■ MALE ■ FEMALE

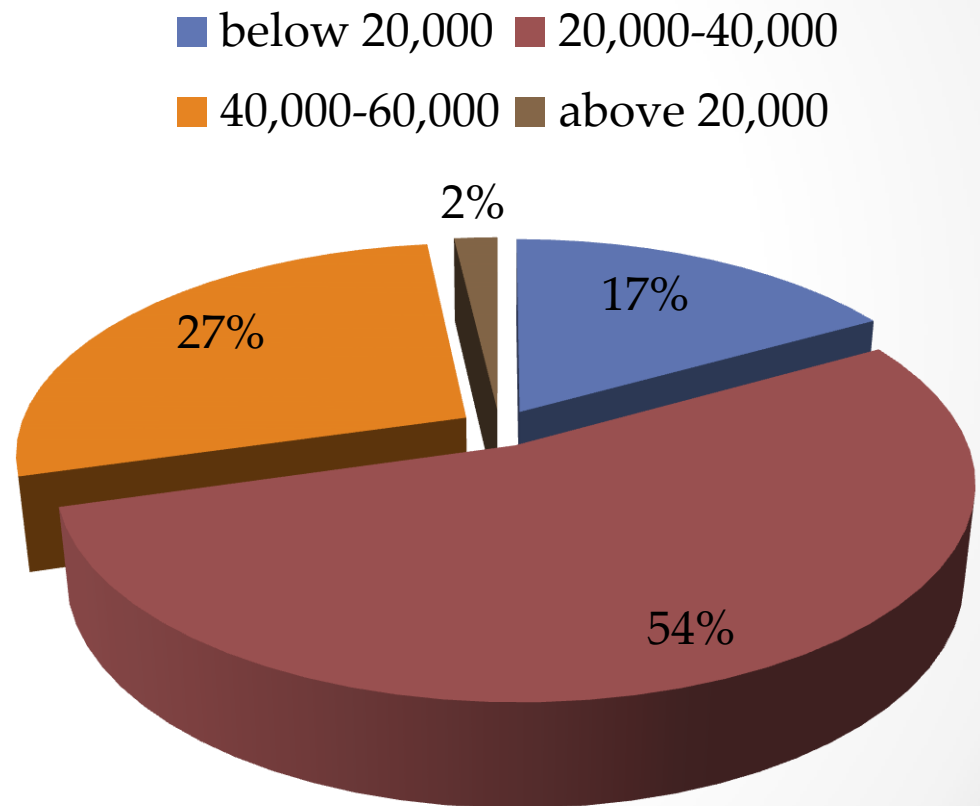


Marital status



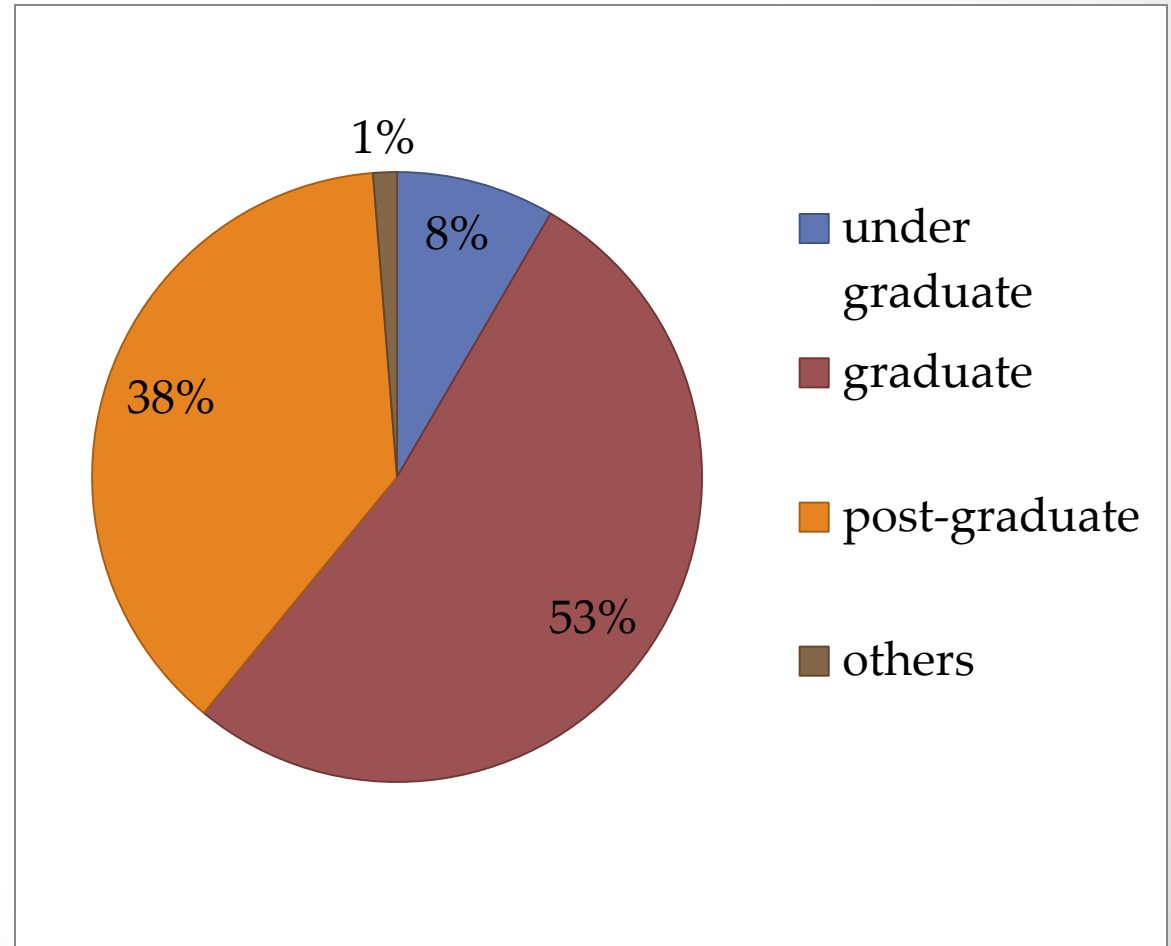
Monthly family income(R s.)

Below 20,000	11
20,000-40,000	35
40,000-60,000	18
Above 20,000	31



Educational qualifications

