

Chapter 4:

4. Data analysis and discussion

One of the important steps is to analyse the data and discuss the findings. In this chapter researchers will discuss the empirical findings from this study. The data analysis mainly concerns primary data collected in the form of questionnaires distributed among students of Kofi Anan University and general public visiting university cafeteria and Gotland Library. Below table 2, shows the results of frequency for respondent's agreement with statements. Each statement is considered as one module.

Modules	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Convenience	Frequency				
1. I get on-time delivery by shopping online					
2. Detail information is available while shopping online					
3. I can buy the products anytime 24hours daily while shopping online					
4. it is easy to choose and make comparison with other products while shopping online					
Website Design/ Features					
5. the website design helps me in searching the products easily					

6. while shopping online, I prefer to purchase from a website that provides safety and ease of navigation and order					
7. the website layout helps me in searching and selecting the right product while shopping online					
8. I believe that familiarity with the website before making actual purchase reduce the risk of shopping online.					
9. I prefer to buy from website that provides me with quality of information.					

Time Saving					
10. online shopping takes less time to purchase					
11. online shopping does not waste time					
12. I feel that it takes less time in evaluating and selecting product while shopping online					
Security					
13. I feel safe and secure while shopping online					
14. online shopping protects my security					
15. I like to shop online from a trustworthy website					

Starting with the demography, data collected by the respondents in the form of age, gender, income and education, researcher will use tables and graph to see the demographic profile of online shoppers in Guinea, in the same step researcher will do correlation analysis of each demographic factor except gender, to see the relationship with demographic factors and attitudes towards online shopping. After finishing first step, researcher will analyse 1st part of the questionnaire regarding four factors.

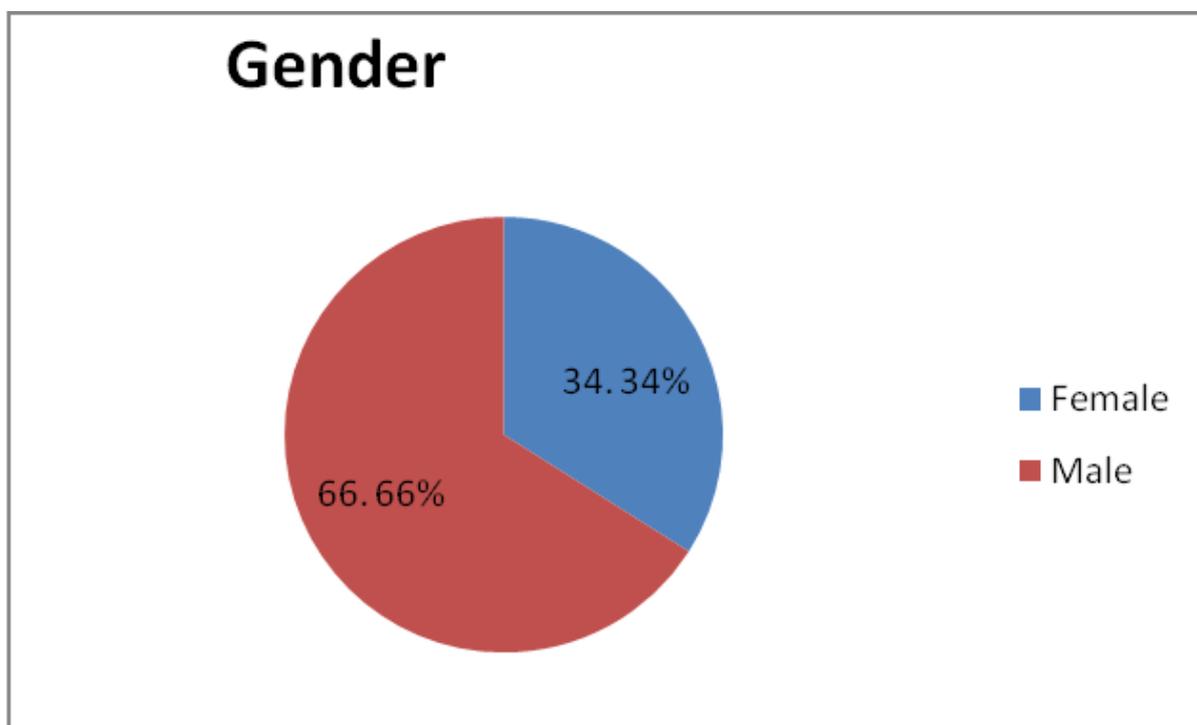
In the second step first section of the questionnaire will be analysed regarding four factors influence consumers to shop online, it consist of 15 questions and each question represent one module, so in total there are 15 modules as it is

