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## Behavioral Economics: Understanding the Term via a Comparative Study and Economic Analysis of Impact of Various Factors on Consumption Expenditure Done by Students

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**Abstract:**

A survey of students in three colleges has been conducted testing their consumption patterns, which helped us in formulating a hypothesis regarding the impact of social, geographical, intellectual, developmental, biological, etc. factors on behaviour of students.

The paper shows the details of consumption expenditure done by the students studying in a particular college on different food items, accessories, stationery, medical services and clothing. The expenditure pattern of each of the above mentioned institutes will then be linked to the existing social, environmental, intellectual, cultural, developmental, biological and various other variables through tabular and graphical analysis. The results obtained from the above methodology will further be compared for the three colleges highlighting the impact of above mentioned factors on the choice and preferences of students.

The paper attempted to seek the above information through well planned questionnaire which was uploaded on the internet by means of Google doc to be answered by various students of the above mentioned institutes. The responses were recorded and deeply analysed in order to draw the conclusions and build concrete results. The paper aimed to incorporate the responses of as many as possible but the study was constrained by the limited no. of responses which we received.

**Keywords:** Consumption pattern, consumption expenditure, variables affecting, student choices and preferences

### 1. Introduction

Students are considered as the future of any society and every society wants their future to be bright and optimistic. This can be achieved through healthy, dedicated and liberated minds of today.

This study aims at finding several factors that determine the dietary habits of the students and the way they affect it. This way the impact of Socio-cultural factors such as beliefs, food preferences, gender discrimination, intellectual level, etc. can be studied. The choice of the above mentioned institutes have been done keeping in mind two things. Firstly, the students from IIT delhi and BITS Pilani don't differ much in terms of IQ level so the regional factors will play an important role here in determining the consumption pattern and secondly, the students from IIT Delhi and JAYPEE are exposed to almost the same kind of regional factors hence the impact of peer group and related factors on consumption pattern can be assessed more prominently by comparing them.

Since, this study shows the relation in the causal factors and their impact on students' behaviour it can further be used for removing those factors which are responsible for the distortion from a normal course of students' life. On the basis of the relations formulated those factors which are negatively impacting the students' choices and preferences can be eliminated. This may further help in building socially aware, responsible and healthy beings. In past many researches have been conducted studying the consumption pattern and the role of human emotions in consumer preferences but this study is different from all the previous once since its main focus is to estimate the variables influencing the consumption expenditure made by college going students by means of field study.

### 2. Observations for IIT Delhi

The average consumption comes out to be Rs. 6103.5 per month and the avg. amount of money spent under various categories is as follows

Category	Amount in Rs.
Food items	2863.63
Stationery items	448.86
Daily usage items	1181.81
Medical services	161.3636
Clothes	1079.54
Recreational activities	163.63
Alcoholic and related items	204.5

Table 1

The change in consumption expenditure by various factors has been recorded and it can be assessed as follows

### 2.1. Gender and Consumption

Out of 22 responses obtained 4 were females and 18 were males and the following was observed by calculating their total consumption and comparing it with the average value for the same college so that geographical and developmental factors can be assumed to be constant and we can just trace the impact of gender, eating habit, annual income of parents, cgpa and the seniority level.

	Above avg.	Below avg.
Male	10	8
female	2	2

Table 2

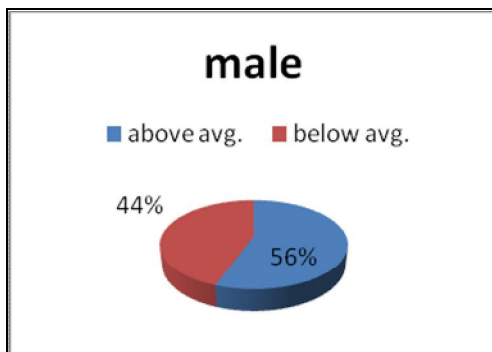


Figure 1

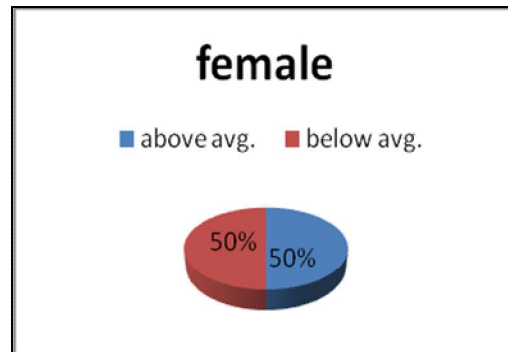


Figure 2

Very slightly more males are spending above avg. value for the college, whereas females do not show any particular trend, they seem to be equally inclined to spend above and below avg. consumption

### 2.2. CGPA and Consumption

Out of the 22 responses received, 5 were 9 pointers, 8 were 8 pointers, 7 were 7 pointers, 2 were 6 pointers and 0 was 5 pointer and the following was observed by calculating their total consumption and comparing it with the average value for the same college.

