

PRESENTATION ON WASHING MACHINES



**LALIT SHARMA
MANSI GOEL
MAYANK JINDAL
MOHIT KUMAR
RAJAT GULATI
GROUP-19
MBA – 1st YEAR**

OBJECTIVES

1. To analyze the consumers brand preferences for Washing Machines.
2. To evaluate consumers attitude towards the usage and utility of Washing Machines.
3. To evaluate consumers perception about the important factors pertaining to Washing Machines purchase decision.

HYPOTHESES

1. Sales of different brand of Washing Machines are uniformly distributed i.e., there is no significant difference in the sales of different Washing Machines brands.
2. There is no significant difference among the consumers of Washing Machines on the factors like age, gender etc. towards their attitude about the usage of washing machine.
3. Different factors which are important in the purchase decision of Washing Machines for consumers do not differ significantly.

- Hypothesis 1: Sales of different brand of washing machines are uniformly distributed i.e., there is no significant difference in the sales of different Washing Machine brands.
- To test hypothesis 1, chi square test was applied.

BRAND	COUNT
SAUMSUNG	29
LG	24
WHIRLPOOL	18
IFB	5
HAIER	2
BOSCH	1
GODREJ	0
VIDEOCON	2
ONIDA	0
PANASONIC	10

CONCLUSION 1:

- ❖ Chi square value (calculated) = 109.31
- ❖ Critical Chi square value (0.05, 10) = 18.3
- ❖ 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 Washing Machines are not uniformly distributed**

Hypothesis 2:

Hypothesis 2 (a): Male and female consumers do not differ significantly on their attitude towards the usage and utility of washing Machines.

To test this hypothesis **z test** was applied with following results

	Mean	n	Z value	Z value critical at .05 and 125 df	Result
Male	54.43	44	2.61	1.95	Significant Reject the null hypothesis
Female	51.95	49			

Conclusion 2(a):

Since the calculated z value is greater than z critical (two tailed) at .05 significance level, hence null hypothesis is **rejected** and it can be said that **there is significant difference in the attitude of male and female consumes on their attitude towards the usage of Washing Machines**

Hypothesis 2 (b): Married and Unmarried consumers do not differ significantly on their attitude towards the usage and utility of washing Machines.

To test this hypothesis **z test** was applied with following results

	Mean	n	Z value	Z value critical at .05 and 125 df	Result
Married	53.6	56	1.23	1.95	Insignificant
Unmarried	52.4	37			Accept the null hypothesis

CONCLUSION 2(b) :

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 Married and Unmarried consumers do not differ significantly on their attitude towards the usage and utility of washing Machines.**

Hypothesis 2 (c): Consumers of different income group do not differ significantly towards the usage of Washing Machines.

To test this hypothesis **ANOVA** was applied with following results

ANOVA : Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
Below 20,000	17	929	54.64706	27.49265
20,000-40,000	45	2375	52.77778	20.90404
40,001-60,000	17	912	53.64706	19.49265
Above 60,000	14	725	51.78571	22.33516

SUMMARY						
Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P-value</u>	<u>F crit</u>
Between Groups	74.55199	3	24.85066	1.12733	0.342414	2.706999
Within Groups	1961.9	89	22.04382			
Total	2036.452	92				

Conclusion 2(c):

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

So, it can be **concluded** that consumers of different income group do not differ **significantly** towards the usage of Washing Machines.



Hypothesis 2 (d): Consumers holding different occupation do not differ significantly towards the usage of Washing Machines.

To test this hypothesis **ANOVA** was applied with following results

ANOVA: Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
Student	25	1315	52.6	16.25
Housewife	31	1622	52.32258	23.35914
Service	13	692	53.23077	26.19231
Business	13	709	54.53846	31.76923
Professionals	11	603	54.81818	16.56364

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	84.50259	4	21.12565	0.952411	0.437815	2.475277
Within Groups	1951.949	88	22.18124			
Total	2036.452	92				

Conclusion 2(d) :

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

So, it can be concluded that consumers involved in different occupation do not differ significantly towards the usage of Washing Machines.



Hypothesis 3: Different factors which are important in the purchase decision of Washing Machines for consumers do not differ significantly among them

To test this hypothesis **ANOVA** was applied with following results

ANOVA: Single Factor

SUMMARY						
Groups		Count	Sum	Average	Variance	
Price		95	2178	22.92632	174.5158	
Status Symbol		95	647	6.810526	62.87861	
Brand Name		95	1552	16.33684	74.58746	
Technology		95	1993	20.97895	193.0847	
Offers and Discounts		95	840	8.842105	40.51736	
Features		95	1533	16.13684	101.3534	
Recommendation by friend/Family		95	757	7.968421	35.5841	
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	23988.7	6	3998.117	41.00505	1.68E-42	2.112341
Within Groups	64157.01	658	97.50306			
Total	88145.71	664				

Conclusion 3:

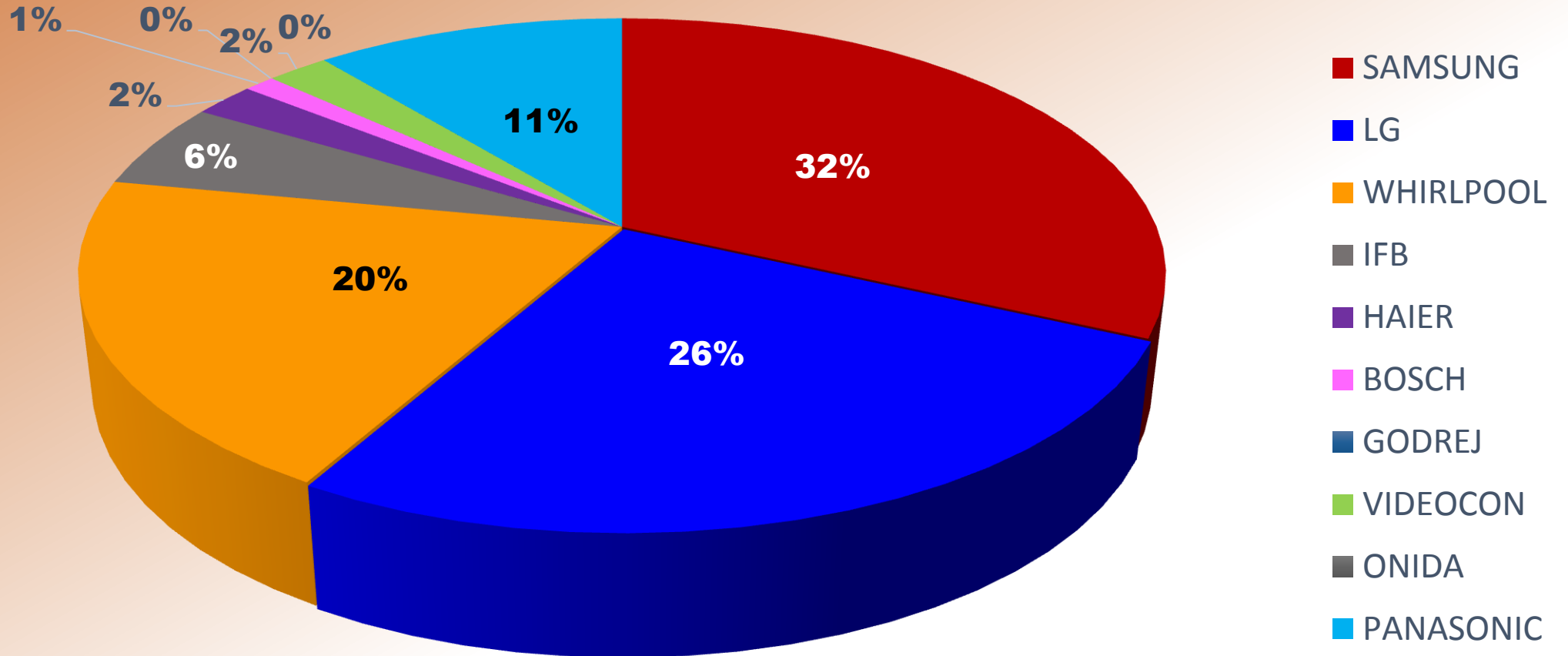
Since F calculated is greater than F critical at 95% significance level, hence Null hypothesis is **rejected**.

So it can be concluded that different factors which are important in the purchase decision of Washing Machines differ significantly among consumers.