evident from table 5. First factor that is convenience carries four modules, and each module will be analyzed and discussed separately with the help of table and graph of frequency and with results of likert scale. Writers have used five point likert scale from strongly agree with score of 5 to strongly disagree with score of 1. The score of each module (e.g. "I get on-time delivery by shopping on-line") in terms of frequency will be used to calculate the average for each module. For instance if we denote "Strongly agree" by "5", the others by "4, 3, 2, 1" then we can use the 100 input data as follows: $5*15(\text{frequency}) + 4*66 + 3*17 + 2*1 + 1*1 = 100$.

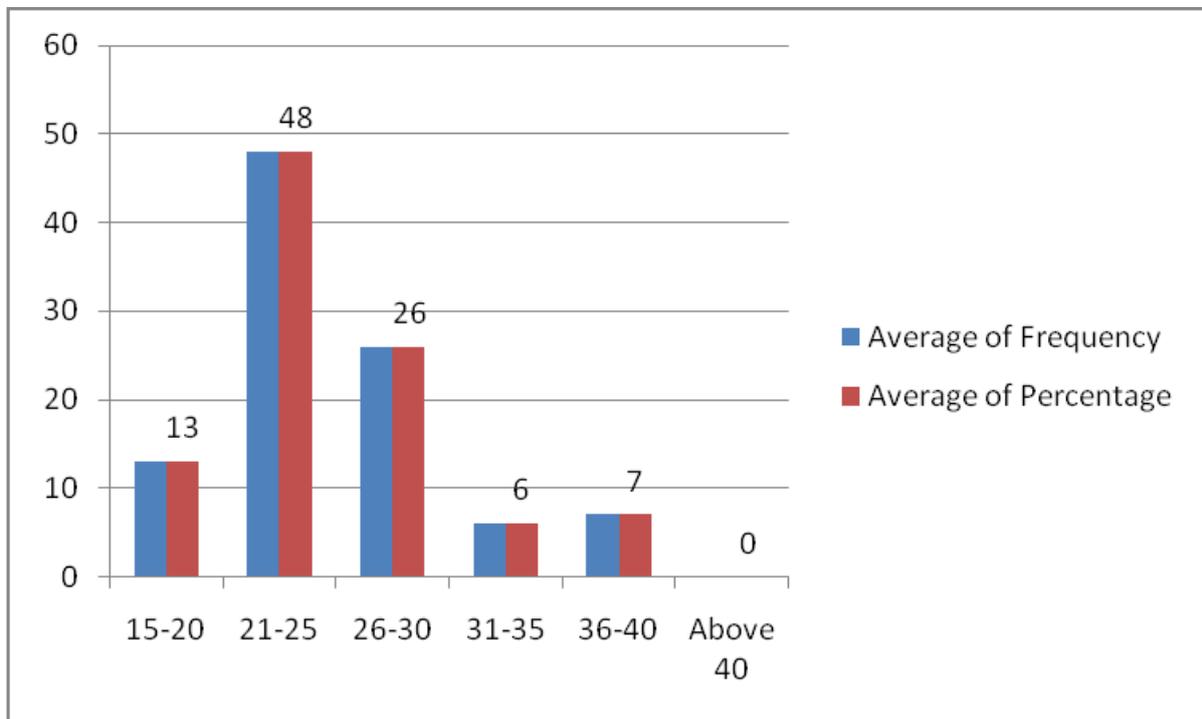
Question number 16 is a general question that is being asked to see if there are some other factors which affects consumers to shop online other than four factors chosen by the writer. Respondent's answers will be discussed in this section. The last section summary includes the summary about the factors that influence consumer and compare our findings with previous literature.

