

# HAIR OIL

PRESENTED BY-  
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# OBJECTIVES

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

# HYPOTHESES

1. Sales of different brands of hair oil are uniformly distributed
2. There is no significant difference among the consumers on the factors like age, gender, and occupation etc towards their attitude about the usage of hair oil.
3. Different factors which are important in the purchase decision of hair oil for consumers do not differ significantly.
4. Male and Female consumers differ significantly in their perceived importance about the different factors which help them purchase hair oil
5. Male and Female consumers differ significantly in their perceived importance about the different sources of information which help them purchase hair oil

Hypothesis 1: Sales of different brands of hair oil are uniformly distributed

To test hypothesis 1, chi square test was applied.

Brand	Count
Parachute	31
Keokarpin	33
Bajaj Almond hair oil	20
Dabar Amla	12
Dabar Vatika	2

Chi square value (calculated) = 34.55

Critical Chi square value (0.05, 4) = 9.49

Chi square value (calculated) is greater than critical chi square value, hence hypothesis is rejected and it can be concluded that Sales of different brands of hair oil are uniformly distributed.

Hypothesis 2(a): There is no significant difference among the consumers of different age groups towards their attitude about the usage of hair oil.  
 To test this hypothesis ANOVA was applied with following results

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Under 18 - 25	40	2105	52.625	42.08654		
26-35	26	1324	50.92308	29.91385		
36-45	14	686	49	16.15385		
46-55	6	292	48.66667	56.66667		
Above 56	12	627	52.25	8.931818		

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	199.971	4	49.99276	1.559756	0.191595	2.469595
Within Groups	2980.804	93	32.05166			
Total	3180.776	97				

## CONCLUSION

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

So, it can be concluded that there is no significant difference among the consumers of different age groups towards their attitude about the usage of hair oil

**Hypothesis 2(b):** Male and female consumers do not differ significantly on their attitude about the usage of hair oils.

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	50.68	44	-1.1	1.95	Insignificant Accept the null hypothesis
Female	51.92	54			

## CONCLUSION

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 among the male and female consumers towards their attitude about the usage of hair oils.

**Hypothesis 2(c):** There is no significant difference among the consumers of different occupation towards their attitude about the usage of hair oil.

To test this hypothesis ANOVA was applied with following results

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Student	16	839	52.4375	26.92917		
Housewife	26	1318	50.69231	53.18154		
Service	32	1626	50.8125	27.125		
Business	16	842	52.625	20.11667		
Professionals	8	409	51.125	34.125		



ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	65.79955	4	16.44989	0.491124	0.742235	2.469595
Within Groups	3114.976	93	33.49437			
Total	3180.776	97				

## CONCLUSION

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

So, it can be concluded that there is no significant difference among the consumers of different holding different occupations towards their attitude about the usage of hair oil

**Hypothesis 3** : Different factors which are important in the purchase decision of hair oil for consumers do not differ significantly.

To test this hypothesis ANOVA was applied with following results

Anova: Single Factor				
SUMMARY				
Groups	Count	Sum	Average	Variance
Reduces hair fall	98	368	3.755102	1.238376
Easy to use	98	307	3.132653	1.353356
Price	98	322	3.285714	1.340206
Dandruff protection	98	329	3.357143	1.448454
Renders shine to hair	98	308	3.142857	1.525773
Quality and purity of the hair oil	98	318	3.244898	1.279613
Non Stickiness of the hair oil	98	305	3.112245	1.214075
Brand name	98	286	2.918367	1.498422