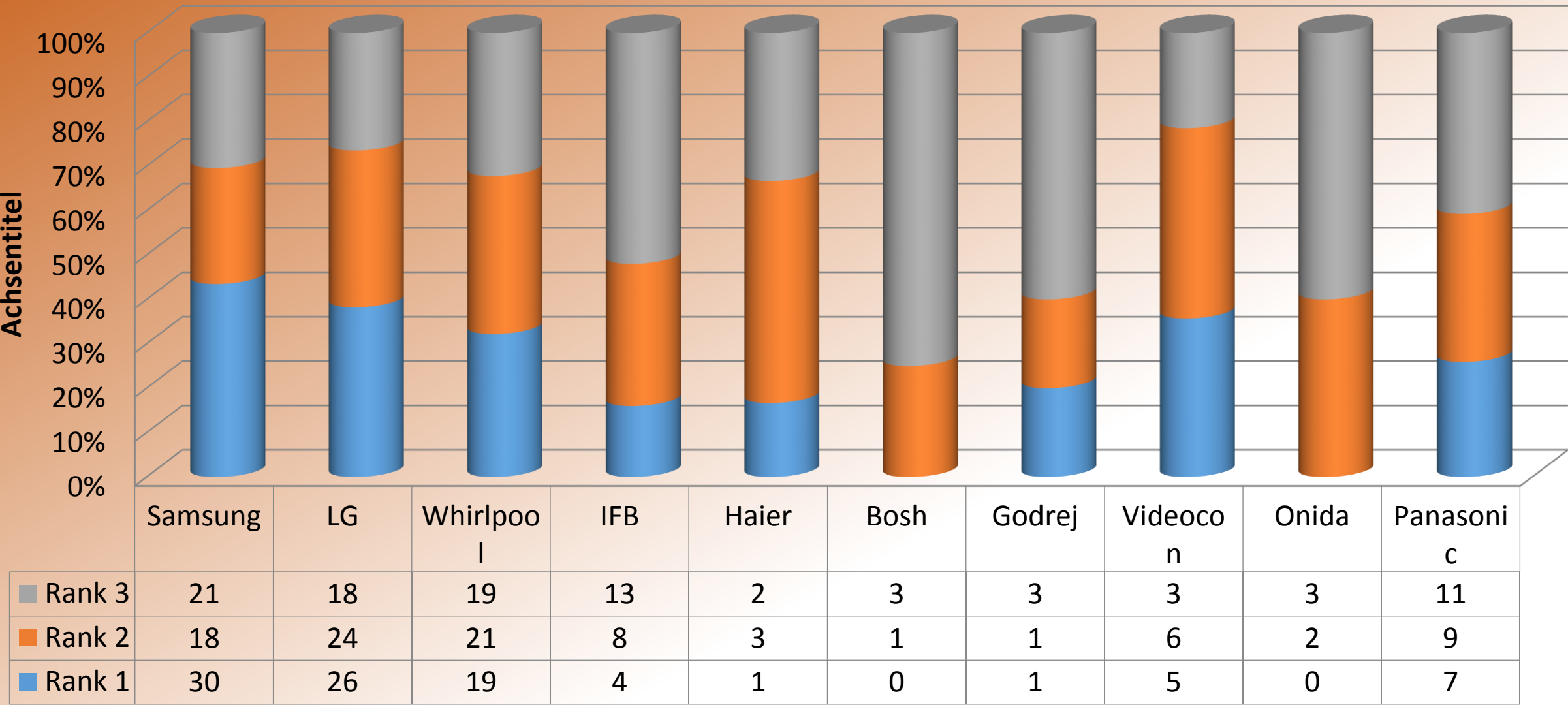


DESCRIPTIVE STATISTICS ANALYSIS

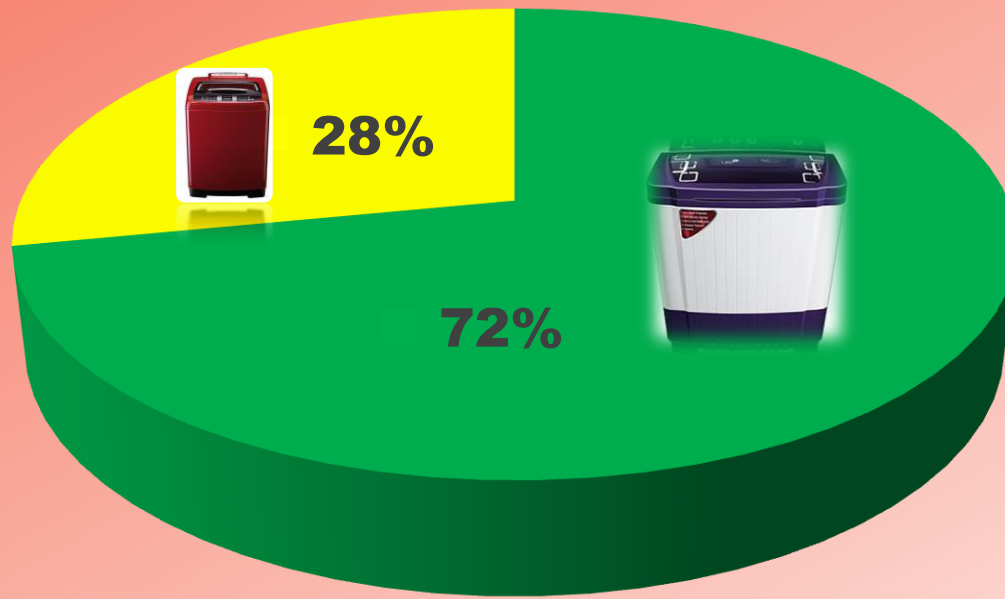
MOST POPULAR BRAND



RANKING OF DIFFERENT MACHINES

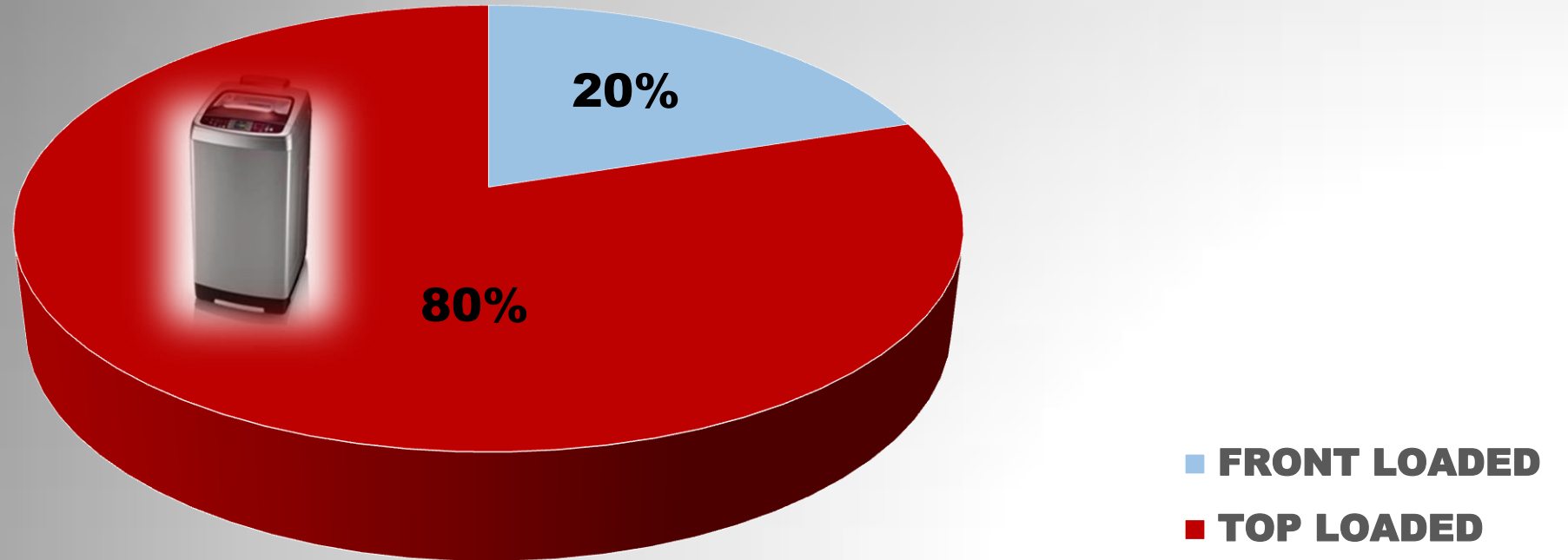


Which type of washing machine do you have?