4.1 Demography

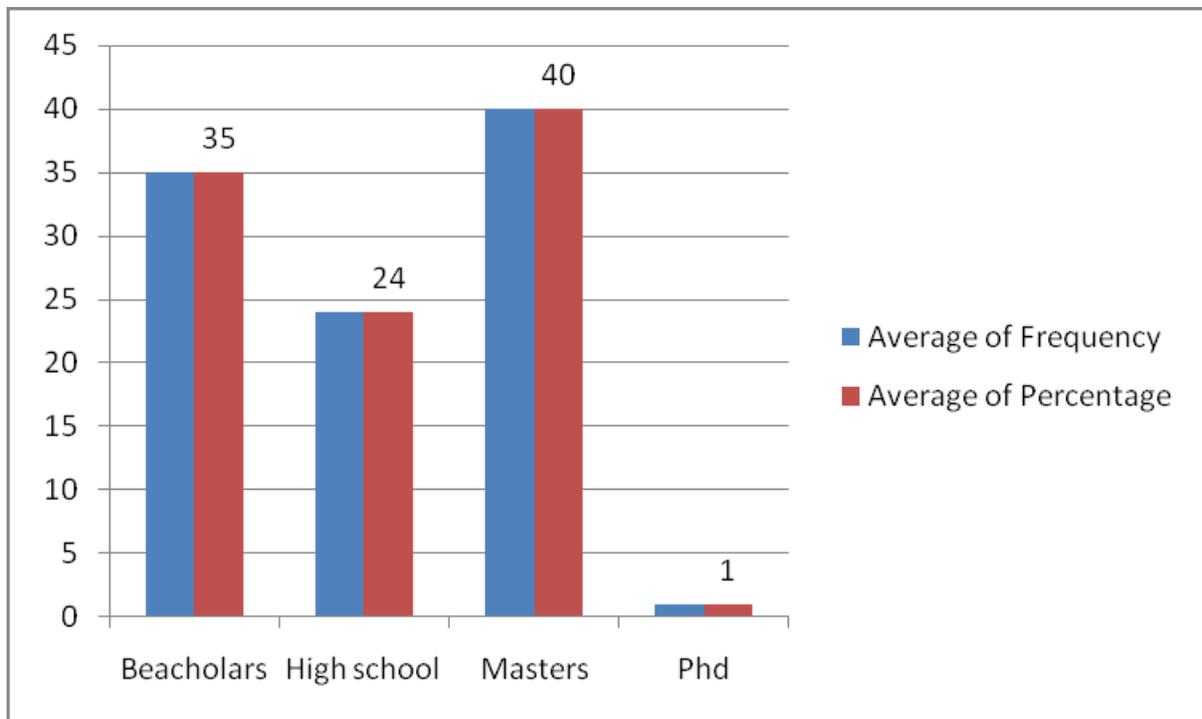
Gender: According to demography profile, 66.66% respondents are male and 33.34% respondents are female. As we mentioned before the study is conducted in the Kofi Anan University students, university cafeteria, university library, and public Library. From these groups total respondents are 100. At the time of survey comparatively higher number of female said that they don't have shopping experience through online. So, according to the survey result it is clear that male respondents are more interested to shop online than female.



Age: Below figure shows that 13% respondents are between 15-20 years old, 48% respondents are between 21-25 years old, 26% respondents between 26-30 years old, 6% respondents are between 31-35 years old, and 7% respondents are between 36-40 years old. As we mentioned before the study is conducted in the Kofi Anan University students, university cafeteria, and university library in Guinea. So according to the respondents group, maximum respondents are high school, bachelor and master student. Between them 48% respondent prefer to shop online that is the highest percentage who has age limit between 21 to 25 years. Overall result shows that between all of them the respondents who has age limit between 21 to 30 years ($48\% + 26\% = 74\%$) people are more familiar to shop online.