	Above average	Below average
5-6	0	0
6-7	2	0
7-8	5	2
8-9	3	5
9-10	2	3

Table 3

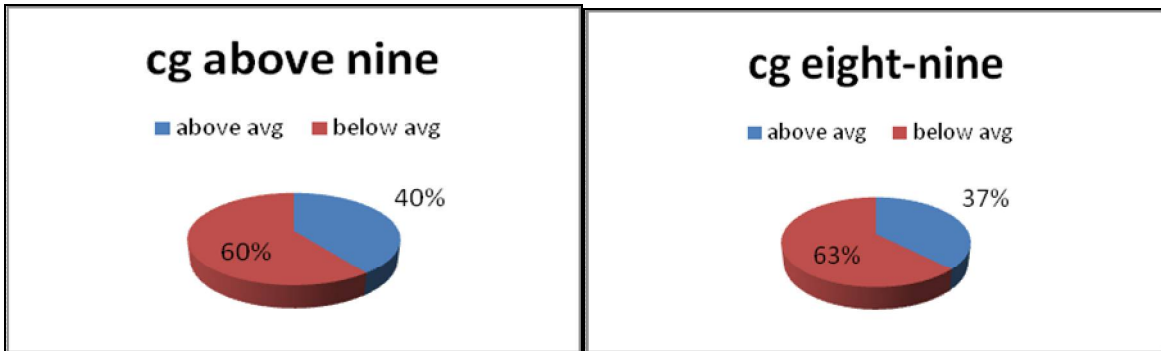


Figure 3

Figure 4

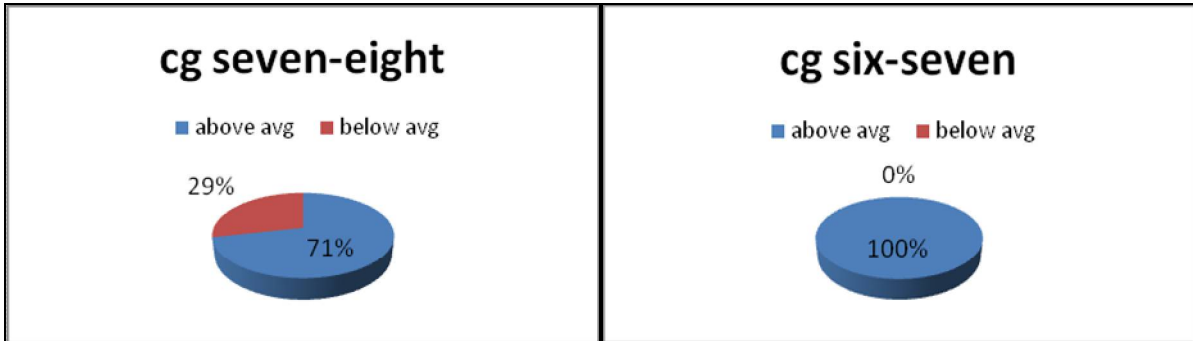


Figure 5

Figure 6

6 pointers are mostly above avg., 7 pointers are also mostly above avg., 8 pointers are slightly more for below avg. consumption and 9 pointers are also slightly more for below avg. consumption

2.3. Eating Habit and Consumption

Out of 22 responses obtained 16 were vegetarians and 6 were non vegetarians and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
Vegetarian	9	7
Non-vegetarian	3	3

Table 4

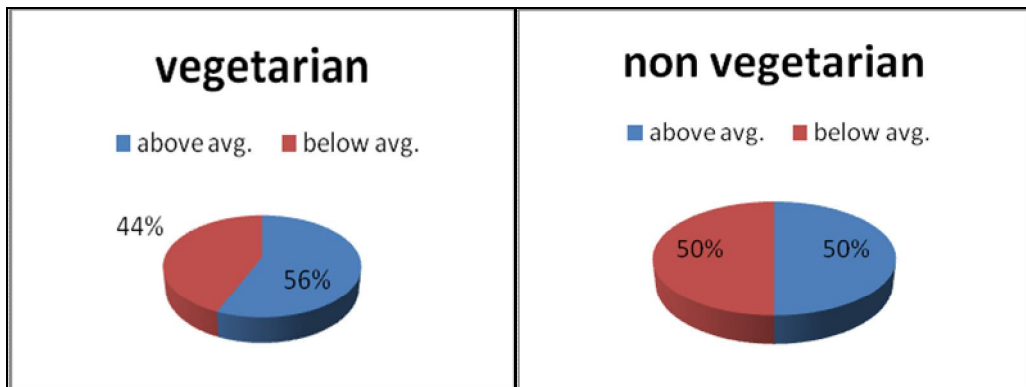


Figure 7

Figure 8

Both vegetarians and non vegetarians spend almost equally below and above avg.

2.4. Parental Income and Consumption

Out of 22 responses obtained 1 have family income below 2 lakh, 9 have family income between 2-5 lakh, 7 have family income between 5-8 lakh and 5 have family income above 8 lakh and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
Below 2	1	0
2-5	5	4
5-8	3	4
Above 8	3	2

Table 5

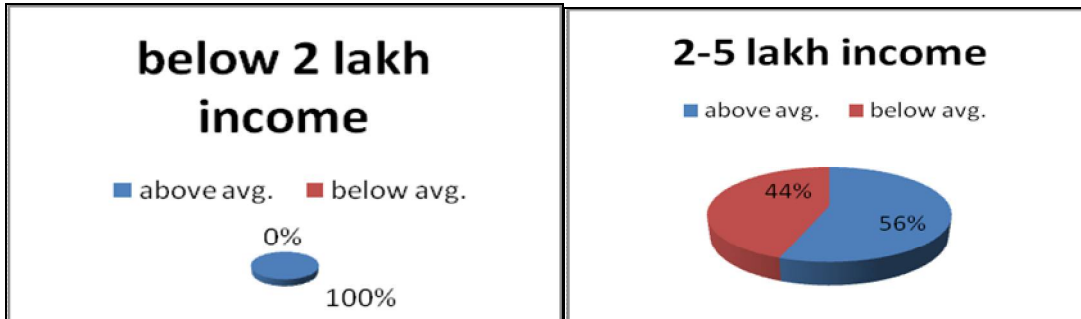


Figure 9

Figure 10

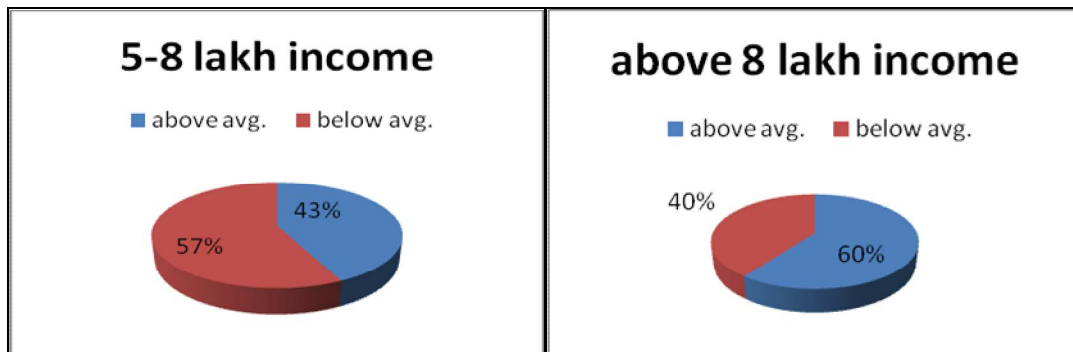


Figure 11

Figure 12

The trend seems to be that as family income increases more of the students consume below avg. although for very high income i.e. above 8 lakh the result is as expected and an increase is seen in consumption