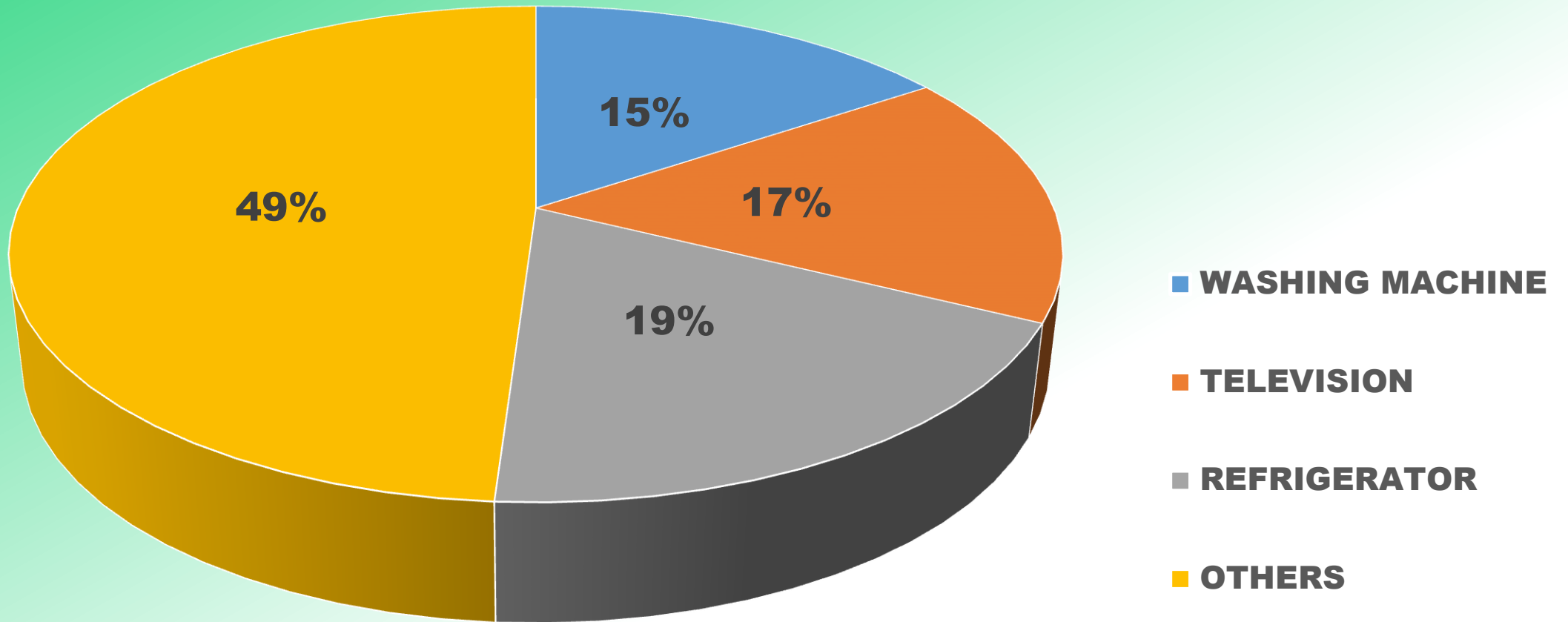


■ **SEMI AUTOMATIC**
■ **FULLY AUTOMATIC**

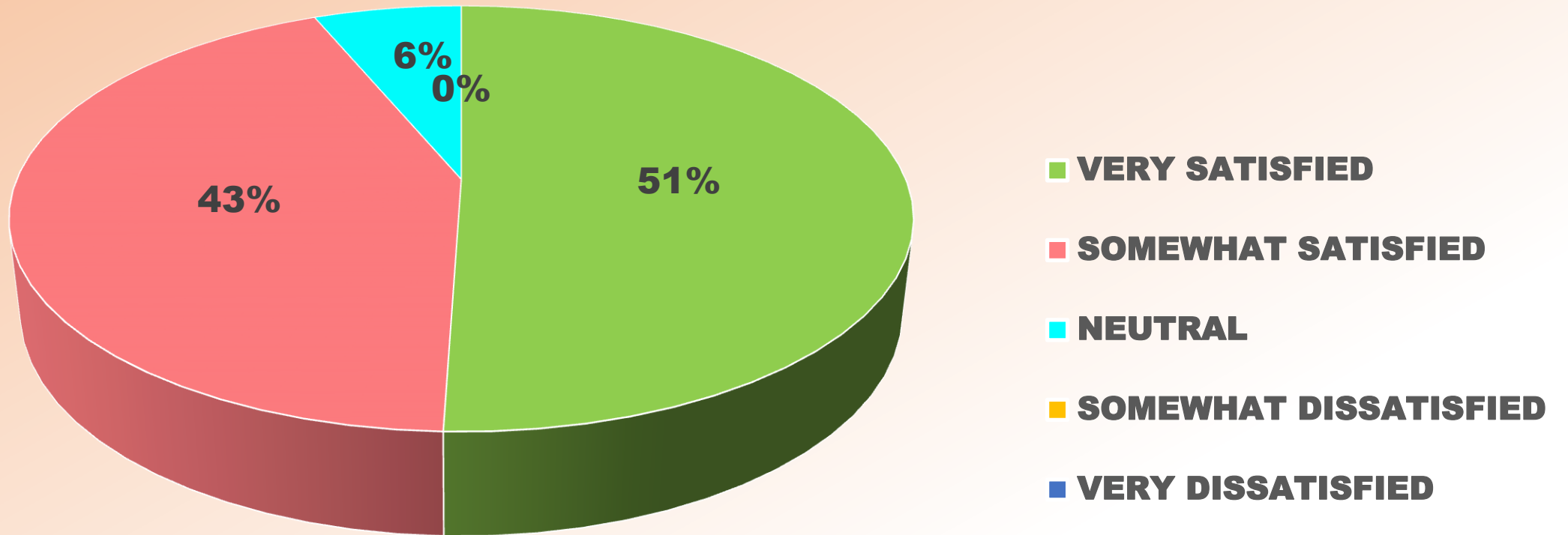
Which type of washing machine do you have?