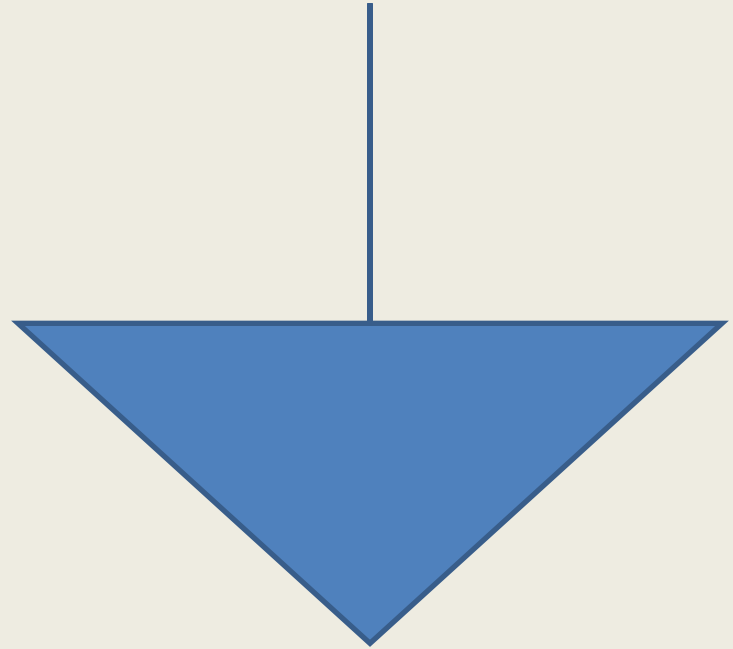
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	41.33546	7	5.905066	4.334679	0.000101	2.021362
Within Groups	1057.133	776	1.362284			
Total	1098.468	783				

## CONCLUSION

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

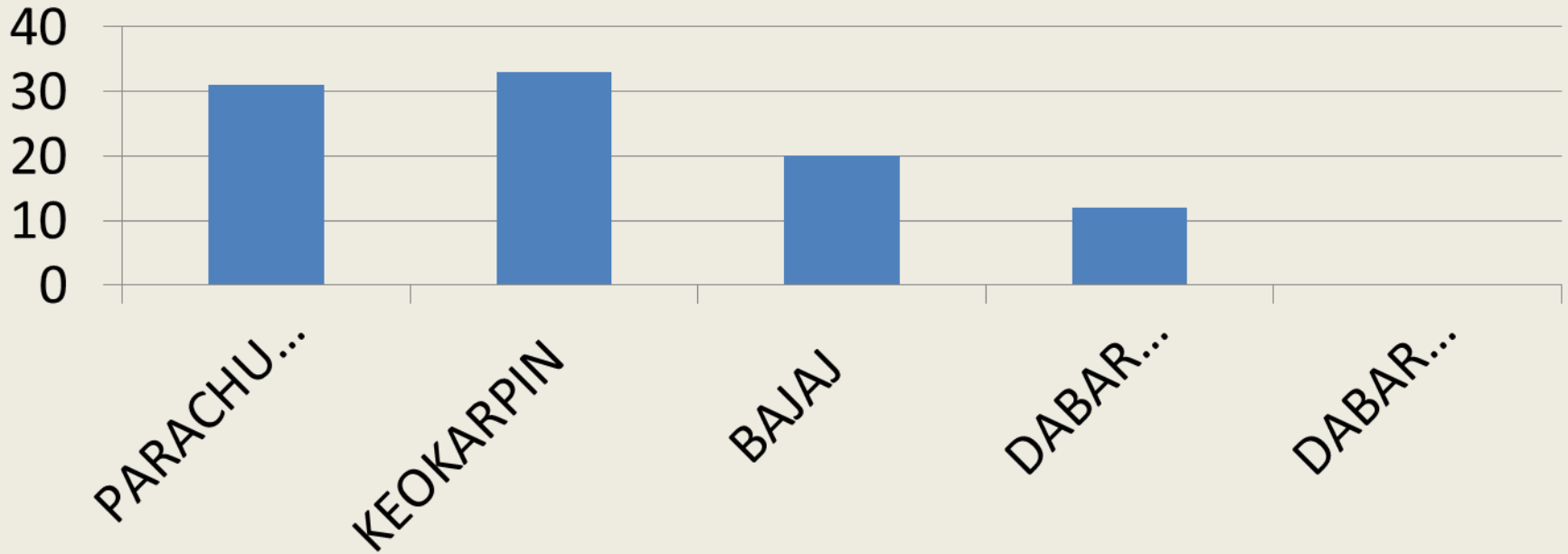
So, it can be concluded that different factors hold different importance in the purchase decision of hair oils.