2.5. Year of Admission and Consumption

Out of 22 responses obtained 2 were in the 4<sup>th</sup> year, 2 were in the 3<sup>rd</sup> year, 18 were in the 2<sup>nd</sup> year and 0 was in 1<sup>st</sup> year and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
2010	2	0
2011	2	0
2012	8	10
2013	0	0

Table 6

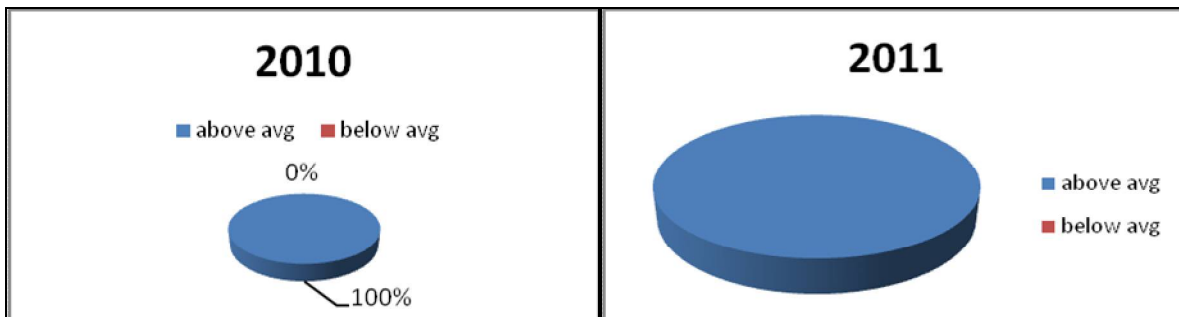


Figure 13

Figure 14

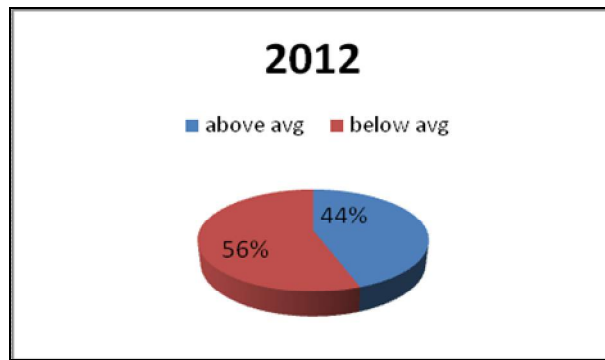


Figure 15

The trend seems to be that as seniority increases consumption increases.

**3. Observations for Jaypee Noida**

The average consumption comes out to be Rs. 7246.52 per month and the avg. amount of money spent under various categories is as follows

Category	Amount in Rs.
Food items	2391.3
Stationery items	413.043
Daily usage items	2043.47
Medical services	113.91
Clothes	1739.13
Recreational activities	467.39
Alcoholic and related items	78.26

Table 7

**3.1. Gender and Consumption**

Out of 23 responses obtained 9 were females and 14 were males and the following was observed by calculating their total consumption and comparing it with the average value for the same college so that geographical and developmental factors can be assumed to be constant and we can just trace the impact of gender, eating habit, annual income of parents, cgpa and the seniority level.

	Above avg.	Below avg.
Male	6	8
female	4	5

Table 8

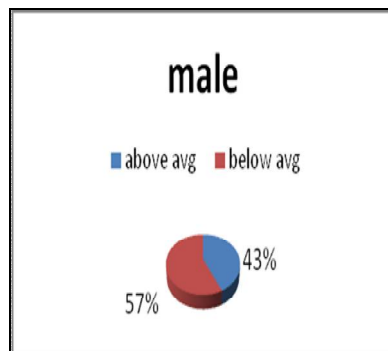


Figure 16

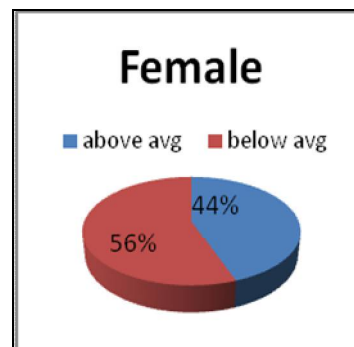


Figure 17

The trend shows that both male and female spend almost equally

**3.2. CGPA and Consumption**

Out of the 23 responses received, 0 were 9 pointers, 5 were 8 pointers, 10 were 7 pointers, 4 were 6 pointers and 4 were 5 pointers and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above average	Below average
5-6	2	2
6-7	2	2
7-8	5	5
8-9	1	4
9-10	5	0

Table 9

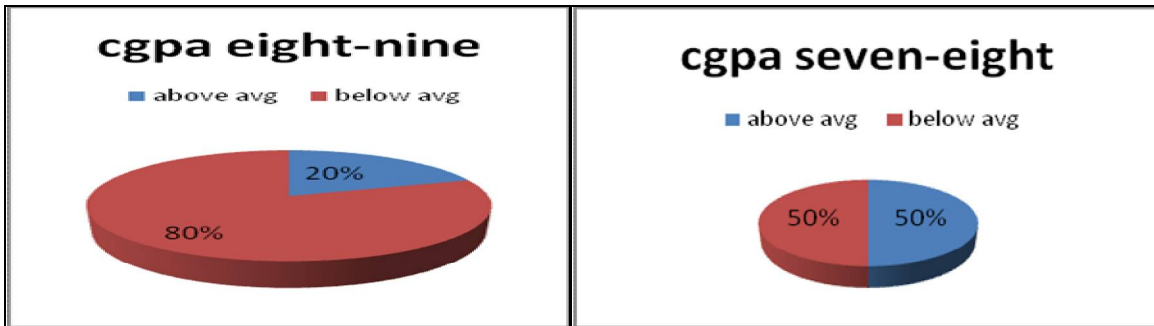


Figure 18

Figure 19

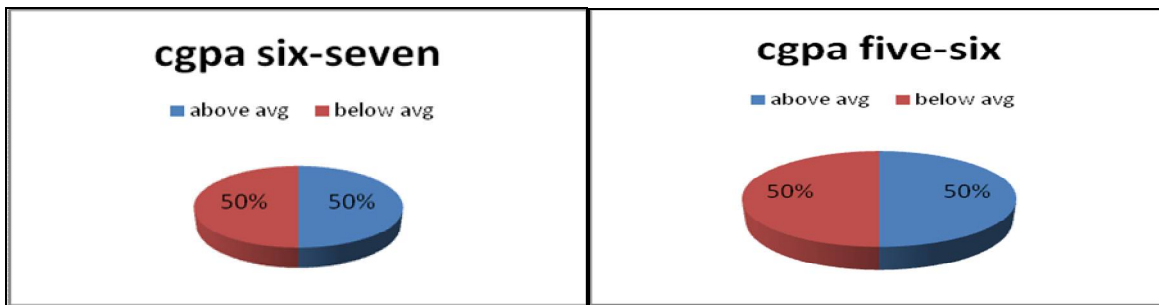


Figure 20

Figure 21

The observation shows that 9 pointers are inclined more towards above avg. consumption and 8 pointers towards below avg. consumption.