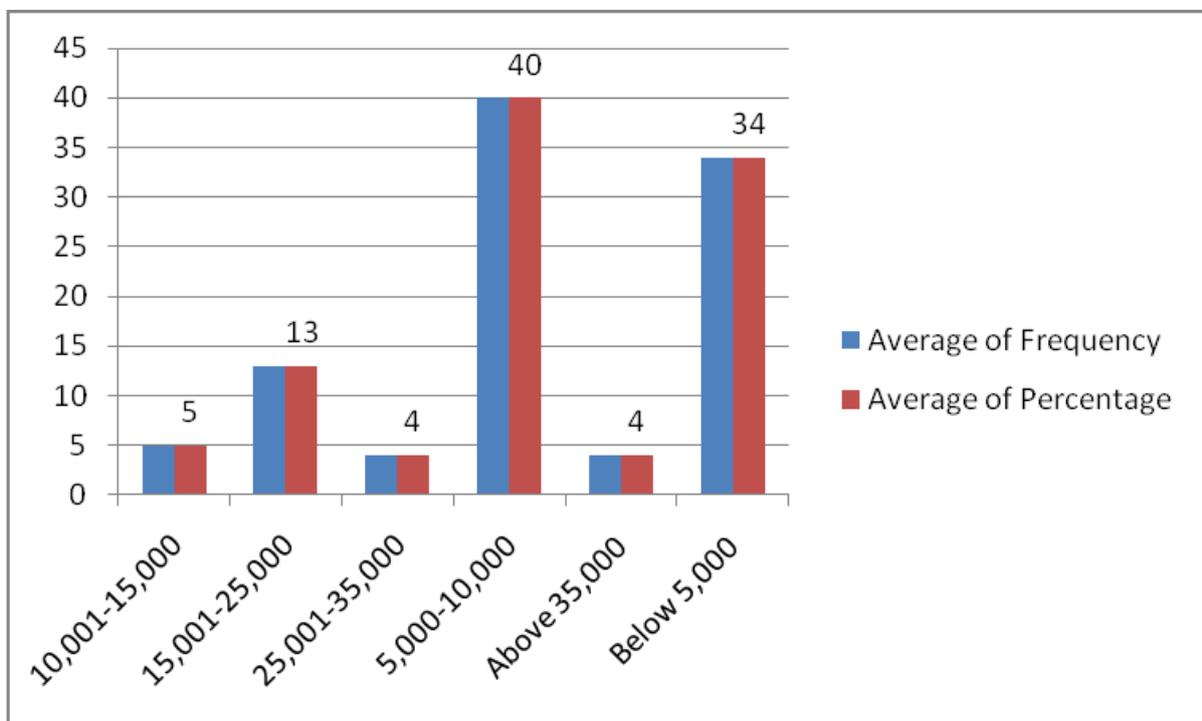


Education: The study is conducted with 100 respondents, between them 39% respondents are bachelor student, 10% respondents are high school student, 45% respondents are master student and only 6% PhD student. From all of the respondents maximum number of respondents (40%) is master student. Survey results shows that 84% respondents are bachelor and master student because most of our respondents are study in Kofi Anan University.



Income: is one of the important and sensitive demographic variables. This figure shows that 5% respondents monthly income 10001-15000SEK, 13% respondents monthly income 1501-2500USD, 4% respondents monthly income 750USD-1000USD, 40% respondents monthly income 500-1000USD, only 4% respondents monthly income more than 750USD, and 34% respondents monthly income less than 500USD. As we mentioned before the study is conducted in the Gotland University students, university cafeteria, university library, and higher secondary school in Guinea. So, our most of the respondents are student. Between them international students also included, who don't have job opportunity like Swedish citizens due to language barriers and unavailability of job. Though maximum respondents are student, between them lowest number of people has good job, some students has part time job,

some students get some money from government due to their social security system, and some foreign students they don't have income they bring money from their home country. That is why, only 26% respondents monthly income above 1000USD, and 74% respondents monthly income 1000USD or below, between them 34% are earning less than 500USD.



4.2 Correlation analysis of demographic factors

In this section writers will do the correlation analysis with demographic factors to see whether how much is the correlation between each demographic factor and attitudes towards online shopping.

Age: Starting with the age we have calculated the scores for the each age groups which gave average of 3,79 for age group (15-20), 3,75 for age group (21-25) and so on for other age groups 3,73/3,456/3,571 respectively, as you can see in table 3, and each average score is calculated from the respondents agreement and disagreement with questions pertaining to consumers attitudes towards online shopping. And then we took the average of each age group and got for group 1,2,3,4 and 5 the following age averages: e.g. age group 15-20= $(15+20)/2=17,5$ and so on 22,5/27,5/35/50 respectively.