# DISCRIPTIVE ANALYSIS



# 1. Most popular brand: Keokarpin

Brand	Count
Parachute	31
Keokarpin	33
Bajaj Almond hair oil	20
Dabar Amla	12
Dabar Vatika	2



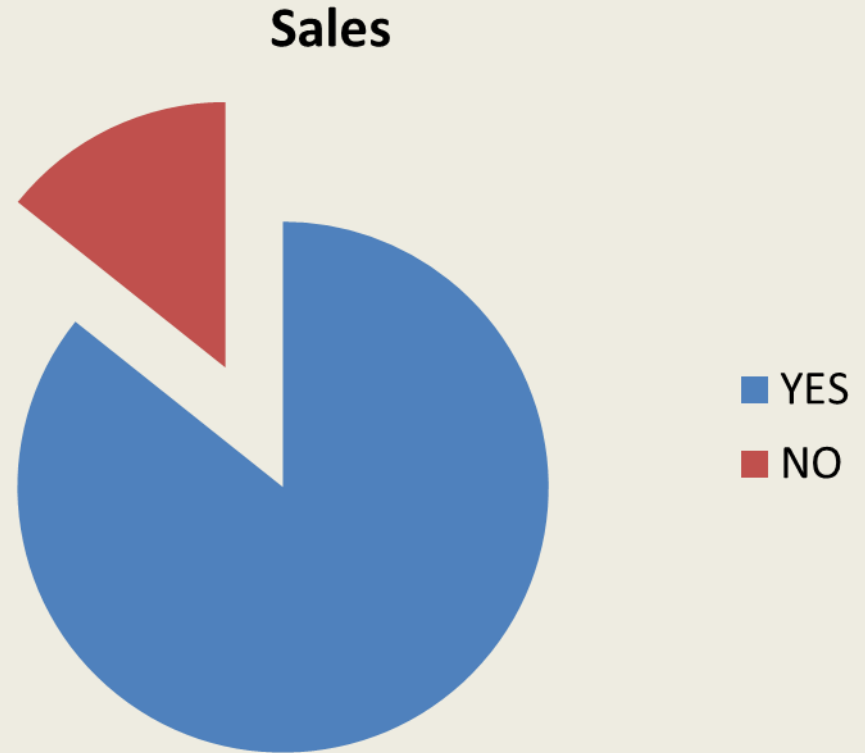
## 2. Importance of Factors (Comparison of male & Female consumers)

	Family Recommendations	Doctors/ beauty clinics	Friends and colleagues	TV advertisements	Magazines and Print Media	Promotion campaigns	Internet blogs and articles
Male	133	146	135	132	114	114	125
Female	178	182	161	151	160	144	165

Total Score	Reduces hair fall	Easy to use	Price	Dandruff protection	Renders shine to hair	Quality and purity of the hair oil	Non Stickiness of the hair oil	Brand name
Male	165	142	137	143	132	140	135	126
Female	203	165	185	186	176	178	170	160

