

BISCUIT



NIKHIL
VERMA

OBJECTIVES

- ✓ To analyze the brand preference of BISCUITS
- ✓ To evaluate consumer attitude towards usage and utility towards the BISCUITS
- ✓ To evaluate consumers perception about the important factors pertaining to BISCUITS purchase decision

HYPOTHESES

- ✓ Sales of different brands of BISCUIT are uniformly distributed i.e there is no significant difference in the sales of different BISCUITS brands.
- ✓ There is no significant difference among the users of Cell Phone on the factors like age, gender etc towards their attitude about the usage of BISCUIT
- ✓ Different factors which are important in the purchase decision of BISCUITS do not differ significantly.
- ✓ Ranking of different cell phone brands do not differ significantly in their ranking

Hypothesis 1

To test hypothesis 1, chi square test was applied.

Brand	Count
Britannia	24
Parle	13
Sunfeast	27
Priya Gold	19
Cremica	7
Anmol	5
Horlicks	3

CONCLUSION

Chi square value (calculated) = 41.71
Critical Chi square value (0.05, 7) = 11.995

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 biscuits are not uniformly distributed

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

To test this hypothesis ANOVA was applied with following results

Anova: Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
Under 18 - 25	59	3400	57.62712	47.65167
26-35	27	1640	60.74074	50.73789
36-45	14	854	61	57.53846

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	248.6582	2	124.3291	2.496371	0.087664	3.090187
Within Groups	4830.982	97	49.80394			
Total	5079.64	99				

CONCLUSION

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 biscuits.

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

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	59.76	42	0.974	1.95	Insignificant
Female	58.34	58			Accept the null hypothesis

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 in the attitude of male and female consumers on their attitude towards consumption of biscuits

Hypothesis 2 (c): consumes of different occupation do not differ significantly on their attitude towards consumption of biscuits

To test this hypothesis ANOVA was applied with following results

Anova: Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
Student	51	2941	57.66667	47.54667
Housewife	16	950	59.375	47.85
Service	23	1400	60.86957	62.48221
Business	4	265	66.25	8.25
Professionals	6	338	56.33333	31.86667

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	425.8646	4	106.4662	2.173351	0.077825	2.467494
Within Groups	4653.775	95	48.98711			
Total	5079.64	99				

CONCLUSION

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 occupation do not differ significantly on their attitude towards consumption of biscuits.

Hypothesis 3: Different factors which are important in the purchase decision of biscuits do not differ significantly

To test this hypothesis ANOVA was applied with following results

Anova: Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
Price	100	379	3.79	1.056465
Brand	100	403	4.03	1.160707
Taste	100	481	4.81	0.276667
Package Design	100	382	3.82	0.674343
Ad & promotion	100	367	3.67	0.768788
Quantity	100	399	3.99	1.020101

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	84.04833	5	16.80967	20.34629	9.08E-19	2.229193
Within Groups	490.75	594	0.826178			
Total	574.7983	599				