The correlation analysis between these ages group give -0,7381 which indicates that there is a quite strong negative correlation between age and attitude to on-line shopping, and it reflects that as age increases interest of online shopping decreases among people, or one can say that elderly people are not so keen to shop on-line.

Education: For the education we have calculated the estimated the average study time for high school, bachelors, masters and PHD. i.e. Average 12 study years in total for high school, $12+4=16$ for bachelor and $16+2=18$ for master and $18 + 4 = 22$ for PHD. The averages for each group are 3,84/3,75/3,62/3,33 respectively as you can see in table 4. Correlation results gives -0,956 which is very high and indicates strong negative relation between education and attitudes towards online shopping and would indicate that higher education makes on-line shopping less attractive.

Income: For the income we have calculated the scores for the each income groups which gave averages of 3.84,/3.67,/3,65,/3,74,/3,1,/ 3,85. As it is visible in table 5, then we have taken the average of income brackets one by one i.e. (income group between 500USD-700USD , $(750+1000)/2 =7500$). The

correlation results shows $-0,1226$ and it indicates that there is a weak negative correlation between income and attitudes towards online shopping so we are unable to conclude anything with this result.

4.3 Analysis of four factors

In this section writers will discuss the fifteen questions concerning four factors, as discussed earlier each question represent one module and we will discuss each module under their concerning factor.

4.3.1 Convenience: Convenience factor carries first four modules.

1. I get on time delivery by shopping online: As you can see in the first module that is “I get on time delivery by shopping online” if we look at the results in table 6, it shows that 66% of the respondents agreed with the statement that they get on time delivery by shopping online and only 1% respondents are disagree with the statement. Like scale scores are calculated by multiplying each frequency by the like scale score ranging from 5=strongly agree to 1=strongly disagree, and then total score is divided by the sample size that is 100 to get the average score. The higher the average scores the higher the respondents’ agreement with the module. In table 6 the average score is 3.93 which shows on average online shoppers in Guinea get on time delivery by shopping online.

2. Detail information is available while shopping online: Table 7 shows that 19% of the respondents are strongly agree with the statement that “detail information is available while shopping online” 55% agree, 19% uncertain, 6% disagree and only 1% strongly disagree with the statement. In the table 7 if you look at the average score for this module that is 3.85 which shows a Positive

agreement of respondents towards the module and Guinea online shoppers perceive that detail information is available while shopping online.

3. I can buy the products anytime 24 hours a day while shopping online: out of total 100 respondents 56% strongly agree with the statement that “they can buy the products anytime 24 hours a day while shopping online” whereas 31% agree, 6% showed uncertain response, 5% disagree and 2% strongly disagree as shown in table 8. So most of the respondents (56+31=87%) falls in agree and strongly agree with the statement which shows a positive agreement. The average score for this module is 4,34 as shown in table 8 in appendix, it shows strong positive agreement with the statement that they can buy the products anytime 24 hours a day while shopping online.

4. It is easy to choose and make comparison with other products while shopping online: The percentage scores from the table 9, shows that 25% of the respondents strongly agree with the statement that “it is easy to choose and make comparison with other products while shopping online, whereas 42% Agree, 16% uncertain, 15% disagree and 2% strongly disagree with above statement. Majority of the respondent’s falls in strongly agree and agree. The average score i.e.3.73 show a positive agreement that Conakry online shoppers or one can say Guinea online shoppers believe that it is easy to choose and make comparison with other products while shopping online.

4.3.2 Website design/features: Website design/Features are divided into five modules, each module carries one question.

5. The website design helps me in searching the products easily: Table 10 shows that 25% of the respondents strongly agree with the statement that

“website design helps me in searching the products easily, 41% agree, 25% uncertain, 8% disagree with the statement and only 1% strongly disagree. If you look at the average score that is 3.81 which shows strong positive agreement with the statement that website design helps consumers in searching the products easily.

6. While shopping online, I prefer to purchase from a website that provides safety and ease of navigation and order: The percentage figures depicted in table 11 shows that out of 100 respondents 52% strongly agree with the statement that “while shopping online, they prefer to purchase from a website that provides safety and ease of navigation and order, in the same manner 30% agree, 13% were uncertain, 3% disagree and only 2% strongly disagree. Majority of the respondents agree with this statement. Even if you look at the average score i.e. 4.27 is the highest scoring so far, which shows very strong agreement of the respondents with one of the module of website design.

