

A STATISTICAL STUDY ON ONLINE SHOPPING BEHAVIOUR AMONG COLLEGE STUDENTS IN COIMBATORE DISTRICT

A project work submitted in partial fulfillment of the requirement
for the award of the degree of

Master of Science in Statistics

Submitted by

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GOVERNMENT ARTS COLLEGE (AUTONOMOUS)

COIMBATORE -641 018

APRIL 2024

CERTIFICATE

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This is to certify that the project work entitled "**A STATISTICAL STUDY ON ONLINE SHOPPING BEHAVIOUR AMONG COLLEGE STUDENTS IN COIMBATORE DISTRICT**" submitted in the Government Arts College, Coimbatore in partial fulfillment of the award of the degree of **Master of Science in Statistics** is a record of original work done by **A. HARIKRISHNAN (22MST114)** during the period of the study (2022-2024) in the Department of Statistics, Government Arts College Coimbatore-18, under my Supervision and guidance. this project work has not formed the award of any Degree /Diploma/ Associate-SHIP/Fellowship or similar title to any candidate of any University.

Signature of the Guide

Head of the Department

Principal

Project report submitted for Viva-Voce Examination on.....

Internal Examiner

External Examiner

DECLARATION

DECLARATION

I hereby declare that the project work entitled “**A STATISTICAL STUDY ON ONLINE SHOPPING BEHAVIOUR AMONG COLLEGE STUDENTS IN COIMBATORE DISTRICT**” submitted to Government Arts College, Coimbatore in partial fulfillment of the requirement for the award of the degree of **Master of Science in Statistics** is a record of original work done by me during the period of the study (2022-2024) under the guidance of **Dr. P.K. SIVAKUMARAN. M.Sc., MBA. M.Phil., PGDCA., Ph.D.**, Associate Professor, Department of Statistics, Government Arts College, Coimbatore-18. This project work has not formed the basis for the award of any Degree/ Diploma/ Associate-SHIP Fellowship or similar title to any candidate of any University.

Date:

Coimbatore-18

Signature of the Student

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A. HARIKRISHNAN (22MST114)

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CHAPTER I

INTRODUCTION TO THE STUDY

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INTRODUCTION TO THE STUDY

1.1 INTRODUCTION ON ONLINE SHOPPING:

Online shopping is attracting more people every day. Online shopping is the activity or action of buying products or services over the Internet. It means going online, landing on a seller's website, selecting something, and arranging for its delivery. The buyer either pays for the good or service online with a credit or debit card or upon delivery. People are now looking for various options to save time and money while purchasing online. While people shop online, the engagement and satisfaction to shop that offline shopping provides is still missing in the current online channels. The biggest advantage of Online shopping is time saving. People need not physically go to various shops to purchase items. You can select items of your choice from your phone. Shopping online is a good way to save your energy and money. You need not burn fuel to go to the markets. Another advantage we can enjoy in online purchasing is availability. You can go for online shopping at any time that best suits you, irrespective of your location. The online stores are open 24 hours a day. You need not take a holiday to go shopping



TYPES OF ONLINE SHOPPING:

- Search based online shopping
- Browsing based online shopping
- Interactive online shopping

1.2. SEARCH BASED ONLINE SHOPPING:

Majority of Indian ecommerce marketplaces are search driven. You open the app, searches for the product they are looking for, compare prices and reviews from sellers and make a decision. This way to shop is best suited for items needing little to no browsing to make a decision. Products such as household items, electronic accessories, common stationary etc. are mostly bought using this format of online shopping.

ADVANTAGES:

Search based shopping saves time. The search to checkout time is the least as compared to other shopping formats. Availability of reviews and prices offered from different sellers on the same items makes it easy to decide what to buy. A detailed description of item is available along with colour and size variations.

DISADVANTAGES:

Sometimes, don't know what exactly to search. This makes discovery of new items difficult as merely 17% people browse till second page on marketplaces like amazon. There is no engagement involved like offline shopping. If you have a question, they will have to go through the question-and-answer section and customer reviews. — It is difficult to grow and get sales for small businesses because of high competitive prices from big brands and the platforms in house brand.

1.3. BROWSING BASED ONLINE SHOPPING:

Remember when you were looking for sneakers and scrolled through pages and pages of multiple apps, still ending up not buying anything because the offer notification that made you open the app is now expired? Browsing based shopping is amazing to explore, discover new products and be in sync with what is trending around you. But the decision paralysis hits when you have 50 suites in your shortlist and you can't make up your mind about which ones to buy. Browsing based shopping is most known for lifestyle products such as apparels, shoes and beauty products etc.

ADVANTAGES:

Product categories where looks are more important than utility are best suited for browsing based shopping. The options to choose from is in large number and there is something for everyone on this kind of ecommerce shopping websites.

DISADVANTAGES:

the products looks on a model isn't the same as how it looks on you when the item is delivered. Because of unavailability of reviews and enormous number of options available, it is hard to make

a decision sometimes. It is difficult for small sellers because of priority being given to bigger brands and returns rates on items being very high.

1.4. INTERACTIVE ONLINE SHOPPING:

More than 80% of India still shops offline. Ever wondered why? Is it because of internet availability? Probably not because internet penetration stands at more than 60% in India. There are multiple reasons, but the hesitancy of being frauded and not getting the same item as showed on the image is one reason. Another reason is, people like the feeling of experience if shopping offline-asking questions and making sure they are buying the right product before paying comes natural as this is way, we have been shopping for the last 6 decades. Interactive shopping is just like that. Sellers showcase their products to a community of interested buyers where buyers can ask questions around the product, ask for variations in colours and sizes, talk to the community and see the product in action before they make a purchase. Isn't this exciting? No more being unsatisfied with the delivered product not matching the expectations. No more endless browsing pages on apps to look for the right product. No more getting cheated from fraud channels on social media. You see that product LIVE and alive on your mobile screen and you get the exact same product delivered. Interactive online shopping is best for items where item reviews are generally not available and you can take suggestions from the seller in terms of you should buy. For eg. A mother would like to understand how a toy would affect her child's learning abilities and help grow but be entertaining at the same time. Who else to get the right products than a seller who has been doing this for the last 10 years and knows the right set of toys?

ADVANTAGES:

Interactive shopping is the best if you like the experience of offline shopping and love to interact with like-minded shoppers. The discovery to checkout time is very good. You would be supporting a small shop instead of buying from the biggest ecommerce marketplaces.

DISADVANTAGES:

You may have to wait to view a certain category of products or may have to wait a bit for your favorite sellers to host the live show but come on, all good things take time, right! sometimes waiting is worth it

INFORMATION COIMBATORE DISTRICTS AND COLLEGES.

Coimbatore district is one of the 38 districts in the state of Tamil Nadu in India. Coimbatore is the administrative headquarters of the district. It is one of the most industrialized districts and a major

textile, industrial, commercial, educational, information technology, healthcare and manufacturing hub of Tamil Nadu. The region is bounded by Tirupur district in the east, Nilgiris district in the north, Erode district in the northeast, Palakkad district, Idukki district and small parts of Thrissur district and Ernakulam district of Neighboring state of Kerala in the west and south respectively. As of 2011, Coimbatore district had a total population of 3,458,045, male 1729297, and female 1728748. Area of Coimbatore **Total:** 4723 Sq. Kms .urban 4723 sq. kms Coimbatore District Total College 433.

DATA COLLECTION OF SAMPLE COLLEGE NAME

- Government Arts College
- PSG College
- SNS College
- KG College
- Krishnan College
- Ramakrishnan College
- KCT College
- Government Medical College
- TNAU
- Karpagam College
- Nirmala College
- Bishop Ambrose College
- Karunya University
- BHARATHIAR University
- Dr N,G,P College
- AVINASHILINGAM University
- Rathinam College
- Cheran College
- CMS College
- SVS College
- GOVERNMENT Engineering college

CHAPTER II

RESEARCH METHODOLOGY

CHAPTER II

RESEARCH METHEDOLOGY

2.1 OBJECTIVES OF THE STUDY:

Objectives are aims or ends in view which serves as necessary guidelines in providing direction by selecting and regulating the activities necessary for the integration of the total process. The researcher has undertaken the setting of objectives as an important step realizing their importance in providing the basis for organizing the work.

The following are the objectives of the present study:

- To understand and categorize the purposes of using online shopping.
- To identify the most type of preferable payment
- To know about the gender most using online shopping.
- To identify the most preferred websites.
- To know the opinion about quality of the product.
- To know about the benefits of using online shopping sites.
- To know about the safely on online shopping.
- To know about the speed of delivery.
- To find the associ
- To identify the disadvantages associated with online shopping sites.