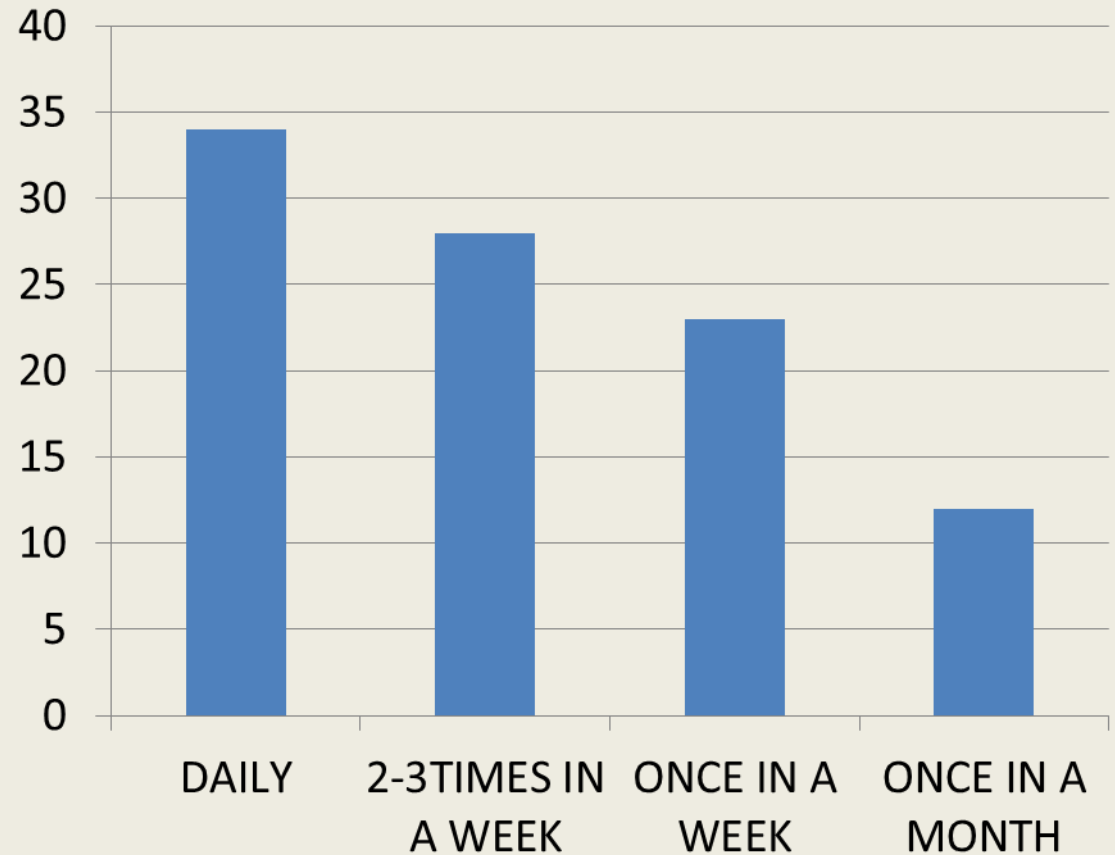
### 3. Do you use hair oil?