If you have extra money, what would you prefer to buy first amongst the following products



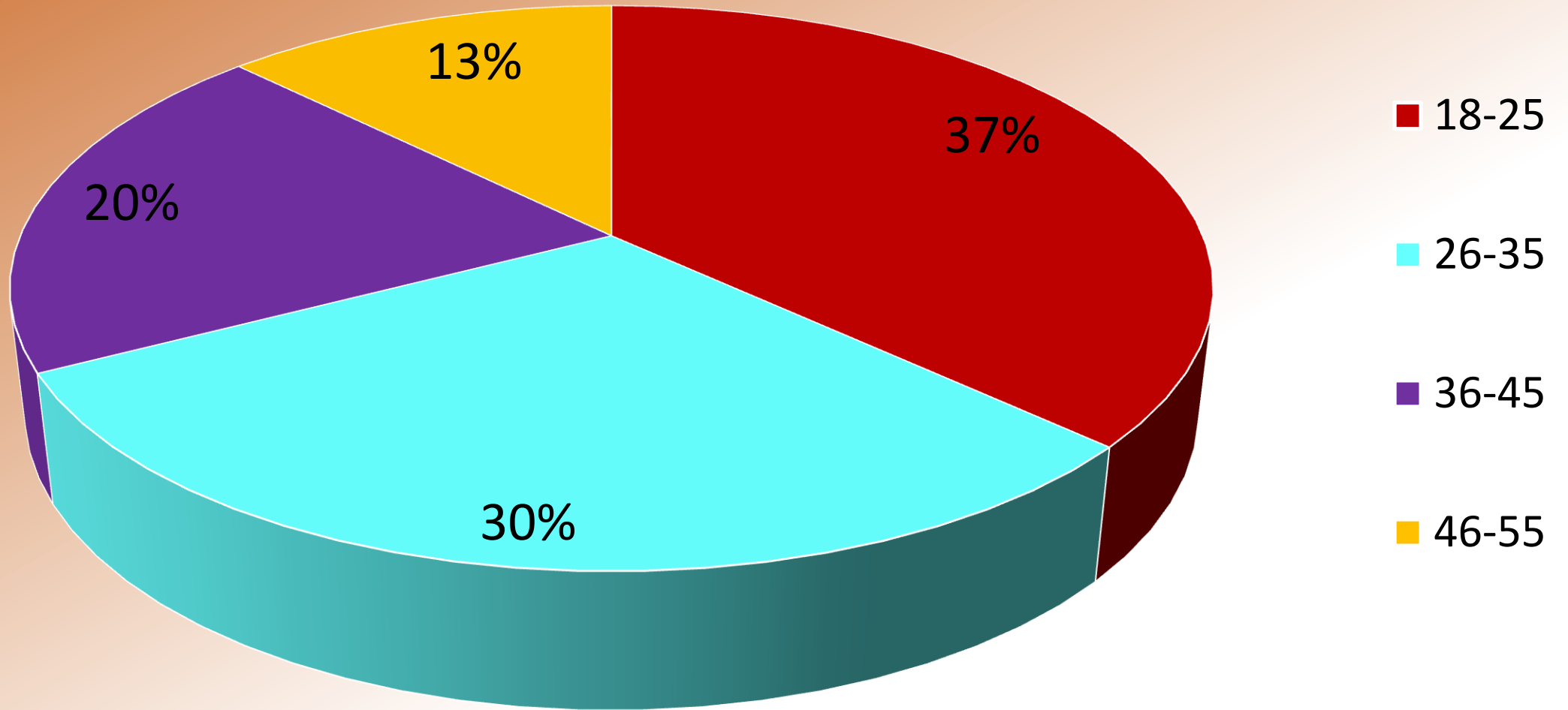
How satisfied are you with the performance of your current Washing Machine?