This chapter explains the methods techniques and the procedure followed in the research study. Research is a systematic and logical study of an issue or problem or phenomenon through scientific methods. Without proper methodology, results are likely to be undependable and defective. Of course, in a research study some methods will have to be used, without the methods no research can be carried out.

RESEARCH METHEDOLOGY:

The research has been conducted through a survey based on a questionnaire. A research design is considered as the framework or plan for a study that guides as well as helps the data collection and analysis of data. Present study is an analytical and descriptive in nature and based on empirical study. The data was collected from primary sources. Primary sources of data is respondents concerned and collected by using a predefined questionnaire.

RESERCH PROCESS:

A questionnaire is developed for collecting the data and analysed the data based on various variables such as age, gender, etc.

TYPE OF DATA:

- ✓ Primary data

PRIMARY DATA:

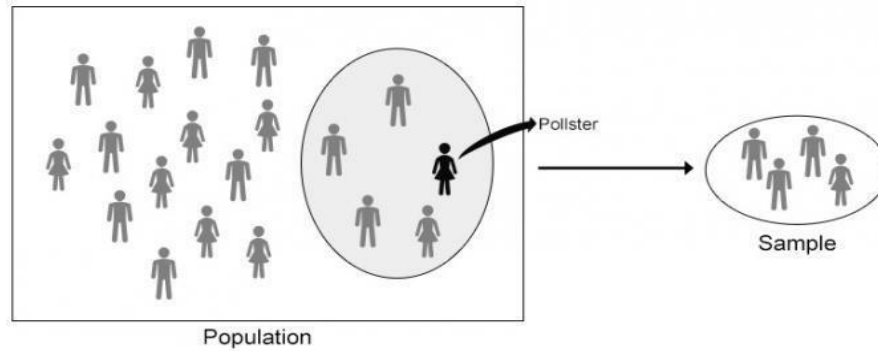
Primary data means original data that has been collected specially for the purpose in mind. It means someone collected the data from the original source first hand. Data collected these ways is called primary data and collected 200 sample. In this study we have used primary data for our purpose.

2.2 CONVENIENCE SAMPLING:

- **Convenience sampling** is a non-probability sampling method where units are selected for inclusion in the sample because they are the easiest for the researcher to access.
- This can be due to geographical proximity, availability at a given time, or willingness to participate in the research. Sometimes called accidental sampling, convenience sampling is a type of non-random sampling.
- Example: Convenience sampling Suppose you are researching public perception towards the city of Seattle. You have determined that a sample of 200 people is sufficient to answer your research question.
- To collect your data, you stand at a subway station and approach passersby, asking them whether they want to participate in your research. You continue to ask until the sample size is reached.

Note: Make sure not to confuse **random selection** with stopping passersby **at random**.

- In probability (or random) sampling, **random selection** means that each unit has an equal chance of being selected.
- In convenience sampling, stopping people **at random** means that not everyone has an equal chance of forming part of your sample. For instance, here you have excluded people who did not pass through that subway station on the day and time you were collecting your data.



Convenience Sampling

WHEN TO USE CONVENIENCE SAMPLING:

Convenience sampling can be useful in specific circumstances:

1. PRELIMINARY OR EXPLORATORY RESEARCH:

Convenience sampling can be a good starting point when conducting initial or exploratory studies. It allows you to gather preliminary data and insights quickly and efficiently, which can be useful in informing more rigorous, probability sampling later.

2. RESOURCE CONSTRAINTS:

When there are constraints in terms of time, budget, or manpower, convenience sampling can provide a low-cost method to collect data.

3. ACCESSIBILITY CHALLENGES:

When a population is hard to access or a sampling frame is unavailable, convenience sampling may be the only feasible way to collect data.

4. RESEARCH GENERALIZABILITY IS NOT THE PRIMARY GOAL:

If the goal of your research is not to generalize the findings to a larger population but to gain deep insights, test instruments, or understand a new phenomenon, convenience sampling can be used.

5. PILOT TESTING:

Before launching a full-scale research study, a pilot study using convenience sampling might be conducted to test the procedures, measures, and protocols that have been designed for data collection.

HOW TO USE:

1. Understanding who the target population is will help your research and plan out where you could go to speak to these people.

2. Taking multiple samples as a larger sample size will reduce the chance of sampling error.
3. Include both qualitative and quantitative questions in your survey or questionnaire.
4. Repeat the survey to ensure the accuracy of your results.
5. Use convenience sampling along with probability sampling to supplement your research.

ADVANTAGES OF CONVENIENCE SAMPLING:

Depending on your research design, there are advantages to using convenience sampling.

- Convenience sampling is usually low-cost and easy, with subjects readily available.
- In the absence of a sampling frame convenience sampling allows researchers to gather data that would not have been possible otherwise.
- If you're conducting exploratory research, convenience sampling can help you gather data that can be used to generate a strong hypothesis or research queries.

DISADVANTAGES OF CONVENIENCE SAMPLING:

Convenience sampling has its disadvantages as well, and it's not a good fit for every study.

- Since the sample is not chosen through random selection, it is impossible that your sample will be fully representative of the population being studied. This undermines your ability to make generalization from your sample to the population of interest.
- Getting responses only from the participants who are easiest to contact and recruit leaves out many respondents. This affects the accuracy of your data and runs the risk that important cases are not detected, leading to under coverage bias.
- Convenience sampling relies on the subjective judgment of the researcher and the subjective motivations of the participants. This leads to a high risk of observer bias..

2.3 STATISTICAL HYPOTHESIS:

Statistical hypothesis is an assumption about a population parameter. The assumption may not be true at all the time. Hypothesis testing refers of the formal procedures used by statisticians to accept or reject statistical hypothesis.

NULL HYPOTHESIS:

- A statistician should take up a neutral or null hypothesis regarding the outcome of the test (or) a decision maker before the sample observations are taken in the key note are said to be null hypothesis.
- The null hypothesis is usually denoted by H_0 .
- Example: There is no difference between the sample mean and population mean. $H_0: \mu = X$

ALTERNATIVE HYPOTHESIS:

- The opposite or composite of null hypothesis is called alternative hypothesis.
- It is usually denoted by H_1 .
- Example: There is a difference between the sample mean and population mean. $H_1: \mu \neq \bar{X}$

LEVEL OF SIGNIFICANCE:

The null hypothesis is rejected if the p-value is less than a predetermined level α .

This α is called as the significance level.

2.4 STATISTICAL TOOLS:

Data collected from the field were edited and coded. The data were fed in the computer and were analyzed using SPSS software and the statistical techniques. Statistical techniques used to facilitate the interpretation of numerical data secured from the samples. Hence the following tools are used in our statistical study

- ✓ Frequency Distribution
- ✓ Descriptive statistics
- ✓ Correlation
- ✓ Chi-square test

2.4.1 FREQUENCY DISTRIBUTION:

A frequency distribution is a representation, either in a graphical or tabular format, that displays the number of observations within a given interval. The interval size depends on the data being analysed and the of the analyst. The intervals must be mutually exclusive and exhaustive. Frequency distributions are typically used within a statistical context. Generally, frequency distribution can be associated with the checking of a normal distribution. It provides a visual representation for the distribution of observations within a particular test. Analysts often use frequency distribution to visualize or illustrate the data collected in a sample.

2.4.1.2 DESCRIPTIVE STATISTICS:

This statistical method is used to summarize data and the most familiar of this method is the finding of the average. Measures of average are also called measures of central tendency and include mean, median, mode and midrange. It helps to gain useful information from the raw data by organizing them into frequency distribution and then presenting the data by using graphs.

2.4.3 CORRELATION:

Correlation is a statistical technique that can show whether and how strongly pairs of variables are related. A correlation is simply defined as a relationship between two variables. The whole purpose of using correlation in research is to figure out which variables are connected. Positive correlation occurs when an increase in one variables increases the value in another. Negative correlation occurs when an increase in one variables decreases the value of another. A weak correlation means that as one variables increases or decreases there is a lower likelihood of there being a relationship with the second variable. the formula for correlations.

$$\text{Correlation} = \text{cov}(x, y) / \sigma_x * \sigma_y$$

ASSUMPTION OF KARL PEARSON'S COEFFICIENT:

The assumptions and requirements for calculating Pearson's correlation coefficient are as follows:

- 1 The data set which is to be correlated should approximate to the normal distribution. If the data is normally distributed, then the data points tend to lie closer to the mean
- 2 The word homoscedastic is a Greek originated meaning able to disperse Homoscedasticity means 'equal variances. For all the values of the independent variable, the error term is the same. Suppose the error term is smaller for a certain set of values of independent variable and larger for another set of values, then homoscedasticity is violated. It can be checked visually through a scatter plot The data is said to be homoscedastic if the points lie equally on both sides of the line of best fit
3. When the data follows a linear relationship, it is said to be linearity If the data points are in the form of a straight line on the scatter plot, then the data satisfies the condition of linearity
4. The variables which can take any value in an interval are continuous variables. The data set must contain continuous variables to compute the Pearson correlation coefficient. If one of the data sets is ordinal, then Spearman's rank correlation is an appropriate measure.
5. The data points must be in pairs which are termed as paired observations. There exists a dependent variable for every observation of the independent variable.