Response	Count
Yes	84
No	14



# . How many times do you apply oil?

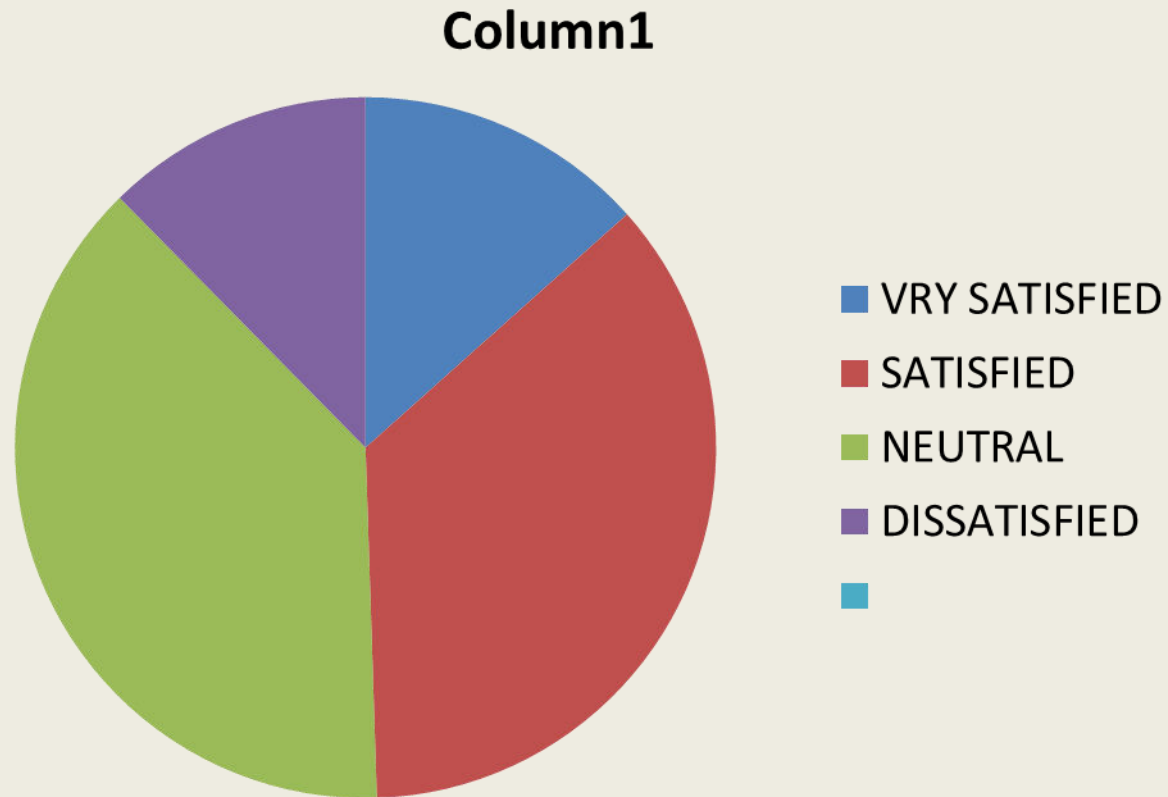
Times	Count
Daily	34
2-3 times in a week	28
Once in a week	23
Once in a month	12



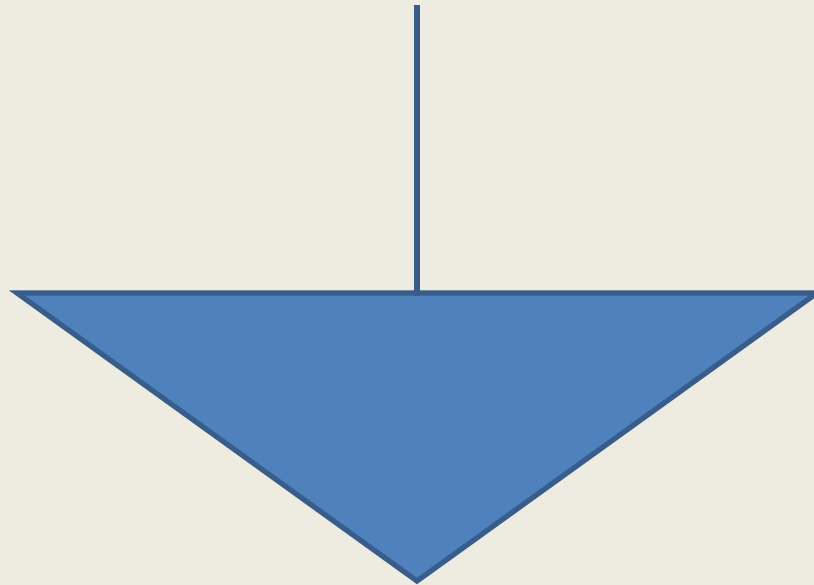


# Overall, are you satisfied with the current hair oil brand you are using?

Satisfaction Level	Count
Very Satisfied	13
Satisfied	35
Neutral	37
Dissatisfied	12
Very Dissatisfied	1