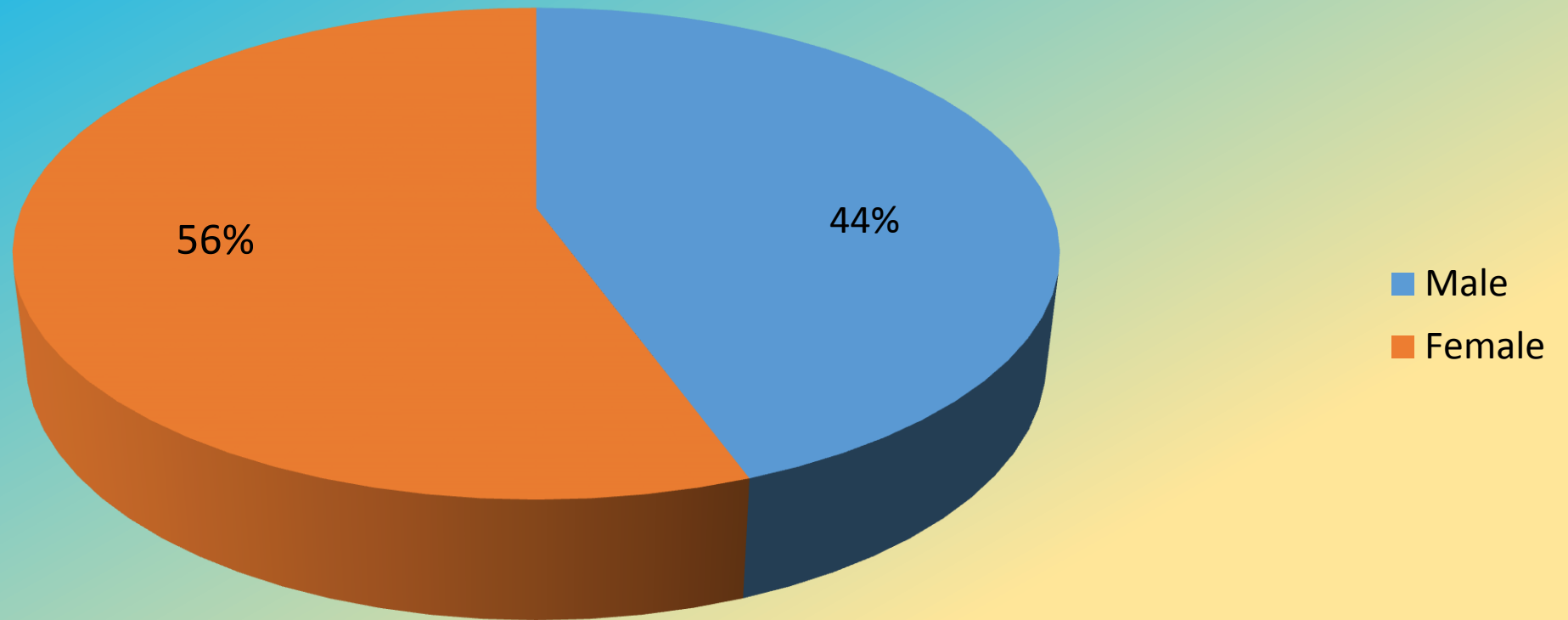


CUSTOMER PROFILE

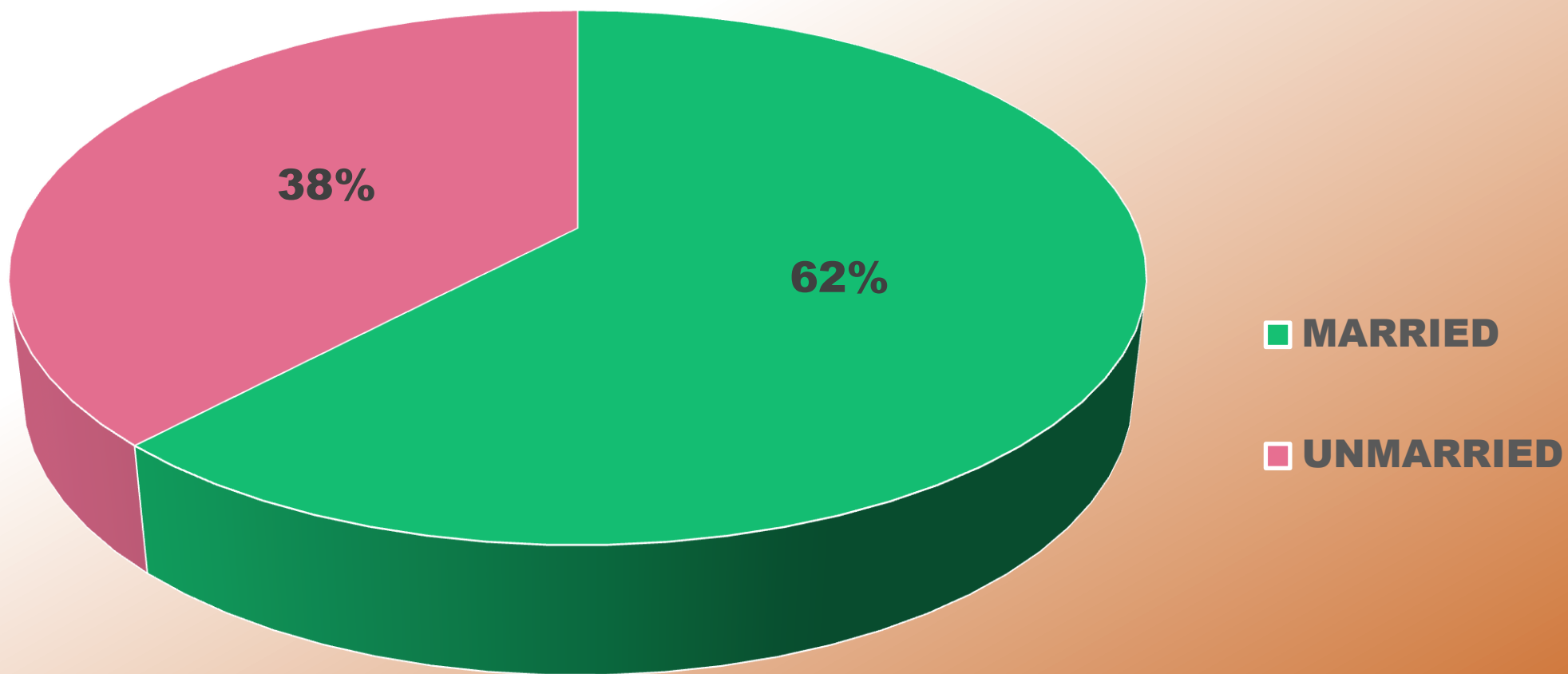
AGE PROFILE