2.4.4 CHI-SQUARE TEST:

The Chi-Square goodness of fit was first proposed by Karl Pearson in the year 1990. Chi is the Greek letter represented by χ , the χ^2 distribution is continuous and has a positive integer parameter which determines its shape.

The chi-square test to decide whether to accept the null hypothesis, that was a hypothesis of independence between two variables.

The chi-square test can be used to test whether a significant difference between the observed theoretical frequencies is. In this aspect, we determine the goodness of fit of a theoretical distribution such that how well it fits the distribution of data that we have actually observed.

The chi-square performs the basis Pearson chi-square test to see whether there is a relation between two categorical variables. This is an extremely elegant statistics based on the simple idea of comparing the frequencies observed in certain categories to the frequencies might expect to get in those categories by chance.

The Pearson chi-square statistics tests whether there is an association between two variables. As part of the crosstab's procedure, SPSS produces a table that includes chi-square statistic and its significance value.

The Pearson chi-square tests whether the two variables are independent. If the significance value is small enough then we reject the null hypothesis that the variables are independent and accept the hypothesis that they are in some way related. The value of the chi-square statistic is given in the table as it the significant value.

PROCEDURE

- Framing the null hypothesis and alternate hypothesis
- fixing the level of significance at $\alpha = 0.05$
- Using chi square test statistic.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

O_i = Observed value

E_i = Expected value

Σ = Summation

ASSUMPTIONS FOR CHI-SQUARE TEST:

1) BOTH VARIABLES ARE CATEGORICAL

It's assumed that both variables are categorical. That is, both variables take on values that are names or labels.

2) ALL OBSERVATIONS ARE INDEPENDENT

It's assumed that every observation in the dataset is independent. That is, the value of one observation in the dataset does not affect the value of any other observation.

3) CELLS IN THE CONTINGENCY TABLE ARE MUTUALLY EXCLUSIVE

It's assumed that individuals can only belong to one cell in the contingency table. That is, cells in the table are mutually exclusive – an individual cannot belong to more than one cell.

4) EXPECTED VALUE OF CELLS SHOULD BE 5 OR GREATER IN AT LEAST 80% OF CELLS.

It's assumed that the expected value of cells in the contingency table should be 5 or greater in at least 80% of cells and that no cell should have an expected value less than 1.

CHAPTER III

ANALYSIS AND INTERPRETATION

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ANALYSIS AND INTERPRETATION

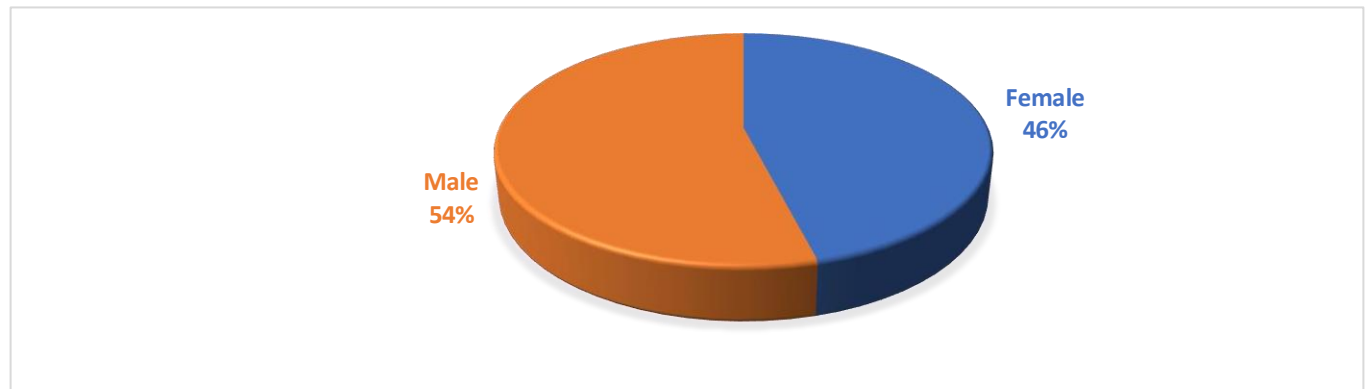
3.1 FREQUENCY ANALYSIS

TABLE 3.1.1: GENDER

In this section, frequency analysis is carried out for the respective variables of data. It provides simple measures and also describe the basic feature of the data in a study.

Gender	Frequency	Percent
Female	92	46.0
Male	108	54.0
Total	200	100.0

FIGURE3.1.1: GENDER



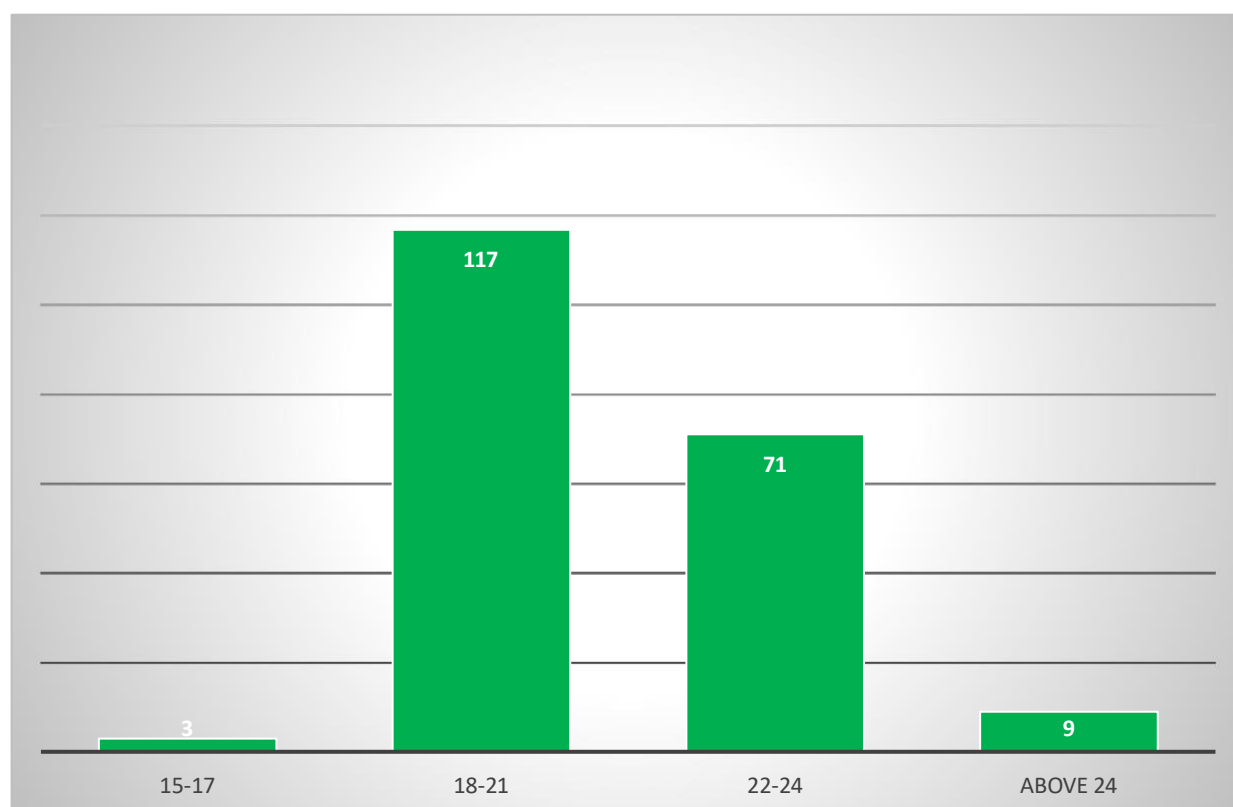
INTERPRETATION:

Among the 200 students, 54% of them were male and the remaining of them 46% were female. The most participated people are male.