7. The website layout helps me in searching and selecting the right product while shopping online: Website layout is the graphic user interface of a web page, it includes the options, search bars, tools and buttons which helps user to browse and shop easily. Results indicated that 29% of the respondents strongly agree with the statement that “website layout helps them in searching and selecting the right product while shopping online, where as 48% agree, 12% uncertain, 9% disagree and 2% have showed disagreement with the statement. The average score of the module as shown in table 12 in appendix i.e.3.93 shows strong agreement with the statement, which means website layout is important element for Swedish consumers while shopping online.

8. I believe that familiarity with the website before making actual purchase reduce the risk of shopping online: Table 13 shows that 33% respondents strongly agree with the statement “we believe that familiarity with the website before making actual purchase reduce the risk of shopping online”, 45% agree with the statement. 15% uncertain, 6% disagree and only 1% respondents have shown strong disagreement with the statement. Average score for this module is 4.03 which again show positive result as on average most of the respondents agree that past experience with website while shopping online reduces the risk of shopping online.

9. I prefer to buy from website that provides me with quality of information: Guinea online shoppers perceive quality of information as important attribute while shopping online , as you can see from table 14, 43% of the respondents strongly agree with this module, 45% have shown agreement, 10% uncertain and only 2% are agree and disagree with the statement. Average score i.e. 4.28 is high which also confirm that a website that provide quality of information can influence consumers more than a website with less quality information.

4.3.3 Time saving: is divided into three modules; we will analyse and discuss each module individually.

10. Online shopping takes less time to purchase: Results on table 15 shows that 22% of the respondents strongly agree that “online shopping takes less time to purchase, 39% respondents agree with the statement, 29% uncertain, 8% disagree and 2% strongly disagree with the statement. The average score 3.51 shows that online shopping takes less time to purchase as compare to traditional shopping.

11. Online shopping doesn't waste time: scores on table 16 shows that 15% respondents out of 100 sample size strongly agree with the statement that "online shopping doesn't waste time", 49% agree, 20% uncertain, 13% disagree where as only 3% respondents have shown disagreement with the statement. The average score calculated from likert scores i.e. 3.34 shows positive agreement with the statement and it shows Swedish online shoppers believe that online shopping doesn't waste time.

12. I feel that it takes less time in evaluating and selecting a product while shopping online: Only 6% respondents are agreed with the statement that " it takes less time in evaluating and selecting a product while shopping online", 31% agree, 24% uncertain, 34% disagree, and 5% strongly disagree with the Statement. The average score as you can see in table 17 i.e. 2.99 but if you look at the frequency and percentage of respondents 34% disagree and 24% uncertain which mean product evaluation takes less time but not so much less.

4.3.4 Security: Security is divided into three modules.

13. I feel safe and secure while shopping online: Table 18 in appendix indicates that 4% respondents strongly agree, 36% agree, 25% uncertain, 26% disagree and 9% respondents strongly disagree with the statement that "they feel that online shopping protects their security "The average score is 3.0, which shows that on average respondents are uncertain that they feel Safe and secure while shopping online. As 50% of the respondents fall between disagree and uncertain which also show that online shoppers in Guinea have security issues while shopping online.

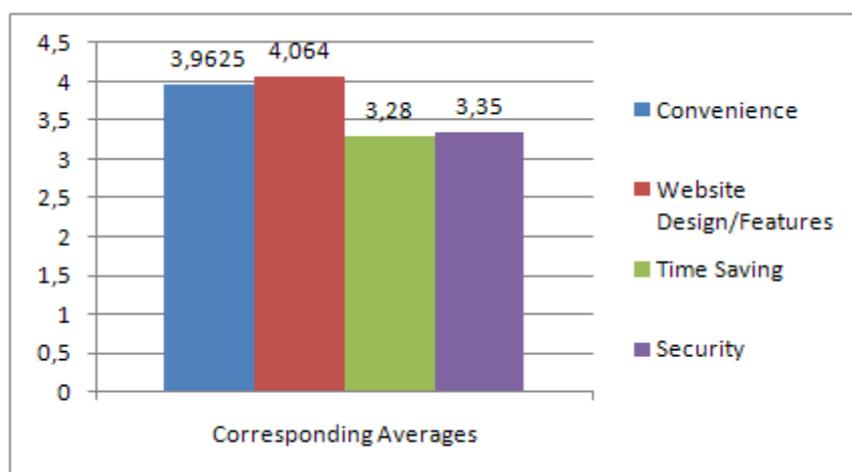
14. Online Shopping protects my security: Table 19 indicates quite negative trend, only 18% respondents fall between strongly agree and agree, 46% are uncertain, 24% are disagree and 12% respondents strongly disagree with the statement that “online shopping protects their security”. Even the average score is less than 3.0 that is 2.71, which shows declining trend, by interpreting the statement and results one gets to know that online shopping security is important aspect which negatively influence consumers to shop online.