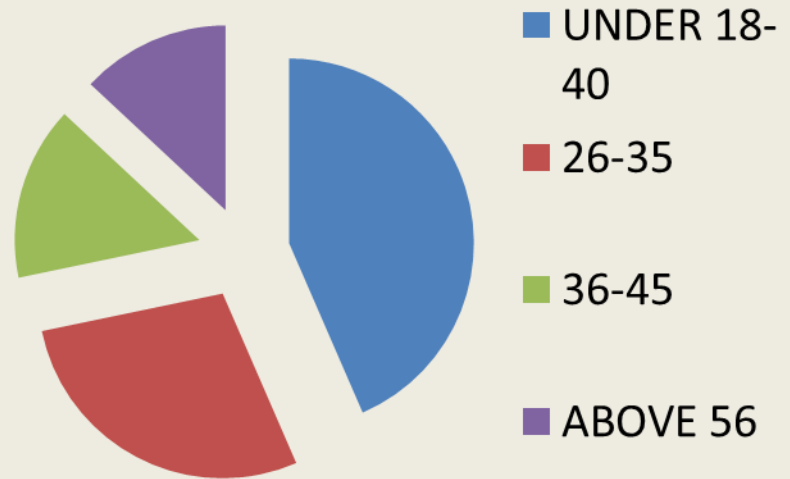


# Consumer Profiles



# 1. Age Profile

<b>Under 18 - 25</b>	<b>40</b>
<b>26-35</b>	<b>26</b>
<b>36-45</b>	<b>14</b>
<b>46-55</b>	<b>6</b>
<b>Above 56</b>	<b>12</b>