TABLE3.1.2: AGE:

Age	frequency	percent
15-17	3	1.5
18-21	117	58.5
22-24	71	38.5
Above 24	9	4.5
total	200	100.0

FIGURE3.1.2: AGE



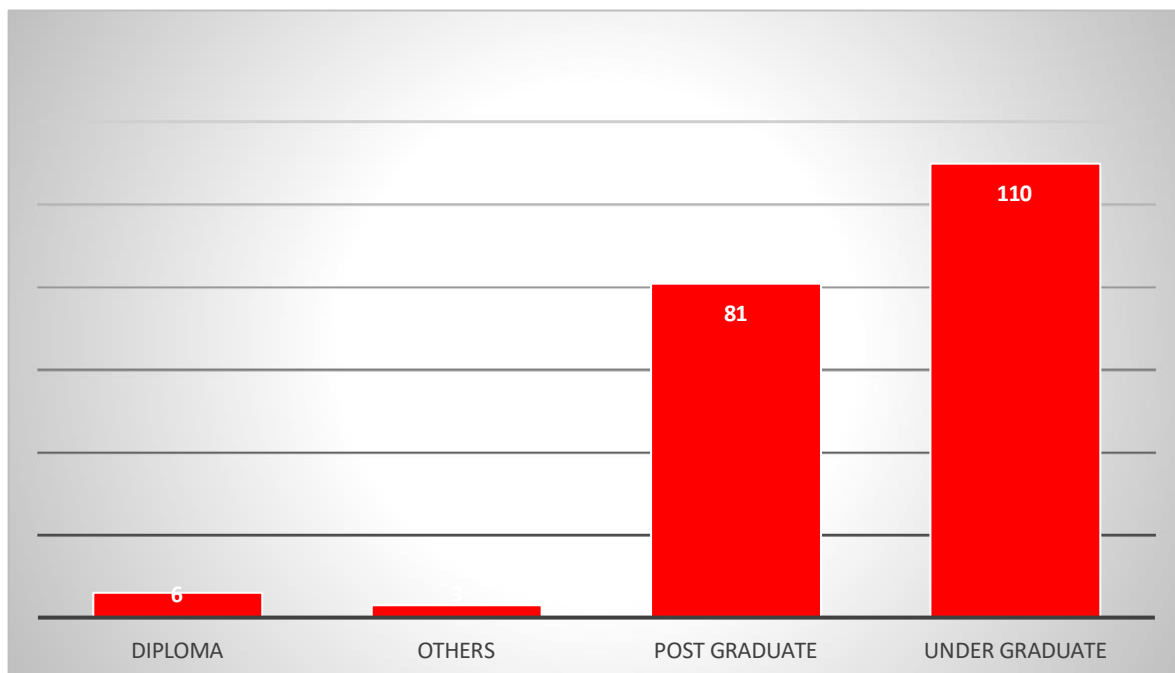
INTERPRETATION:

Among the 200 respondents 58.5% are from the age group between 18-24 . 38.5% are from the age group between 22-24. 4.5% are the from the age group between above 24. 1.5% are from the age group between 15-17. It shows that most of the respondents are from the age group between 18-24.

TABLE3.1.3: CURRENT EDUCATIONAL LEVEL

Educational level	Frequency	percent
Diploma	6	3.0
Others	3	1.5
Post Graduate	81	40.5
Under Graduate	110	55.0
Total	200	100.0

FIGURE3.1.3: CURRENT EDUCATIONAL LEVEL



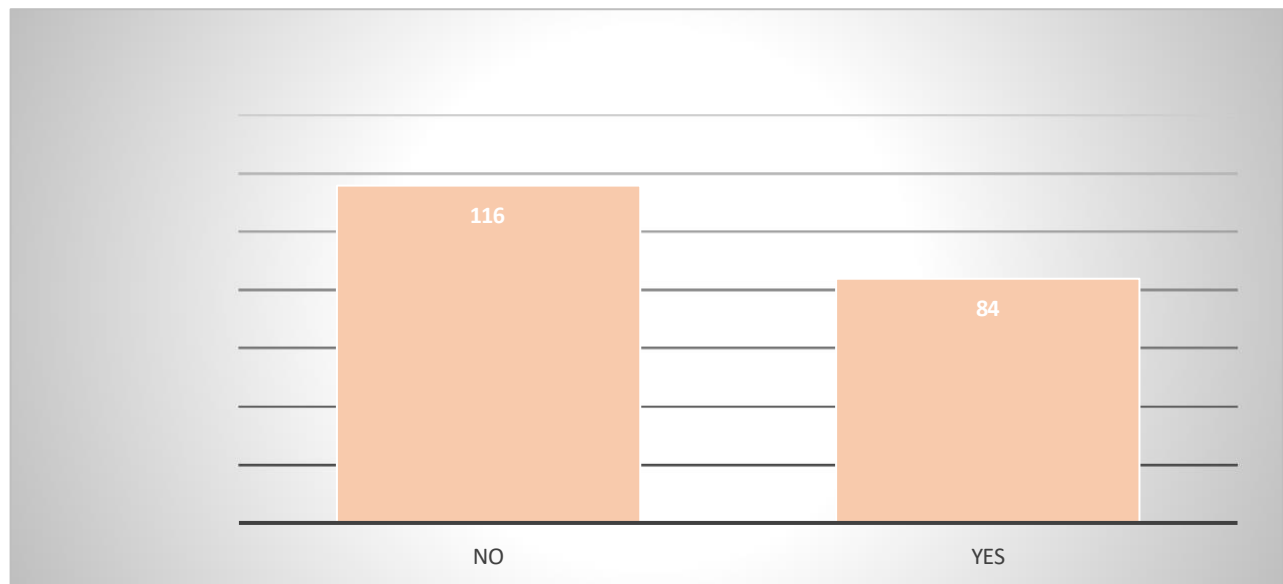
INTERPRETATION:

Among the 200 students, 55% of them were under graduates, 40.5% of them were postgraduate, and 3% of them were diploma. then remaining of them 1.5% were others. And the result is most of the online shopping student's current educational status is under graduates.

TABLE3.1.4: HAVE A PART TIME JOB

Job	frequency	percent
Yes	84	42.00
No	116	58.00
Total	200	100.0

FIGURE3.1.4: HAVE A PART TIME JOB



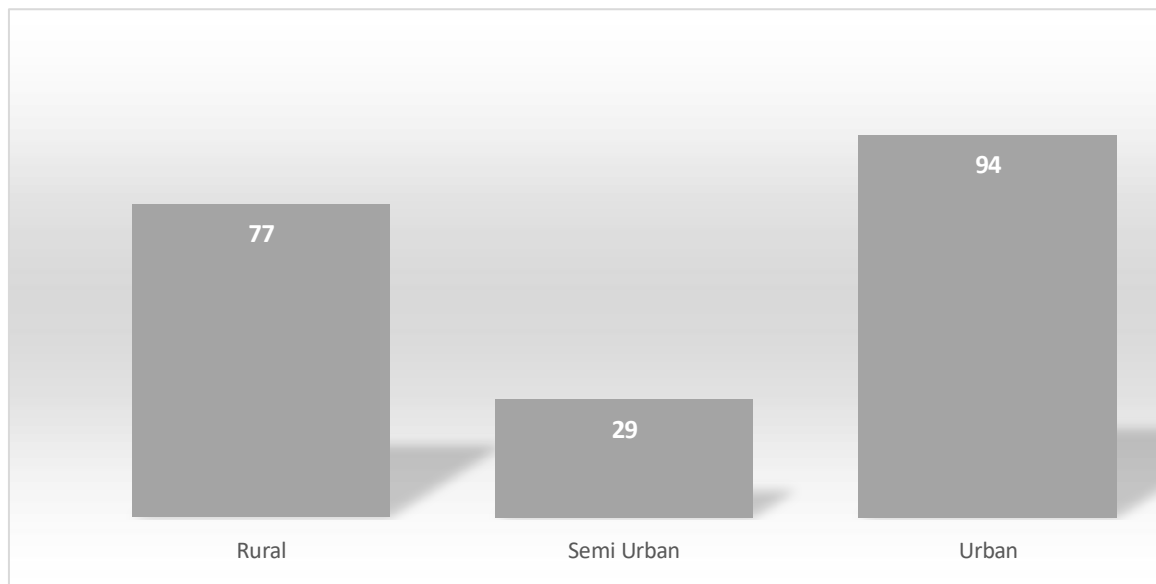
INTERPRETATION:

Among the 200 students have a part time 58.0% said that they are not working part time and 42.0% said that they are working part time. Is shows most of the respondents said that they are not working part time.