15. I like to shop online from a trustworthy website: Table 20 in appendix indicates 46% of the respondents strongly agree that “they like to shop online from trust worthy website”, 47 % agree with this statement which mean in total out of 100, 93% respondents believes that trustworthiness is important attribute while shopping online. If you look as the average score that is 4.34 which also proves that majority of the respondents would not like to take risk by shopping from a website that is not trustworthy.

4.4 Comparative analysis of four factors

In the comparative analysis of four factors we will take the averages of each factor by their corresponding modules, for instance “Convenience” as one of the four factors contains four modules, we will take the average of four modules under convenience and compare with other factors averages to see which factor is relatively more attractive, we will also discuss the each factor as well. In table 21 you can see Convenience contains 4 modules, Website design/ Features contains 5 modules, Time saving with 3 modules and Security contains 3 modules. The average score for convenience is 3,9625 which is high score and it indicates convenience is the important factor for online shoppers in Guinea, and convenience as a factor influence consumers to shop online and it also

attracts online shoppers, if we compare the convenience with the other factors it has second highest score and this also indicates as it is one of the important factor for online shoppers in Guinea, as there are not so many options for people in Conakry, so it is perhaps more convenient for people to shop online.



The corresponding average scores of Website Design/Features is 4,064 which is the highest score we have received as compare to other factors, so it is concluded that for online shoppers in Guinea website design/Features is the most attractive factor that influence consumers to shop online. Though time saving has the lowest score of all i.e. 3,28 but still the score is positive and it indicates that time saving is also an attractive factor for online shoppers in Gotland. Lastly the average score for the security i.e.3,35 is also positive and its above 2, which shows security is an important factor that online shoppers keep in mind while shopping online.

4.5 Analysis of additional comments by respondents

Question no.16 of the study was designed to check what other factors influence consumers to shop online, out of 100 respondents, 41 respondents opted to write additional comments. After analysing the statements provided by respondents we have found another important attribute that is price of the product or services and discount, as they perceive while shopping online they get items in lower prices and get better discounts while shopping online. As one of the respondent said “the main benefit for me is that prices are lower in on-line shops”, another said “I guess shopping online depends on the price of product, otherwise I will go myself to the shop. If the shop is far away and the product is cheaper buying it online then I will shop online otherwise i will prefer to go to the shop, evaluate the product properly myself and make a decision to buy or not”. So by looking at these statements and some other similar statements, one can signify that price is another important factor which influences consumers to shop online. Convenience is also important factor as our study also indicated and one of the respondent said” Living in Guinea makes it sometimes hard to find certain things anywhere but by online Shopping is probably my strongest reason for shopping online”.

Feedback from previous buyers is also seen to influence online shoppers, as one of the respondent said “the feedback from previous users I found it very helpful to minimize the risk”. Online shoppers are also concerned about security issue, quality and reliability of information as one respondent claims “The biggest problem I have with online shopping trusts the product quality and delivery, especially since you rely totally on second hand information i.e. someone is giving you information about the product rather than you seeing it for yourself”.

People are also concerned about the website design and we have also found from our study as to be the most attractive factor in our study and one respondent believes “The major influence is the display of the product. Prefer products with many pictures from different positions. So after analysing the statements writers have found that other than four factors 1) Price and discount 2) feedback from previous users 3) Product quality and quality of information are also important factors which influence consumers to shop online.