3.3. Eating Habit and Consumption

Out of 23 responses obtained 9 were vegetarians and 14 were non vegetarians and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
Vegetarian	2	7
Non-vegetarian	8	6

Table 10

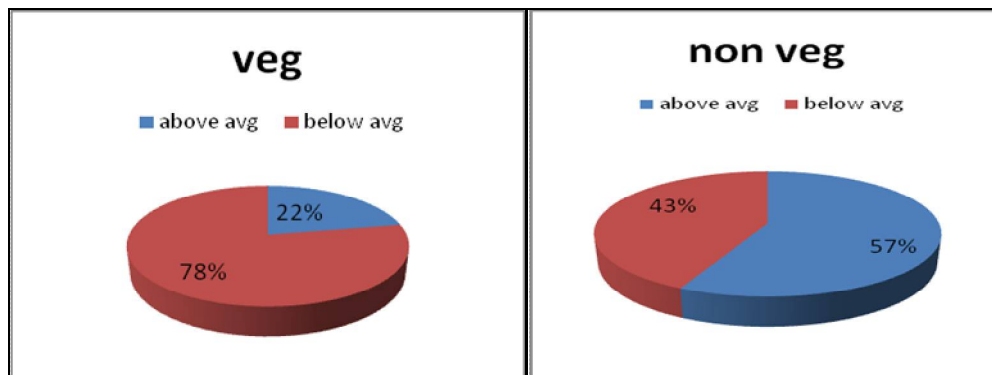


Figure 22

Figure 23

The observation shows that more vegetarians spend below avg. and more non-vegetarian spend almost equally.

3.4. Parental Income and Consumption

Out of 23 responses obtained 0 have family income below 2 lakh, 5 have family income between 2-5 lakh, 3 have family income between 5-8 lakh and 15 have family income above 8 lakh and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
Below 2	0	0
2-5	1	4
5-8	2	1
Above 8	7	8

Table 11

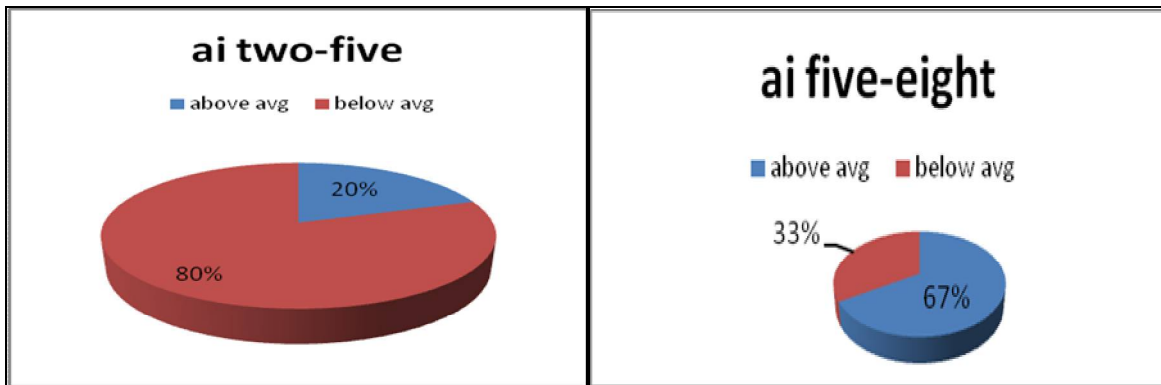


Figure 24

Figure 25

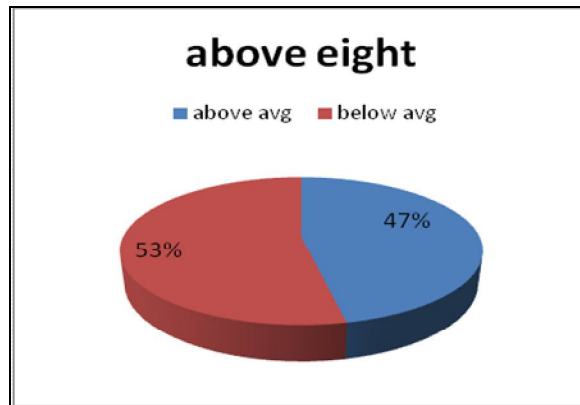


Figure 26

The observation shows that family income does play a very well defined role although for 2-5 lakh income the trend says that more people spend below avg.

3.5. Year of Admission and Consumption

Out of 23 responses obtained 5 were in the 4<sup>th</sup> year, 5 were in the 3<sup>rd</sup> year, 11 were in the 2<sup>nd</sup> year and 2 were in the 1<sup>st</sup> year and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
2010	2	3
2011	3	2
2012	4	7
2013	1	1