TABLE3.1.5: PLACE OF RESIDENCE

place	Frequency	percent
Rual	77	38.0
Semi Urban	29	14.5
Urban	94	47.0
Total	200	100.0

FIGURE 3.1.5: PLACE OF RESIDENCE



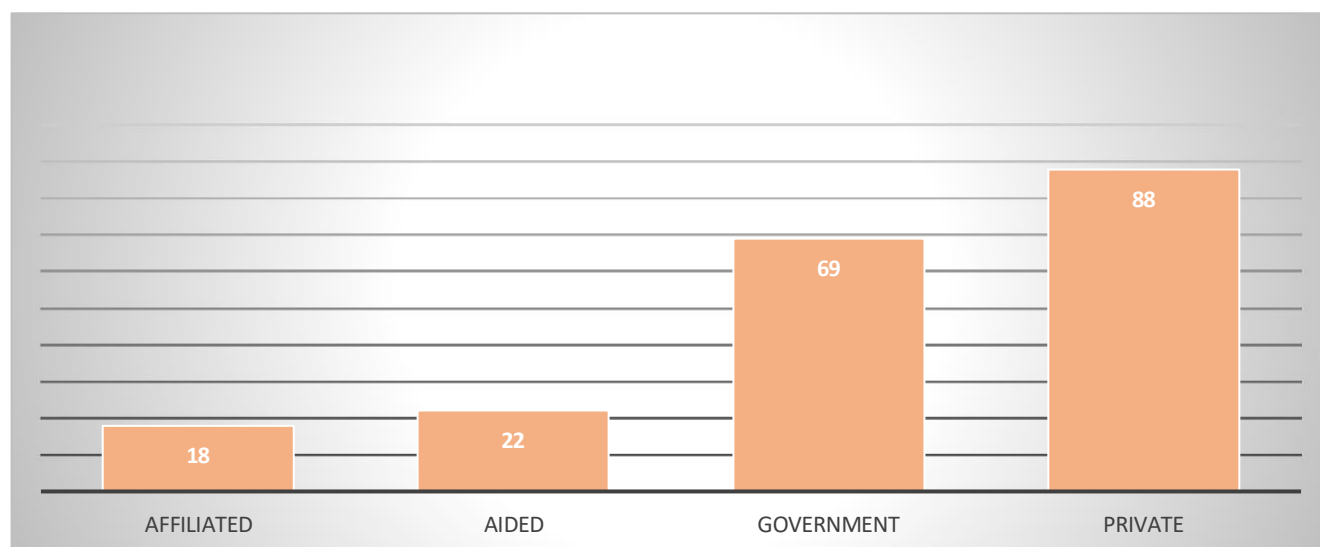
INTERPRETATION:

Among the 200 students place of residence 47.0% are from urban place and 38.0% are from rural place and 14.5% are from semi urban. Is shows most of the respondents said that they are from urban place.

TABLE3.1.6: COLLEGE TYPE

College Type	Frequency	Percent
Affiliated	18	9.0
Aided	25	12.5
Government	69	34.5
Private	88	44.5
Total	200	100.0

FIGURE 3.1.6: COLLEGE TYPE



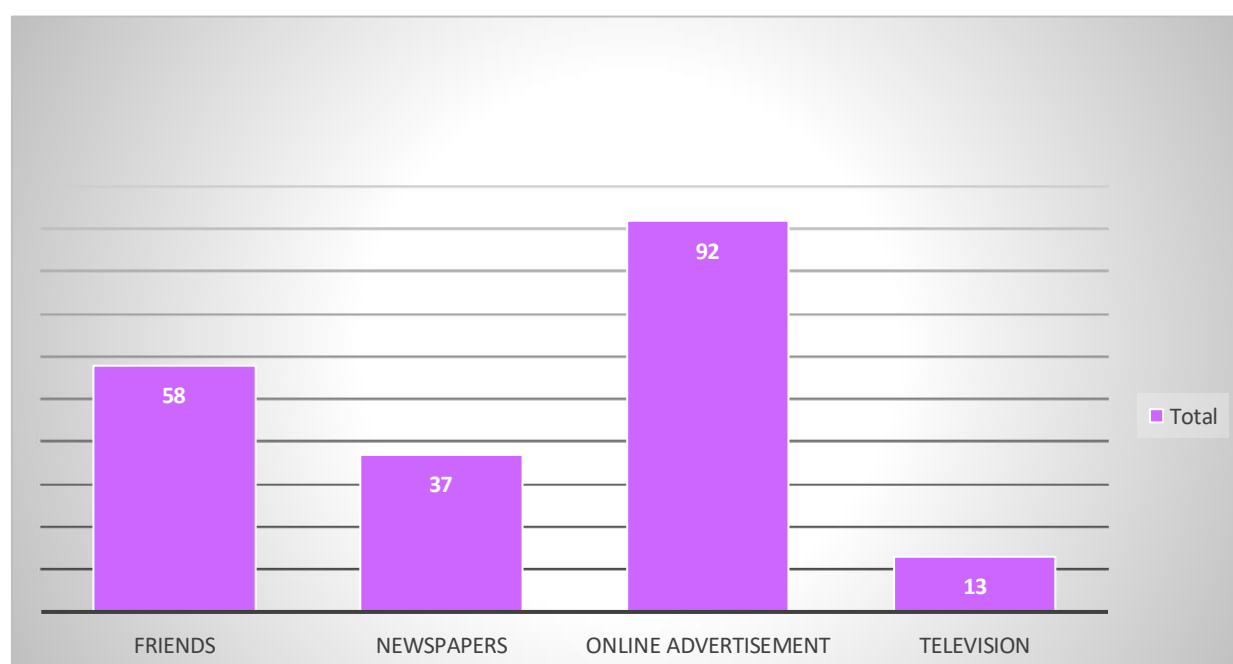
INTERPRETATION:

Among the 200 students, 44.0% are private college, 12.5% are aided college, 34.5% are government college, 9.0% are affiliated college and the result of most purchasing college type is a private.

TABLE3.1.7: SOURCES OF AWARENESS ON ONLINE SHOPPING

Awareness	Frequency	Percent
Friends	58	29.0
Newspaper	37	18.5
Online Advertisement	92	46.0
Television	13	6.5
Total	200	100.0

FIGURE 3.1.7: SOURCES OF AWARENESS ON ONLINE SHOPPING



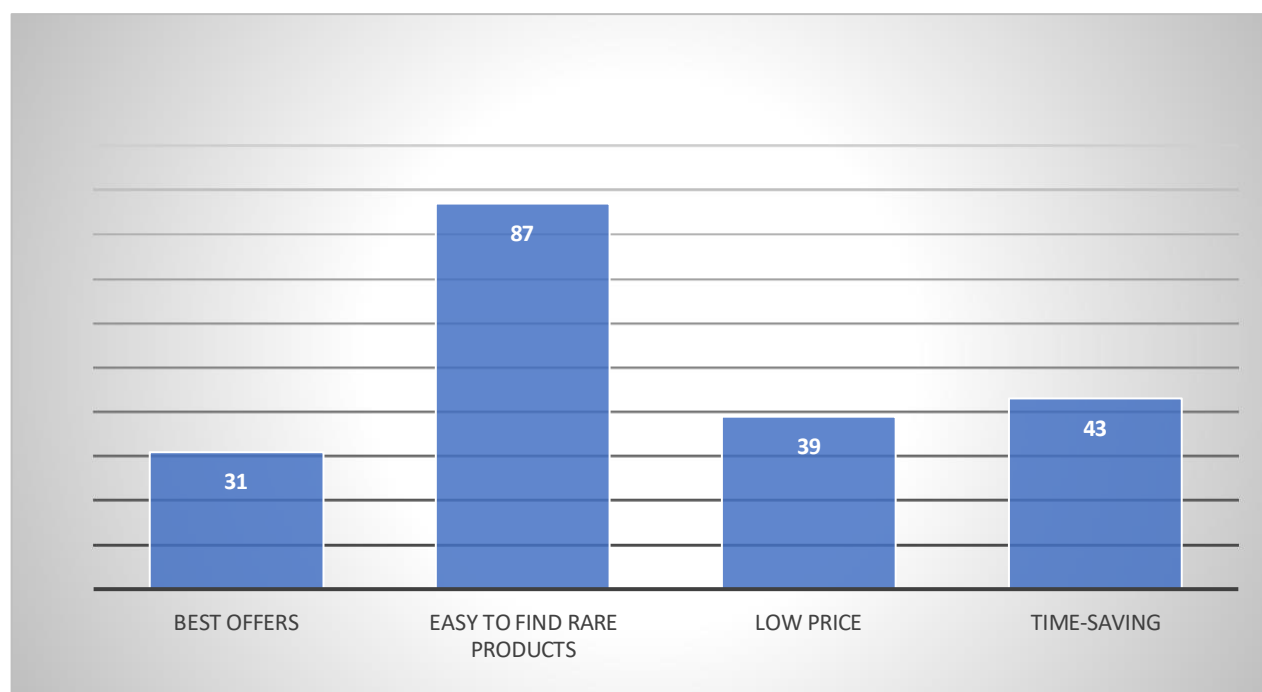
INTERPRETATION:

Among the 200 students, 46.0% are find information from online advertisement, 18.5% are from got newspaper, 58% are got from friends and the remaining of them 6.5% are got from television and the result is most online advertisement.