CONCLUSION

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

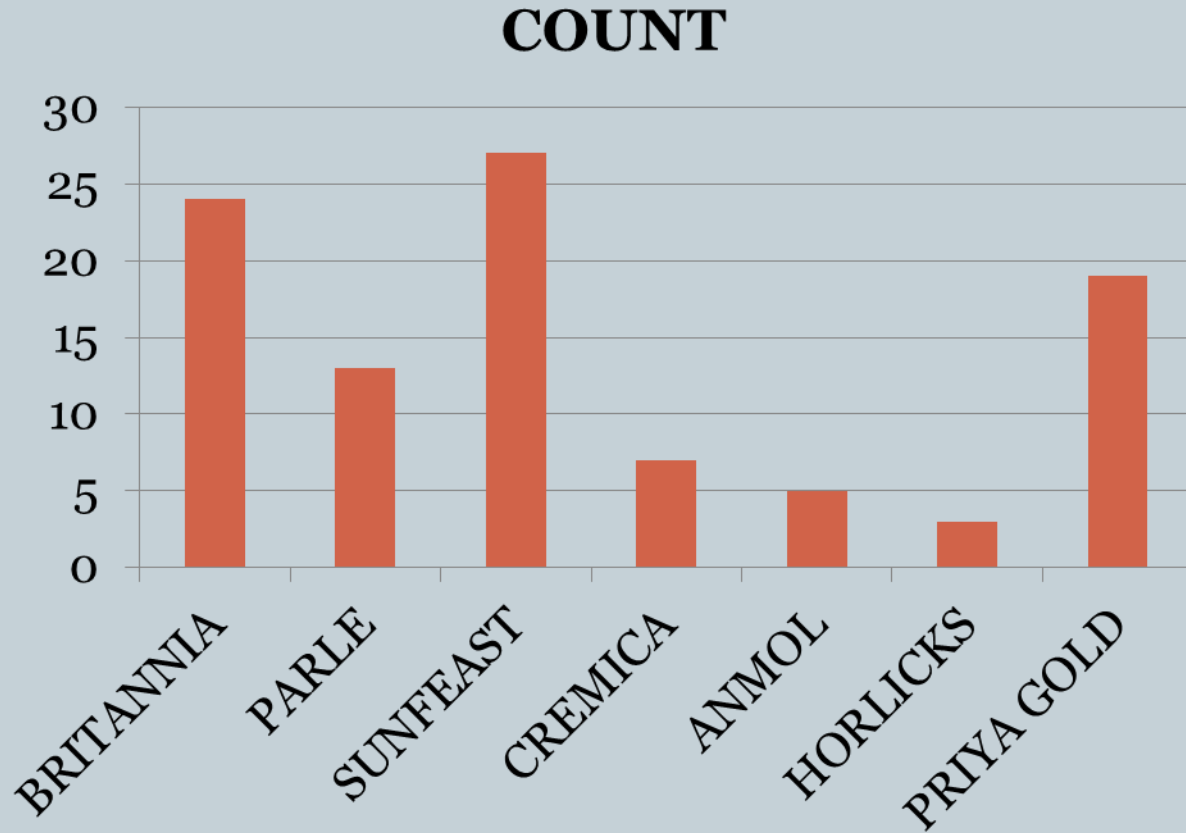
So, it can be concluded that different factors which are important in the purchase decision of biscuits for consumers differ significantly.

Descriptive statistics analysis



1. Most popular brand: Sunfeast

Brand	Count
Britannia	24
Parle	13
Sunfeast	27
Priya Gold	19
Cremica	7
Anmol	5
Horlicks	3



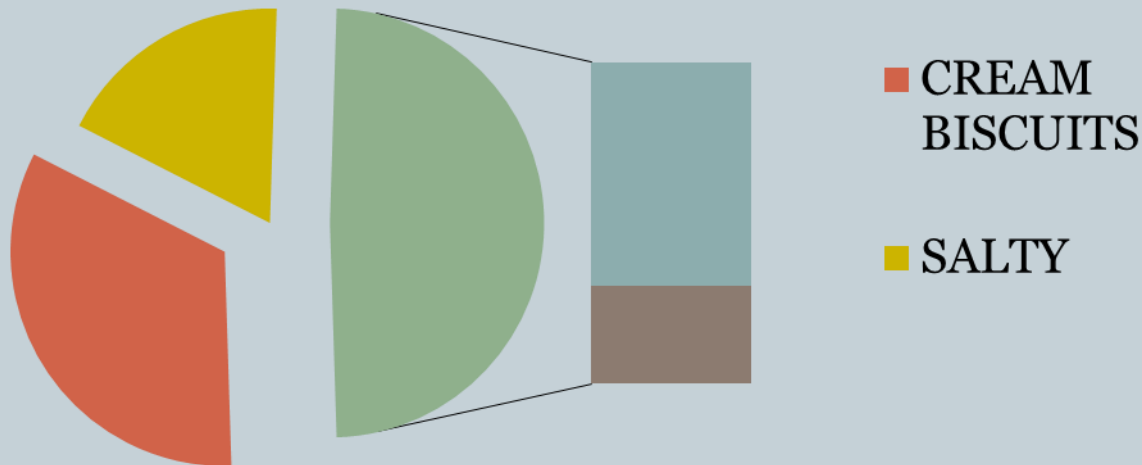
Ranking Performance

	Brand	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7
	Britanni							
1	a	24	13	33	17	6	6	4
2	Parle	33	27	21	6	4	5	4
3	Sunfeast	19	29	22	10	14	3	5
	Priya							
4	Gold	21	16	13	23	14	5	11
5	Cremica	4	6	5	24	25	23	14
6	Anmol	0	9	2	14	23	28	25
7	Horlicks	0	1	5	7	15	31	38