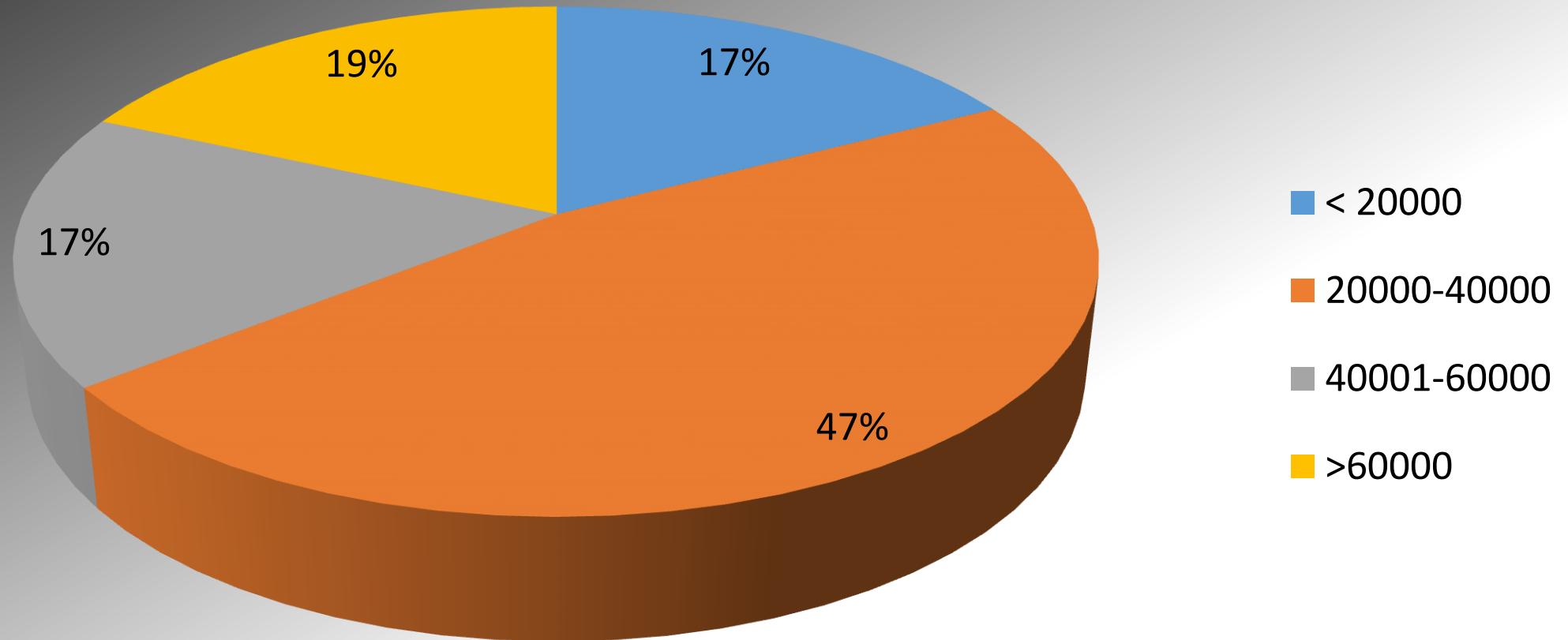
GENDER



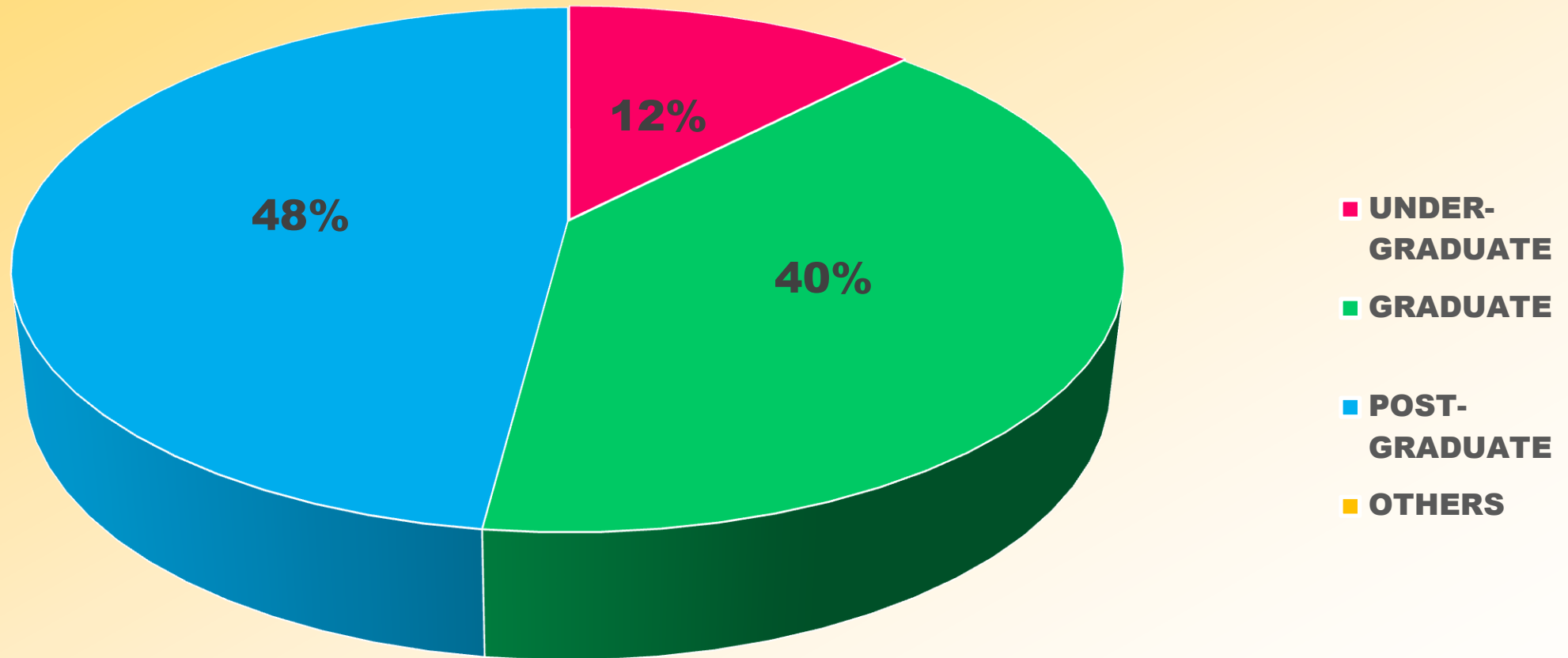
MARITAL STATUS