TABLE3.1.8: REASON FOR CHOOSING ONLINE SHOPPING

Reason	Frequency	Percent
Tiem Saving	43	21.5
Easy To Find Rare Products	87	43.6
Low Price	39	19.5
Best Offers	31	15.5
Total	200	100.0

FIGURE 3.1.8: REASON FOR CHOOSING ONLINE SHOPPING



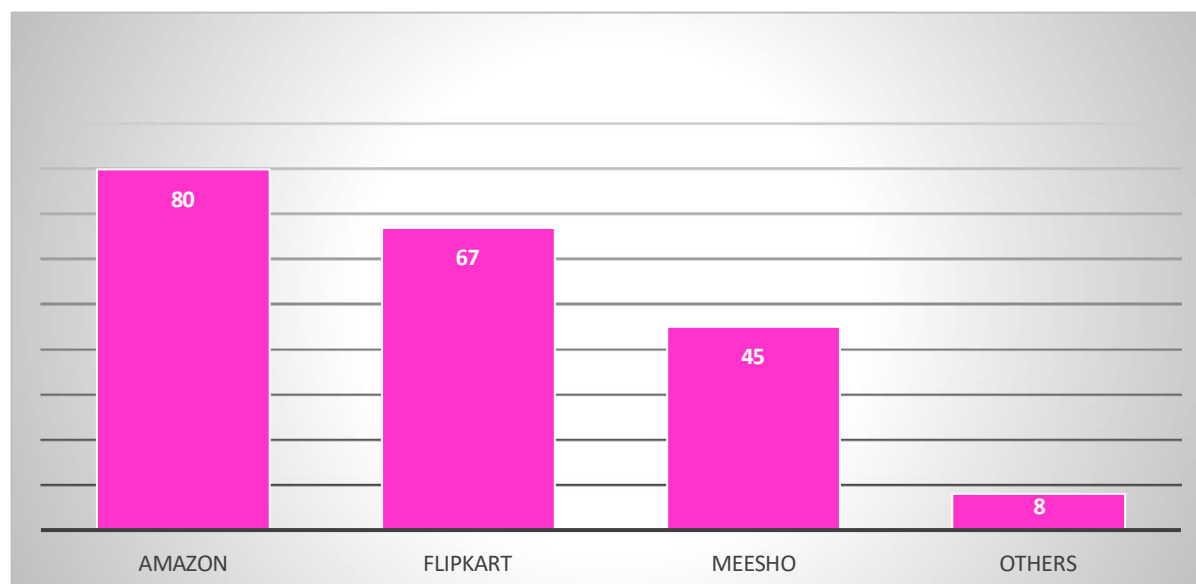
INTERPRETATION:

Among the 200 students, 21.5% select the reason is time saving, 43.6 % select the reason is easy to find rare products, 19.5% select the reason is low price and the remaining of them 15.5%. select the reason is best offers and the result is most of rare products online.

TABLE 3.1.9: FAVORITE WEBSITE FOR ONLINE SHOPPING

Favorite	Frequency	Percent
Amazon	80	40.0
Flipkart	67	33.5
Meesho	45	22.5
Others	8	4.0
Total	200	100.0

FIGURE 3.1.9: FAVORITE WEBSITE FOR ONLINE SHOPPING



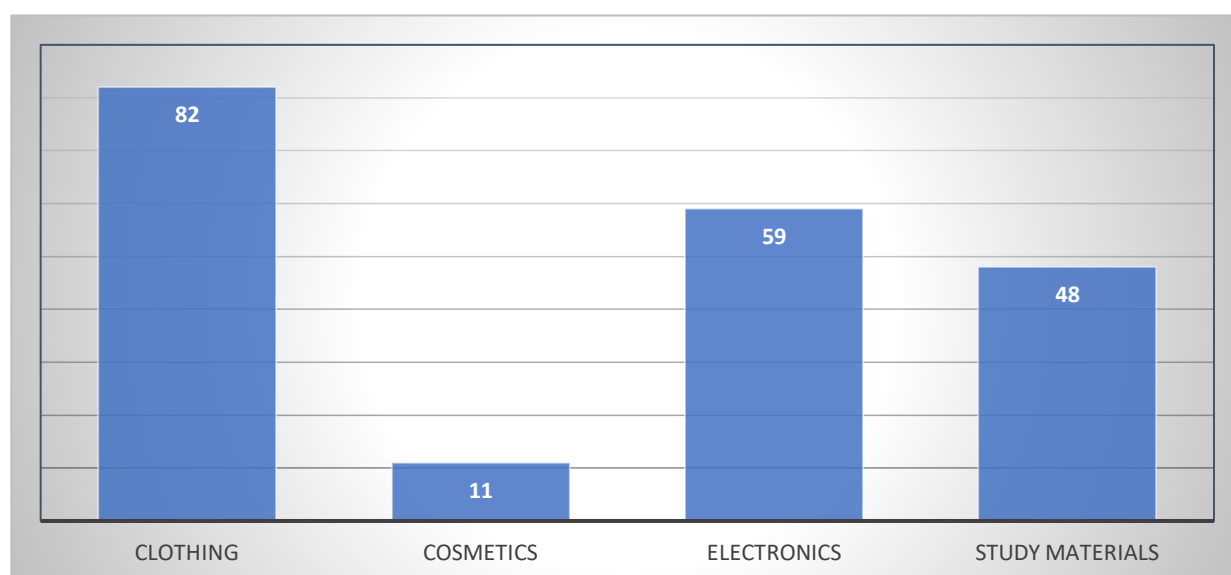
INTERPRETATION:

Among the 200 students, 33.5% choose flipkart, 40.0% choose amazon, 22.5% choose meesho and the remaining of them 4.0% choose others. The result is most of the students choosing the website is amazon.

TABLE 3.1.10: PREFERENCE OF PRODUCTS

Products	Frequency	Percent
Clothing	82	41.0
Cosmetics	11	5.5
Electronics	59	29.5
Study Materials	48	24.0
Total	200	100.0

FIGURE 3.1.10: PREFERENCE OF PRODUCTS



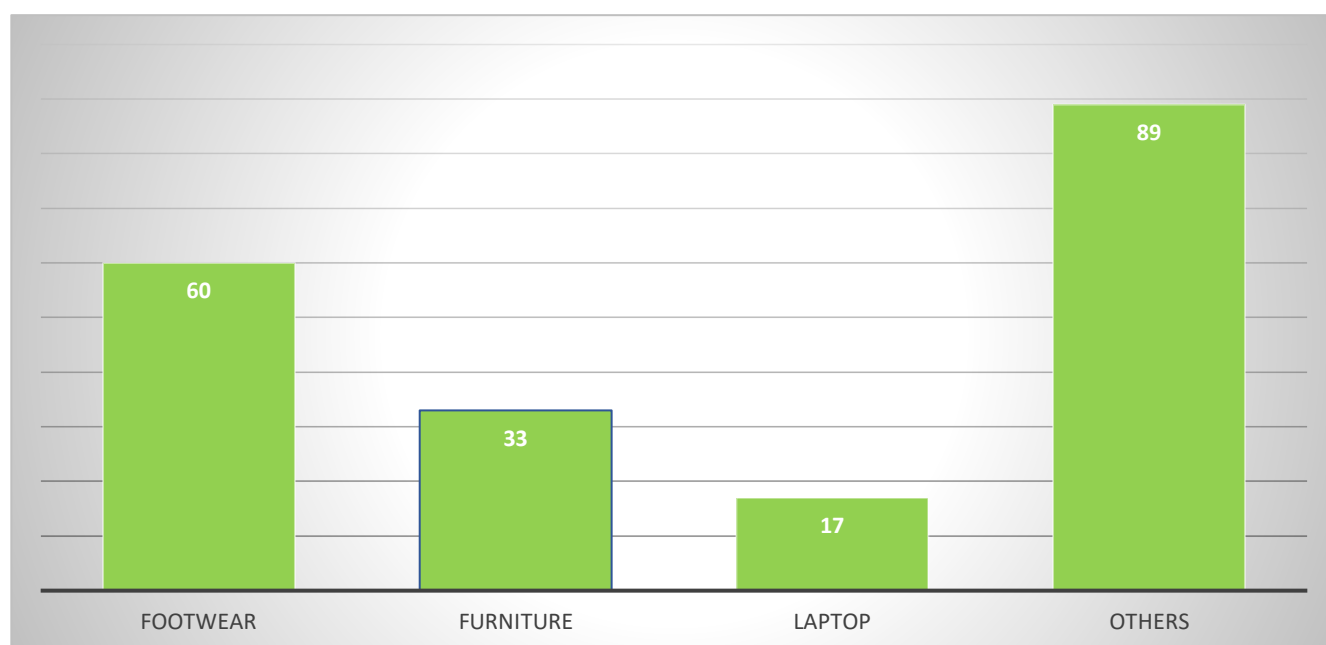
INTERPRETATION:

Among the 200 students, 41.0% are purchased prefer clothing, 5.5 % are purchased prefer cosmetics, .29.5% are prefer electronics. 24.0% prefer study materials and the result is highly purchased type prefer are clothing.