Table 12

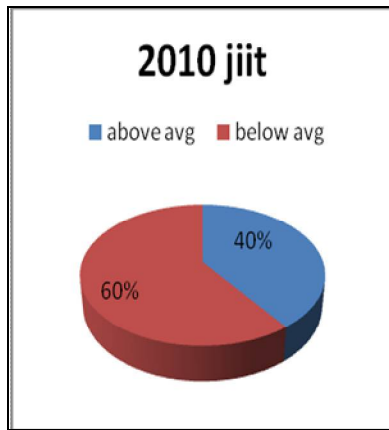


Figure 27

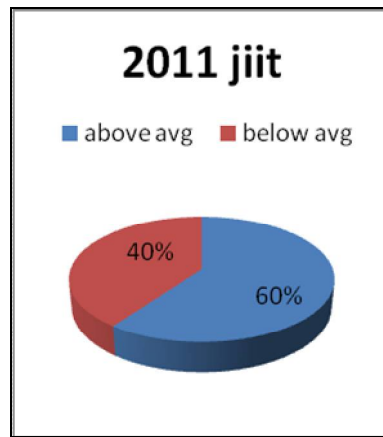


Figure 28

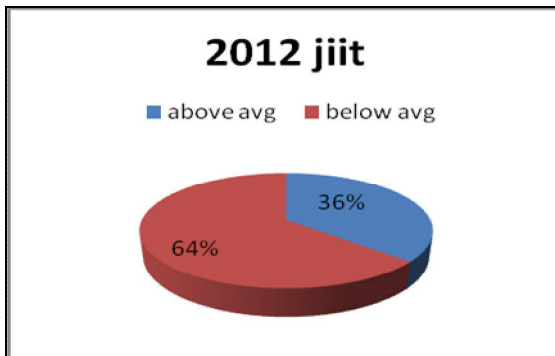


Figure 29

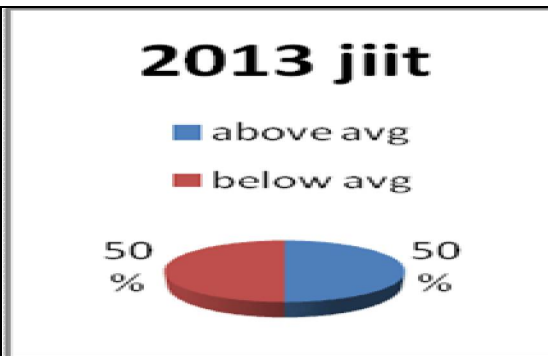


Figure 30

As seniority level increases more people tend to spend above avg. with an exception seen for 4<sup>th</sup> year and 1<sup>st</sup> year since very few responses were received.

**4. Observations for Bits Pilani**

The average consumption comes out to be Rs. 5757.045 per month and the avg. amount of money spent under various categories is as follows

Category	Amount in Rs.
Food items	2227.273
Stationery items	505.68
Daily usage items	1050
Medical services	93.4
Clothes	1562.5
Recreational activities	193.1818
Alcoholic and related items	125

Table 13

**4.1. Gender and Consumption**

Out of 22 responses obtained 8 were females and 14 were males and the following was observed by calculating their total consumption and comparing it with the average value for the same college so that geographical and developmental factors can be assumed to be constant and we can just trace the impact of gender, eating habit, annual income of parents, cgpa and the seniority level.

	Above avg.	Below avg.
Male	8	6
female	3	5

Table 14



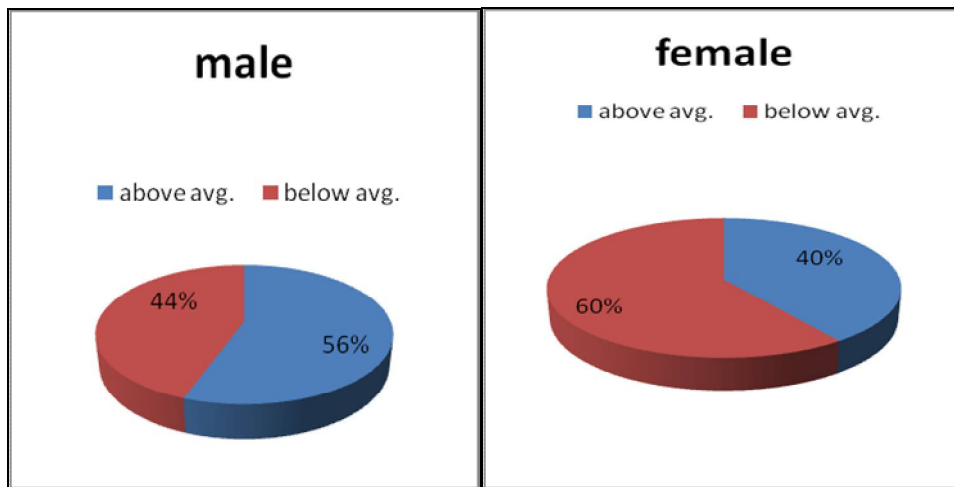


Figure 31

Figure 32

Males are little bit bent towards spending more above avg, and female for spending more below avg.

4.2. CGPA and Consumption

Out of the 22 responses received, 2 were 9 pointers, 6 were 8 pointers, 8 were 7 pointers, 5 were 6 pointers and 1 was 5 pointer and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above Average	Below Average
5-6	1	0
6-7	2	3
7-8	2	6
8-9	4	2
9-10	2	0