# 2. Gender

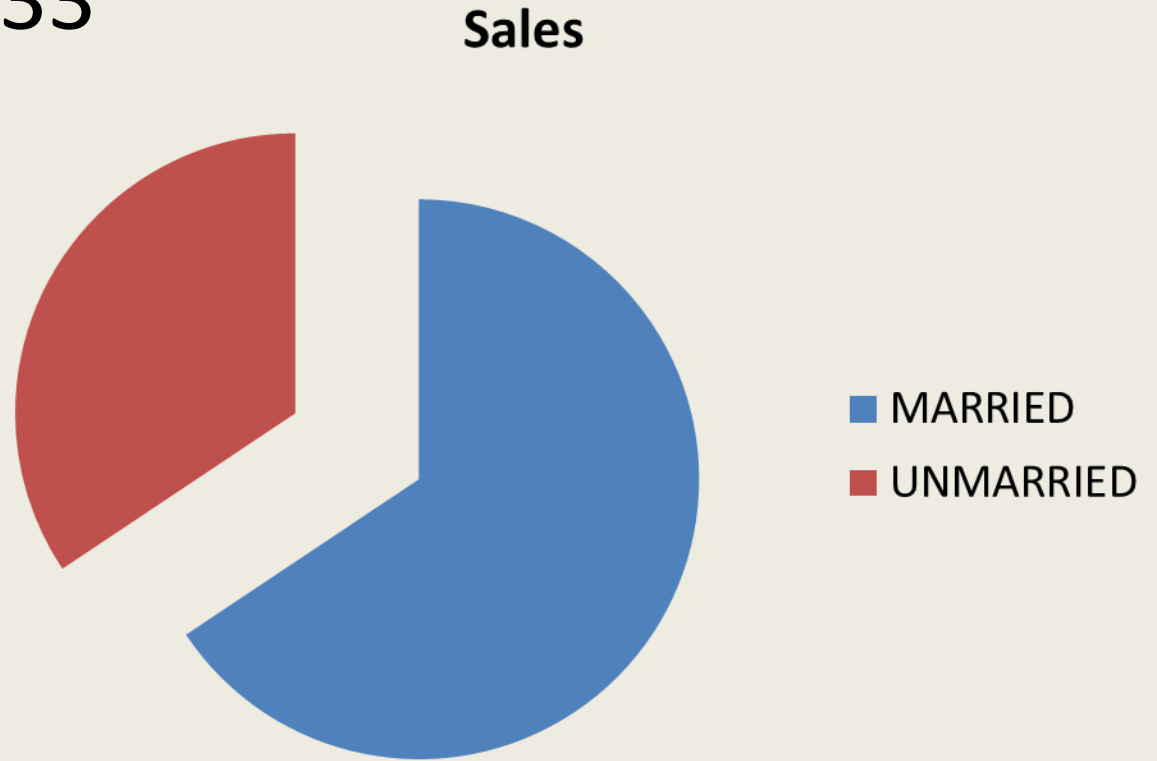
Male 44  
Female 54

Sales



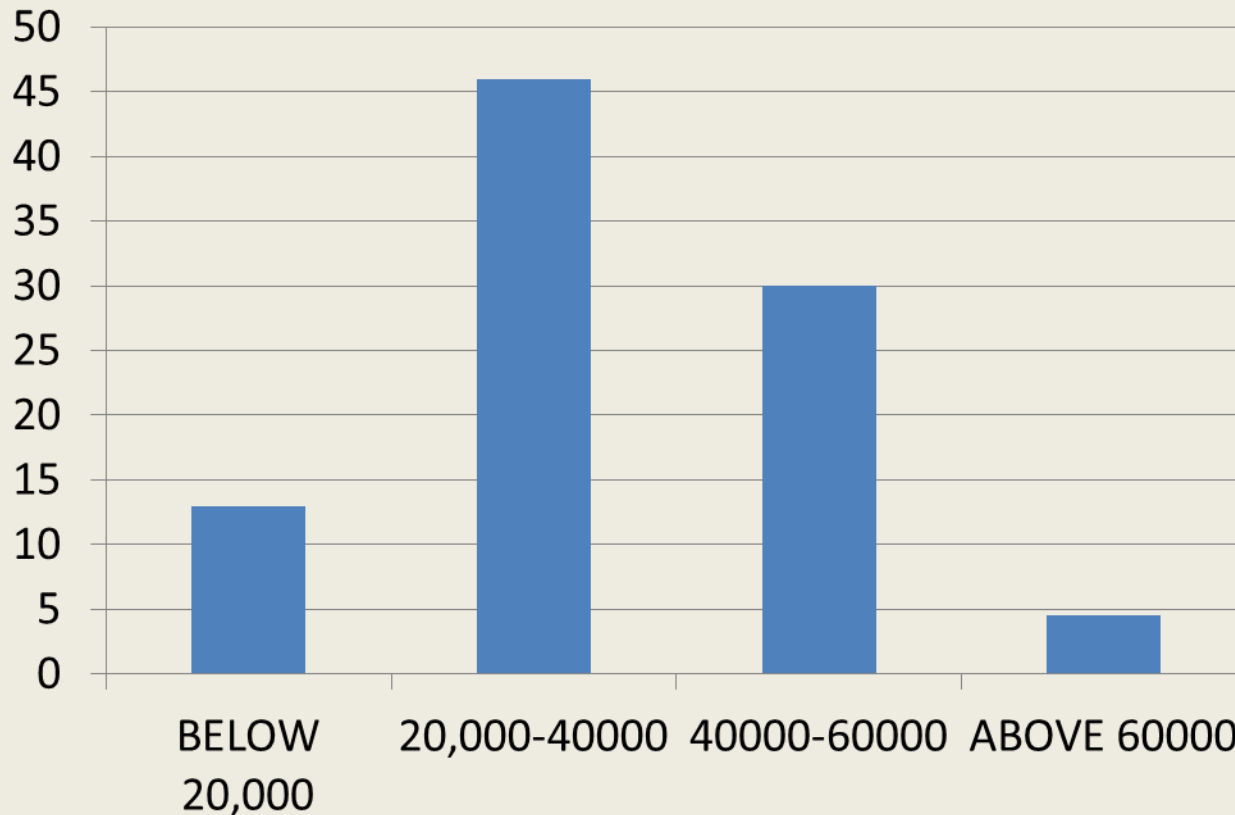
# 3. Marital Status

Married	63
Unmarried	33



### 3. Monthly Family income (Rs.):

Below 20,000	13
20,000-40,000	46
40,001-60,000	30
Above 60,000	9



THANK YOU