TABLE 3.1.11: MOST PREFERABLE PRODUCTS

Preferable	Frequency	Percent
Footwear	17	8.5
Furniture	34	16.9
Laptop	60	29.9
Others	89	44.7
Total	200	100.0

FIGURE 3.1.11: MOST PREFERABLE PRODUCTS



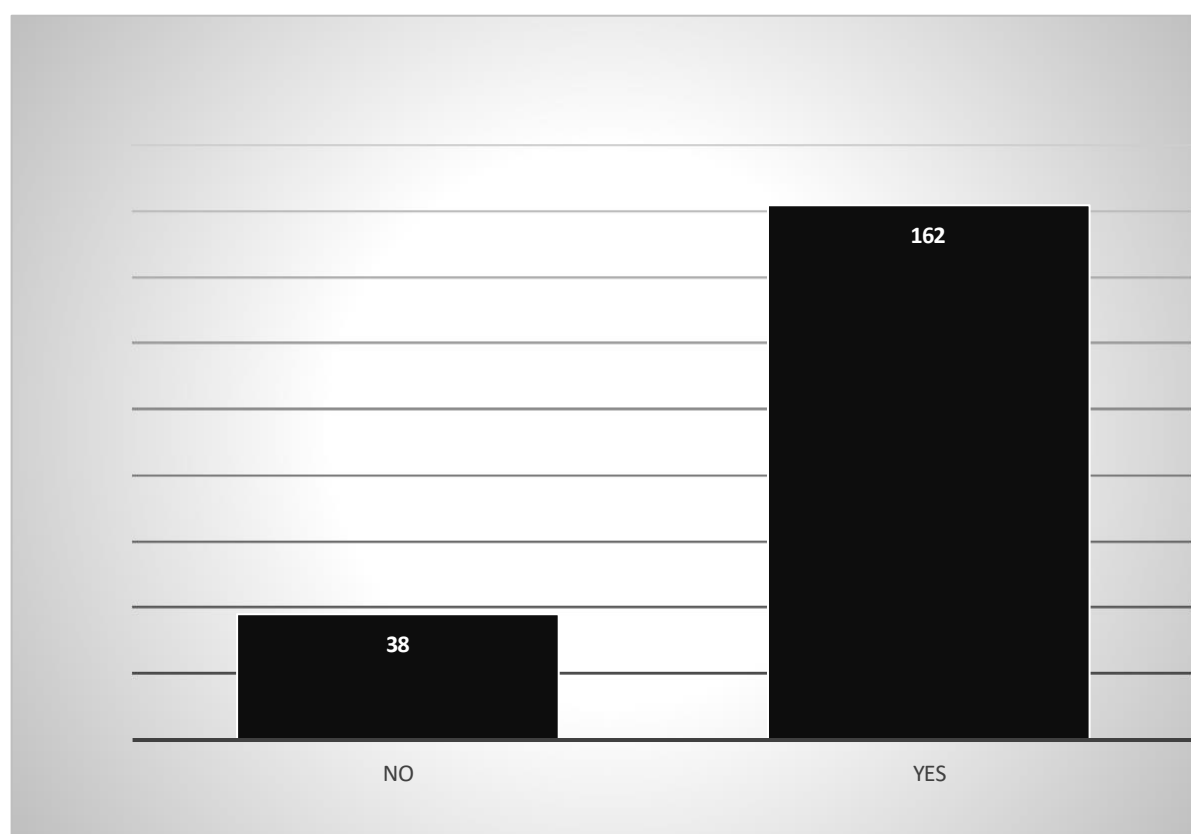
INTERPRETATION:

Among the 200 students, 8.5% are purchased footwear, 16.9% are purchased furniture, 29.9 % are purchased baby laptop and the remaining of them 44.7% are purchased others. and the result is highly purchased are other.

TABLE 3.1.12: SAFETY ON ONLINE SHOPPING

Safely	Frequency	Percent
Yes	162	81.0
No	38	19.0
Total	200	100.0

FIGURE 3.1.12: SAFETY ON ONLINE SHOPPING



INTERPRETATION:

Among the 200 students do you feel online shopping. 81.0% are from safe yes and 19.5% are from no safe. Is shows most of the respondents said that they are online shopping is safe yes.

TABLE 3.1.13: TYPE OF PAYMENT FOR ONLINE SHOPPING

Payment	Frequency	Percent
Credit Card /Debit Cards	11	5.5
Online Bank Transfer	46	23.0
Upi Payment	56	28.0
Cash On Delivery	87	43.5
Total	200	100.0

FIGURE 3.1.13: TYPE OF PAYMENT FOR ONLINE SHOPPING



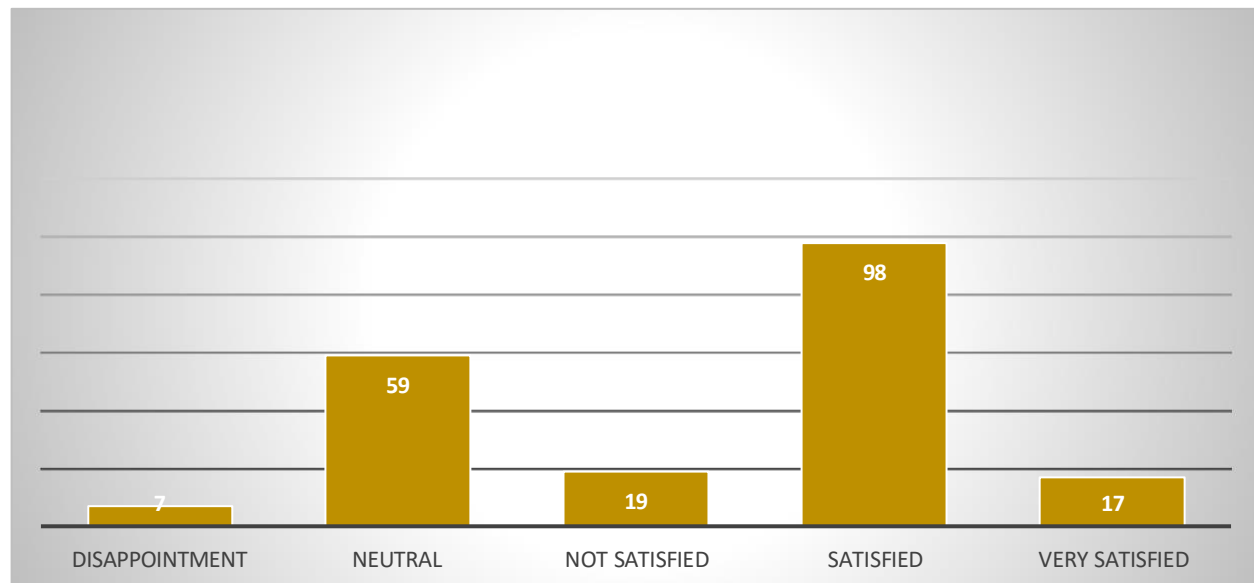
INTERPRETATION:

Among the 200 students, 5.5% are paying credit card /debit cards,23.0 % are paying online bank transfer .28.0% paying upi payment. 43.5% paying cash on delivery and the result is highly paying for cash on delivery.