Table 15

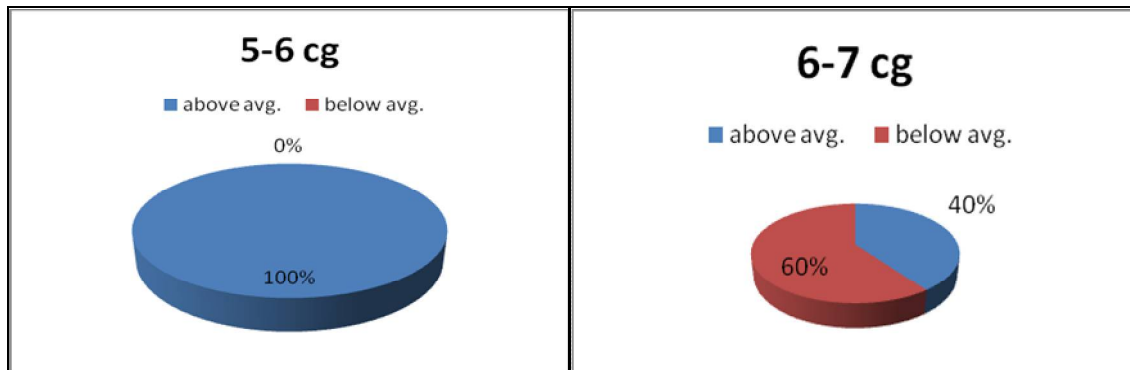


Figure 33

Figure 34

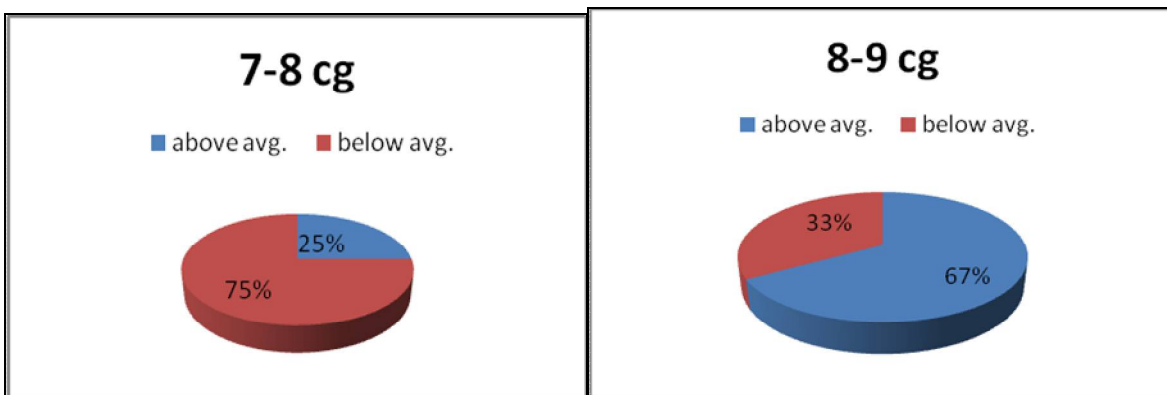


Figure 35

Figure 36

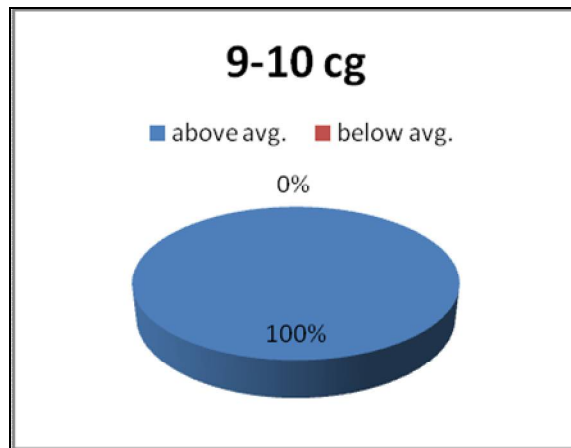


Figure 37

The high cgpa holders spend more above avg.

4.3. Eating Habit and Consumption

Out of 22 responses obtained 12 were vegetarians and 10 were non vegetarians and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above Avg.	Below Avg.
Vegetarian	6	6
Non-vegetarian	5	5

Table 16

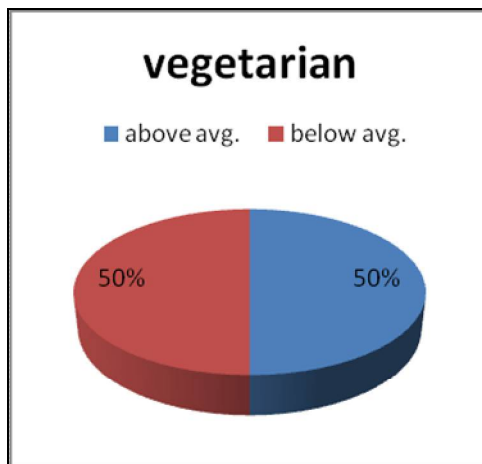


Figure 38

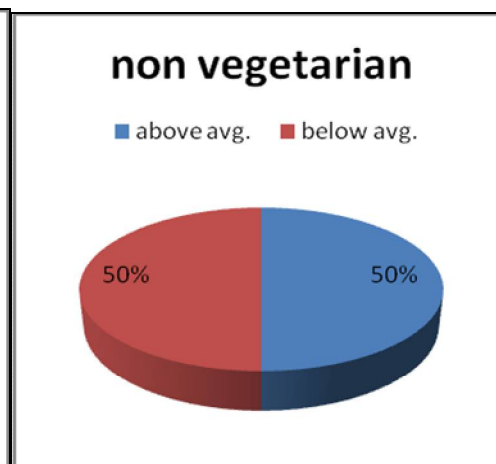


Figure 39

No specific trend for eating habit

4.4. Parental Income and Consumption

Out of 22 responses obtained 2 have family income below 2 lakh, 3 have family income between 2-5 lakh, 9 have family income between 5-8 lakh and 8 have family income above 8 lakh and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
Below 2	1	1
2-5	2	1
5-8	4	5
Above 8	4	4