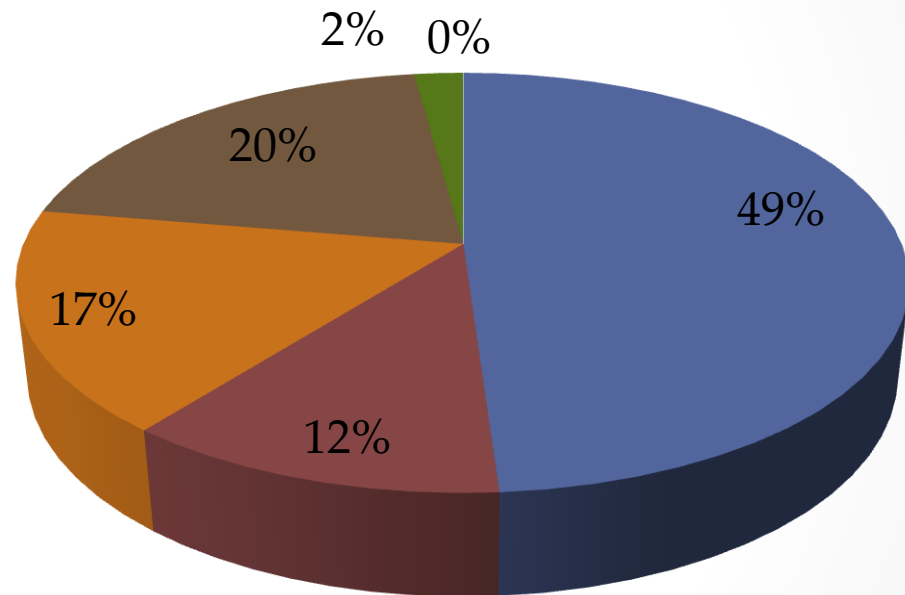
Under graduate	8
Graduate	50
Post-graduate	36
others	0



OCCUPATION

STUDENT	46
SERVICE	11
BUSINESS	16
PROFESSIONALS	19
OTHERS	2

■ students ■ service ■ bsiness
■ professionals ■ others ■



THANKYOU