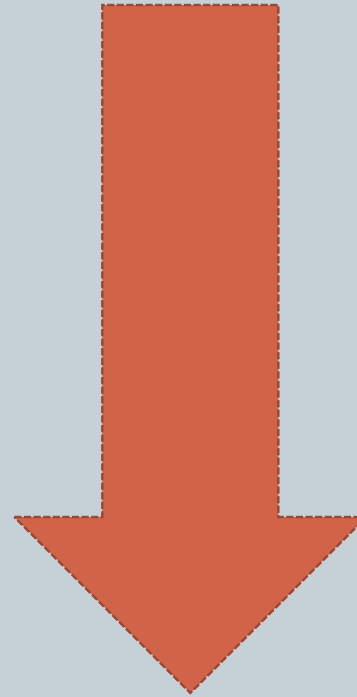
Which type of biscuit do you like to eat most?

Type	Count
Cream biscuits	33
Salty biscuits	18
Both	34
Different Sweet biscuits	15

Sales



Consumer Profiles



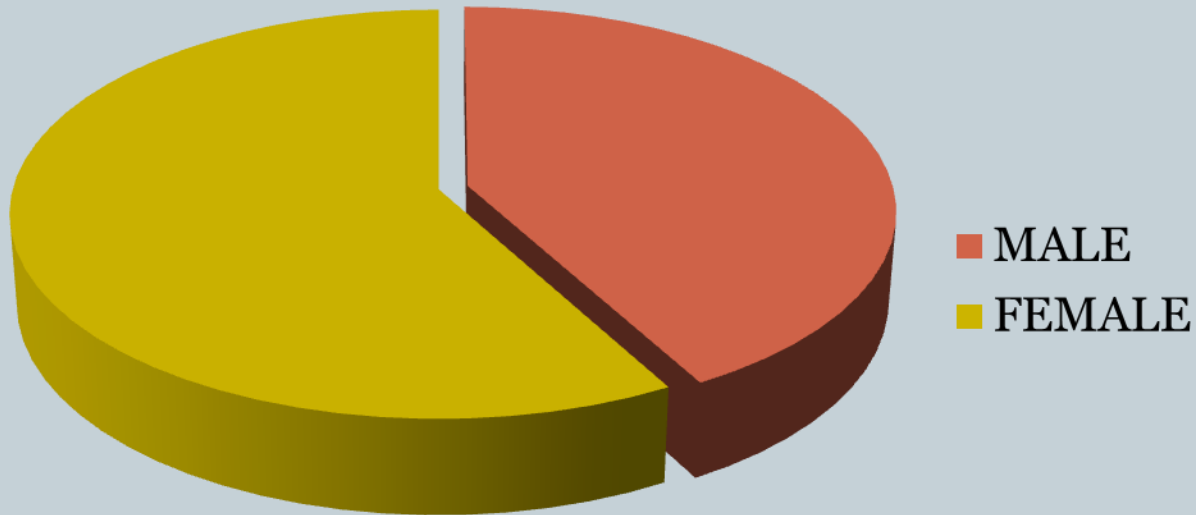
1. Age Profile:

Under 18 - 25	59
26-35	27
36-45	14
46-55	0



2. Gender

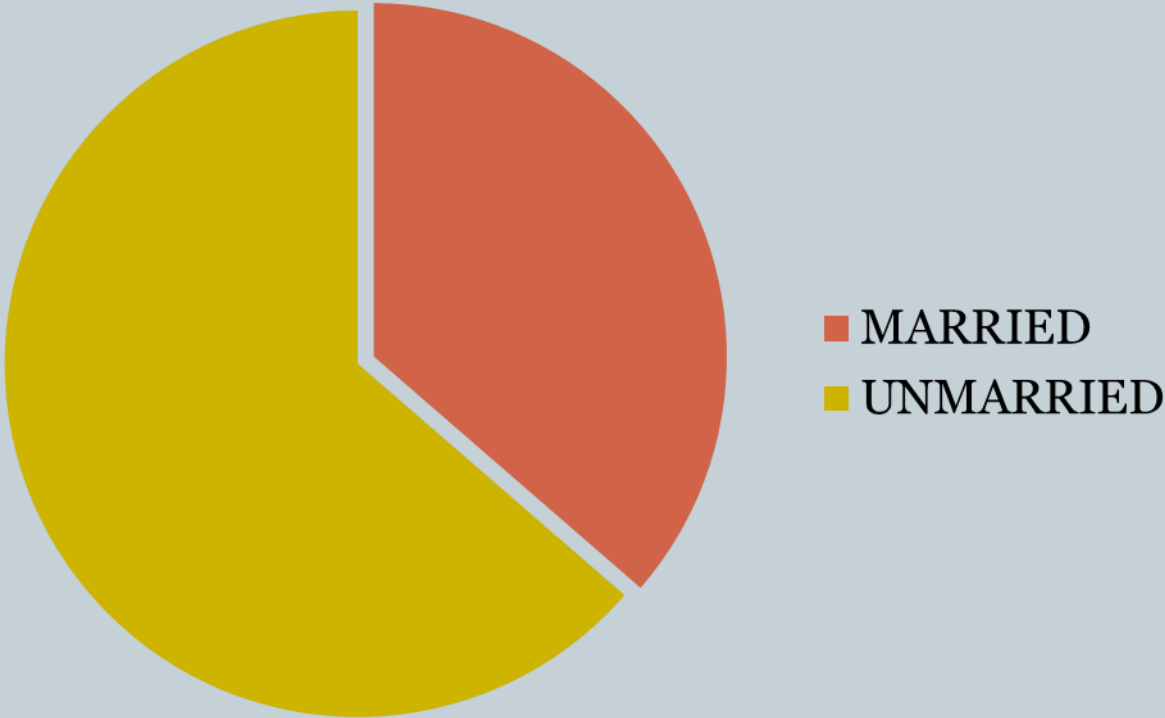
Male	42
Female	58



2. Marital Status

Married 36
Unmarried 63

Column1



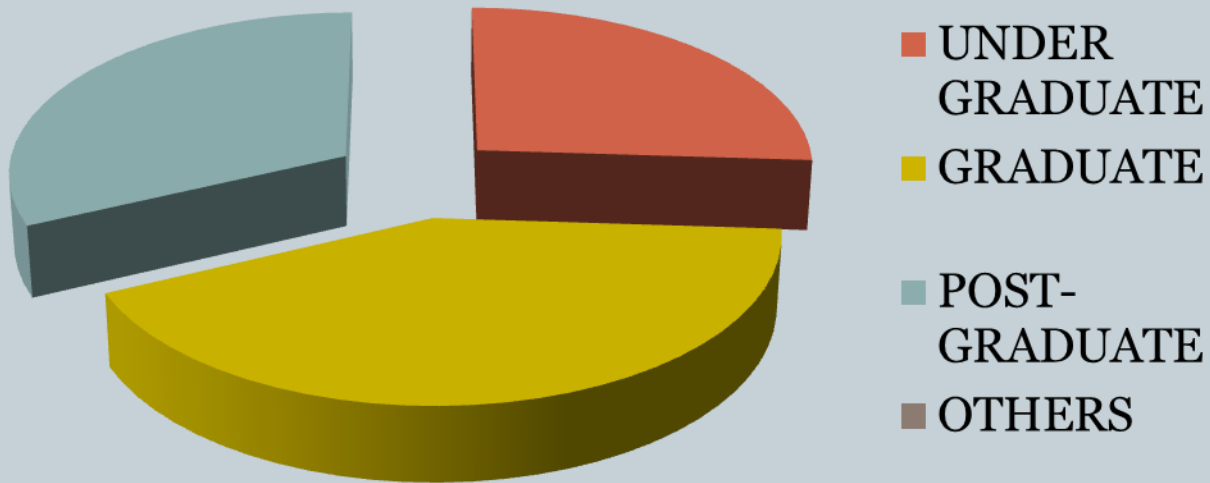
3. Monthly Family income (Rs.):