Table 17

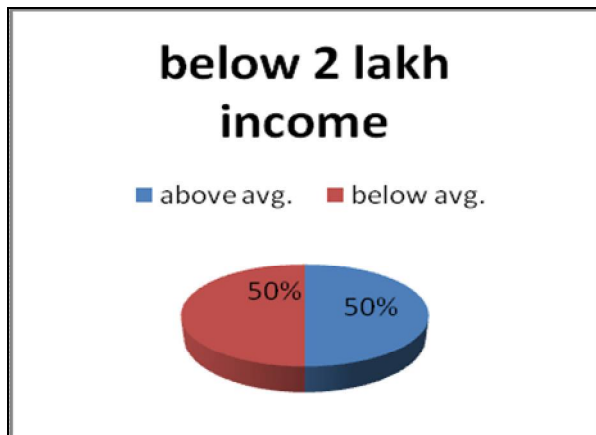


Figure 40

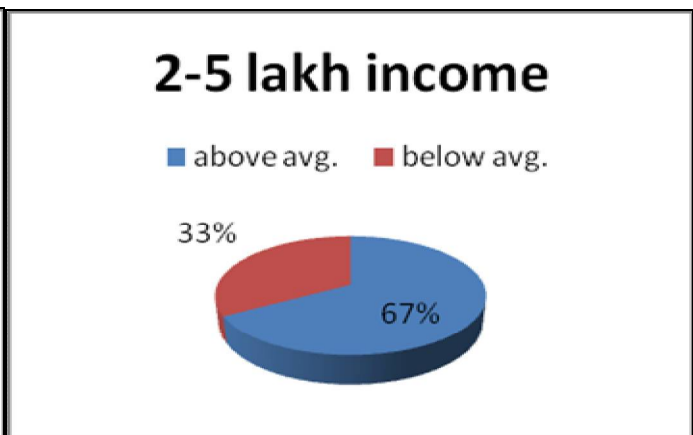


Figure 41

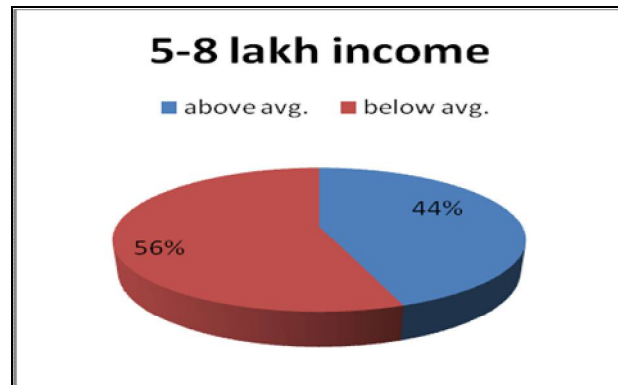


Figure 42

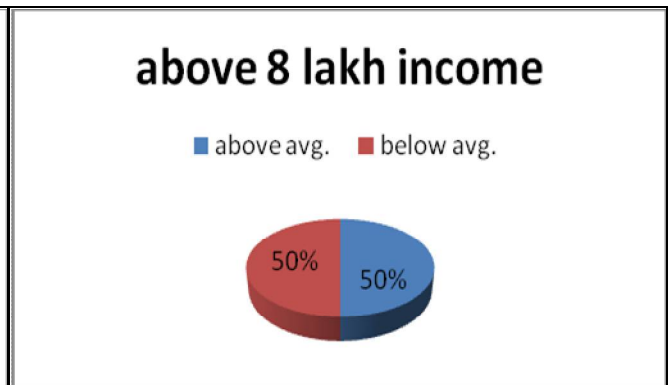


Figure 43

As annual income increases more people are seen to spend below avg. again with exception of above 8 lakh category

4.5. Year of Admission and Consumption

Out of 22 responses obtained 1 were in the 4<sup>th</sup> year, 2 were in the 3<sup>rd</sup> year, 18 were in the 2<sup>nd</sup> year and 1 was in 1<sup>st</sup> year and the following was observed by calculating their total consumption and comparing it with the average value for the same college

	Above avg.	Below avg.
2010	0	1
2011	2	0
2012	9	9
2013	0	1

Table 18

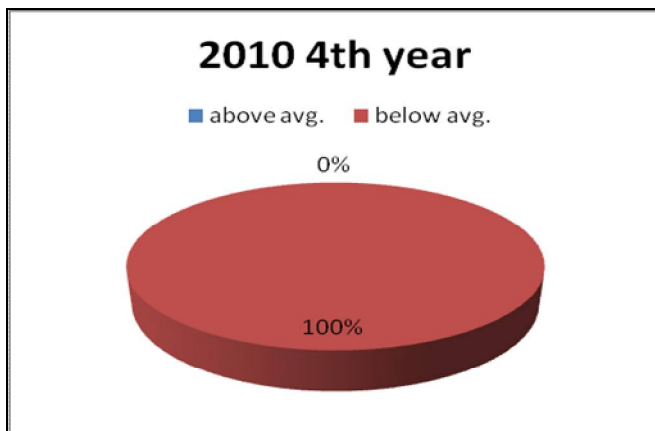


Figure 44

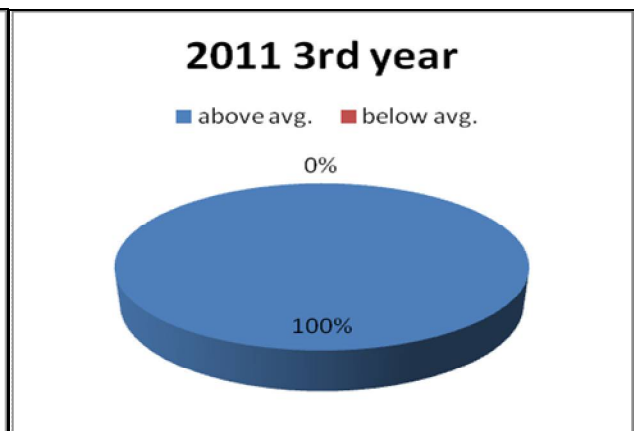


Figure 45

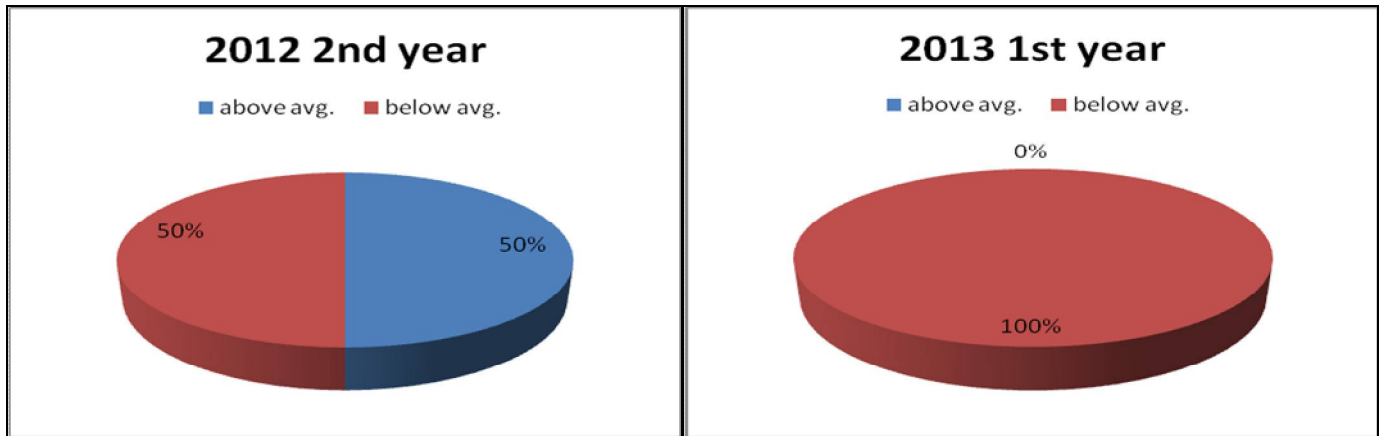


Figure 46

Figure 47

As seniority level increases more people are seen to spend above normal although there is an exception for 4<sup>th</sup> year may be due to limitation of observations.

### 5. Inferences from the Observations

Comparing the observations for the three institutes we can find out the variables which have shown the same trend for the three institutes. Looking at effect of all variables for each institute separately it can be concluded that there is no specific relation between gender, eating habit and expenditure but there is a significant relation observed in the seniority level and expenditure pattern as seniority increases the consumption increases same is the case with cgpa mostly students having higher cg are seen to spend more as well as extremely low cg people spend more where as annual family income has shown somewhat unexpected results as even when the income is low, lot of people spend above avg.