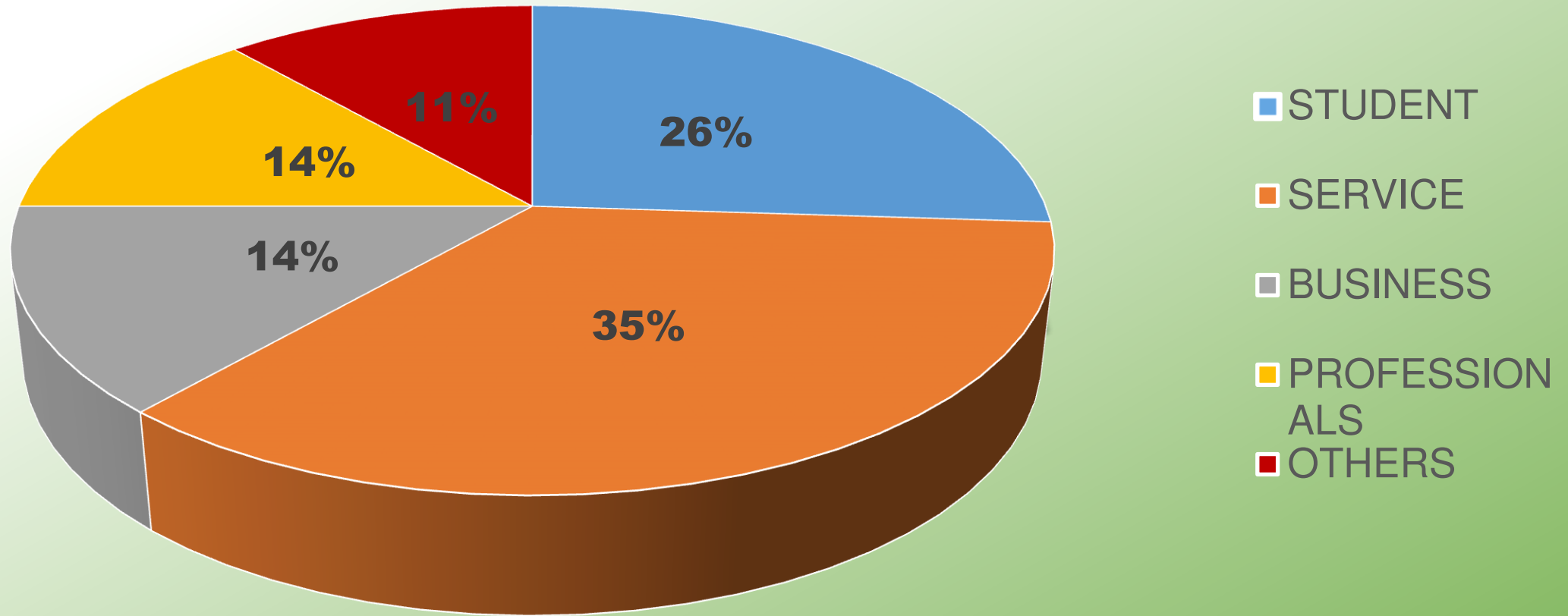
MONTHLY FAMILY INCOME



EDUCATIONAL QUALIFICATION



OCCUPATION



THANK
YOU