Below 20,000	10
20,000-40,000	37
40,001-60,000	32
Above 60,000	21



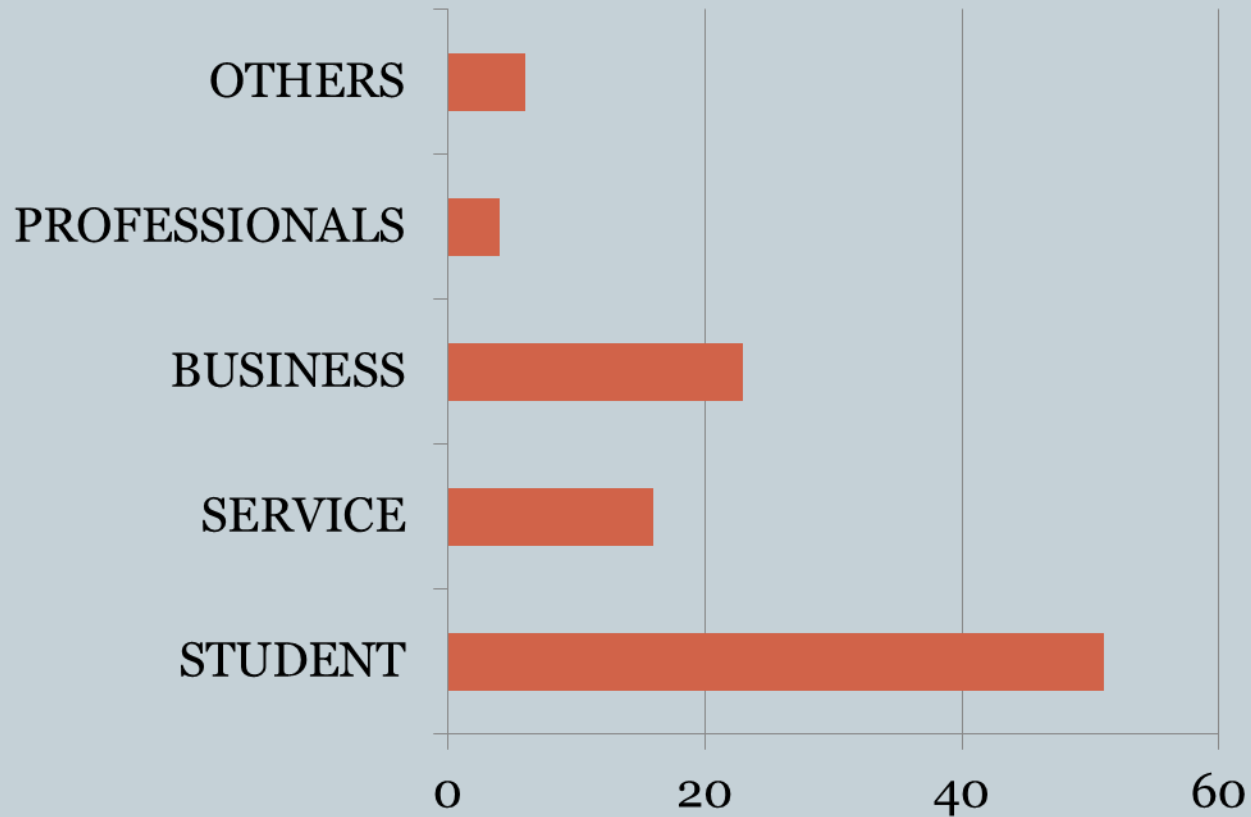
4. Educational qualification:

Under- Graduate	26
Graduate	42
Post- Graduate	32
Others:	0



5. Occupation:

Student	51
Service	16
Business	23
Professionals	4
Others:	6





THANK YOU