Out of the three institutes the highest avg. expenditure is made by jaypee followed by IIT Delhi and then bits pilani which clearly reveals the impact of location and developmental factors since bits pilani is situated in a small town there is less scope of expenditure where as the difference in avg. expenditure of iit and jaypee can be contributed to the developmental factors means if academic and intellectual development is lower expenditure is higher.

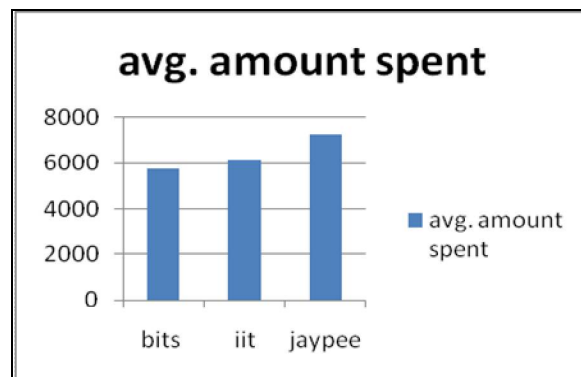


Figure 48

The amount spent by students of the three institutes on various items can also be compared

Food- The highest expenditure is made by iit students followed by jaypee and bits

- Stationery items- The highest is by bits and lowest by jaypee so impact of study orientation can be sought
- Daily usage- The highest expenditure is by jaypee and lowest by bits so impact of availability of items due to location can be seen
- Medical service- The highest expenditure is by iit followed by jaypee and then bits hence showing the impact of pollution and stress level due to geographical and intellectual factors respectively.
- Clothes- Highest expenditure is made by jaypee then bits and then iit hence showing the impact of attention paid to glamour world due to family back ground and location factors
- Recreational activities- Highest expenditure is made by jaypee and lowest by iit showing the impact of availability due to location and study orientation
- Alcoholic consumption- Highest expenditure is made by iit and lowest by jaypee showing the relation in stress level and alcohol consumption

This can be further observed through the following graphs

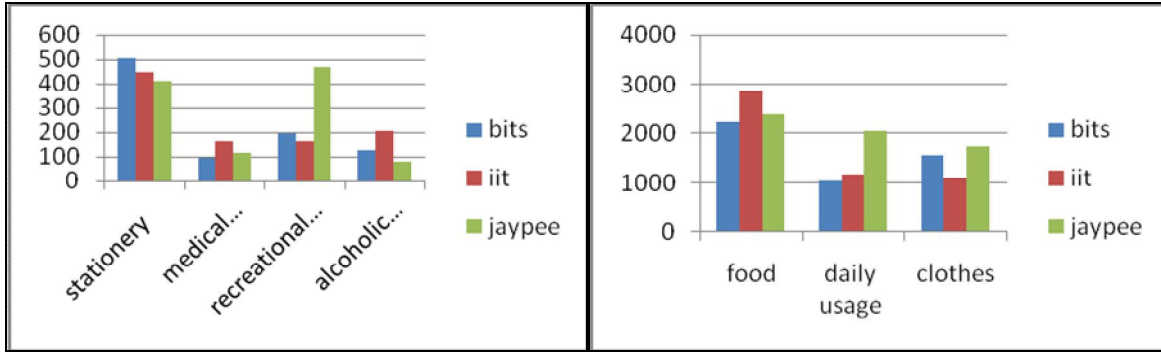


Figure 49

Figure 50

The type of food items preferred in the three institute can also tracked

For bits most of the amount is spend on meals outside and snacks and comparatively lesser on health items

For iit most of the amount is spent on meals and snacks and very less on healthy food items

For jiiit most of the amount is spent on snacks and lesser for soft drinks and meals outside and even lesser for healthy food items.

These results can be observed through the following graphs also

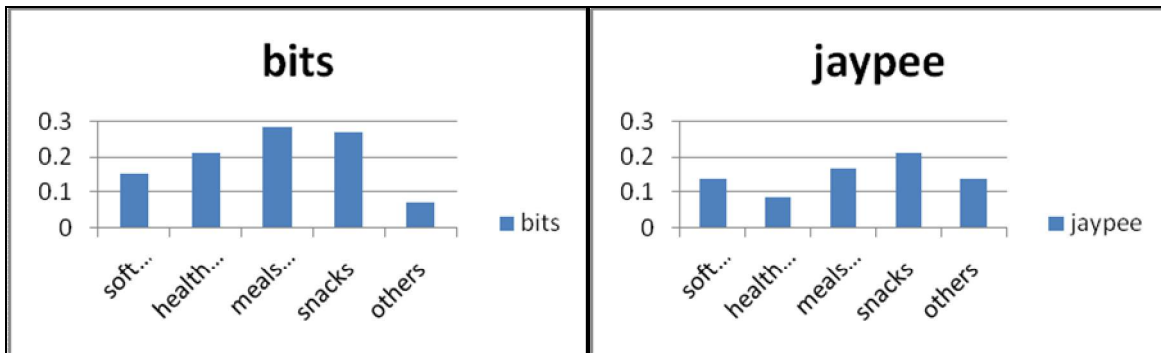


Figure 51

Figure 52

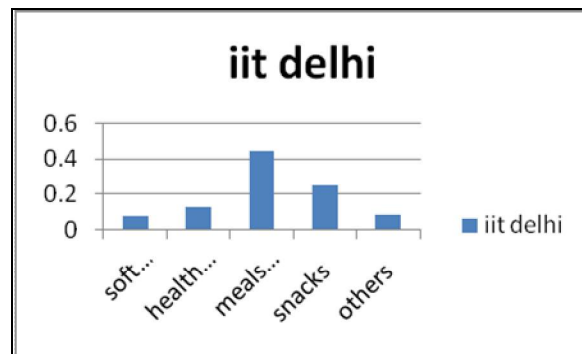


Figure 53

**6. Acknowledgement**

We would like to thank our teachers from Department of Economics And Finance, Birla Institute of Technology and Science and Humanities Dept., IIT Delhi for their valuable guidance and support.

God, Almighty for showing us the light to accomplish this fine piece of work and our families and friends for their support and encouragement.

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- i. <http://www.iitd.ac.in/>
- ii. <http://www.jiit.ac.in/>
- iii. [www.bits-pilani.ac.in](http://www.bits-pilani.ac.in)