TABLE3.1.14: SATISFACTION ABOUT QUALITY OF THE PRODUCT

Quality	Frequency	Percent
Disappointment	7	3.5
Neutral	59	29.5
Not Satisfied	19	9.5
Satisfied	98	49.0
Very Satisfied	17	8.5
Total	200	100.0

FIGURE 3.1.14: SATISFACTION ABOUT QUALITY OF THE PRODUCT



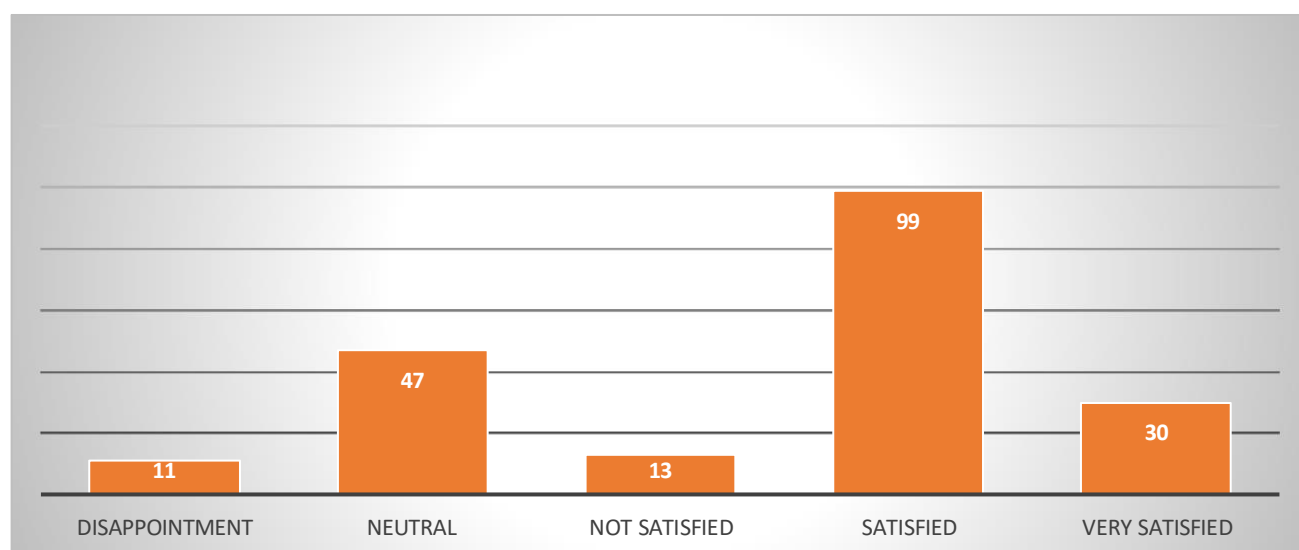
INTERPRETATION:

Among the 200 students, 8.5 % students are very satisfied, 49.0 % students are satisfied, 29.5% students are neutral, 9.5 % not satisfied, 3.5 % disappointment. The result is most of the students about quality of the product is satisfied.

TABLE 3.1.15: SATISFACTION ABOUT SPEED OF DELIVERY

Speed	Frequency	Percent
Disappointment	11	5.5
Neutral	47	23.5
Not Satisfied	13	6.5
Satisfied	90	49.5
Very Satisfied	30	15.0
Total	200	100.0

FIGURE 3.1.15: SATISFACTION ABOUT SPEED OF DELIVERY



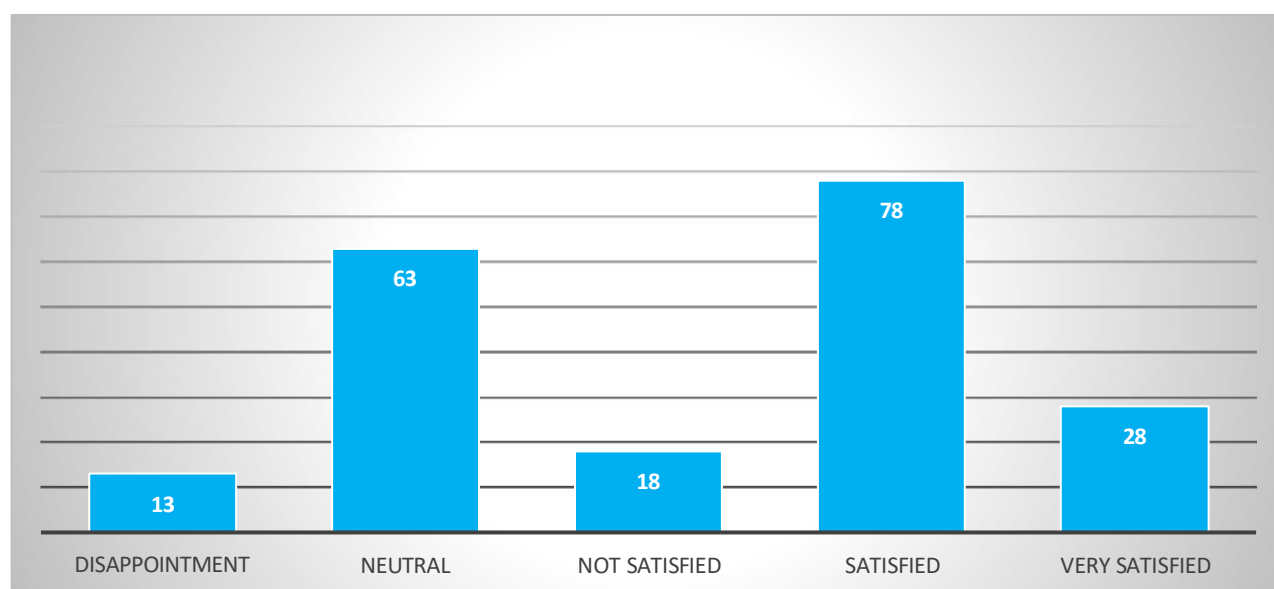
INTERPRETATION:

Among the 200 students, 15.0% are very satisfied, 49.5% are satisfied, 23.5% are neutral, 6.5% are not satisfied and the remaining of them 5.5% are disappointment. The result is most of the student's opinion about delivery speed on online shopping is satisfied.

TABLE 3.1.16: SATISFACTION ABOUT DISCOUNT OFFERS

Discount	Frequency	Percent
Disappointment	13	6.5
Neutral	63	31.5
Not Satisfied	18	9.0
Satisfied	78	39.0
Very Satisfied	28	14.0
Total	200	100.0

FIGURE 3.1.16: SATISFACTION ABOUT DISCOUNT OFFERS



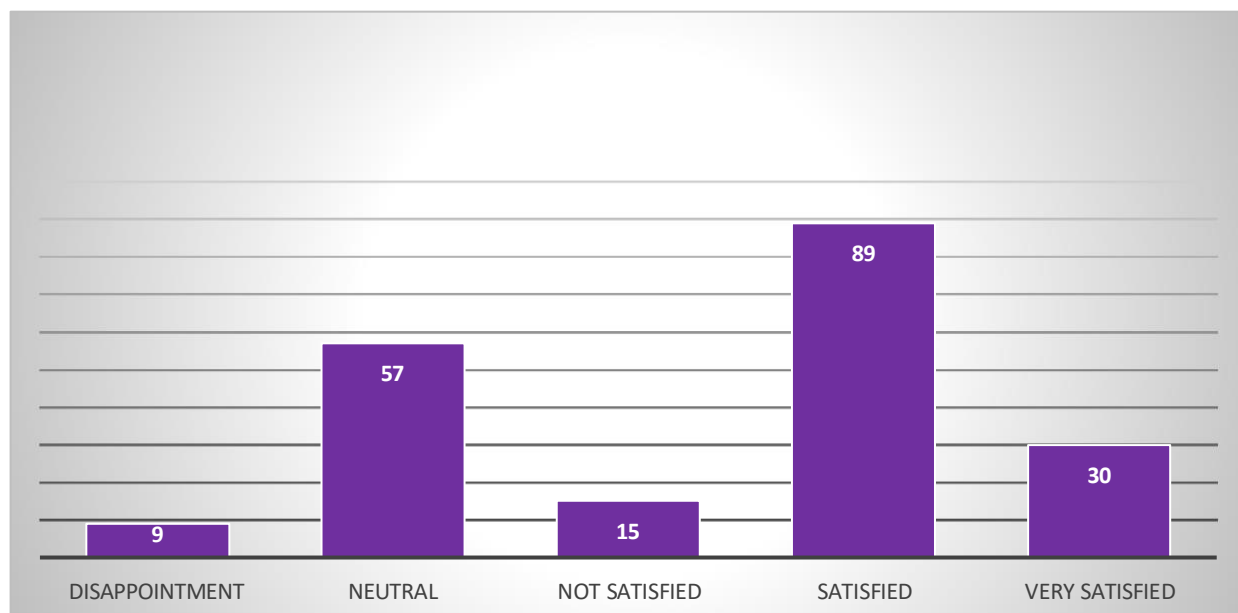
INTERPRETATION:

Among the 200 students, 14.0% are very satisfied, 39.0% are satisfied, 31.5% are neutral, 9.0% are not satisfied and the remaining of them 6.5% are disappointment. The result is most of the student's opinion about discount offers on online shopping is satisfied based on the survey.

TABLE3. 1.17: THE RETURN PRODUCT ARE GENERALLY CUSTOMER FRIENDLY

Return	Frequency	Percent
Disappointment	9	4.5
Neutral	57	28.5
Not Satisfied	15	7.5
Satisfied	89	44.5
Very Satisfied	30	15.0
Total	200	100.0

FIGURE 3.1.17: THE RETURN PRODUCT ARE GENERALLY CUSTOMER FRIENDLY



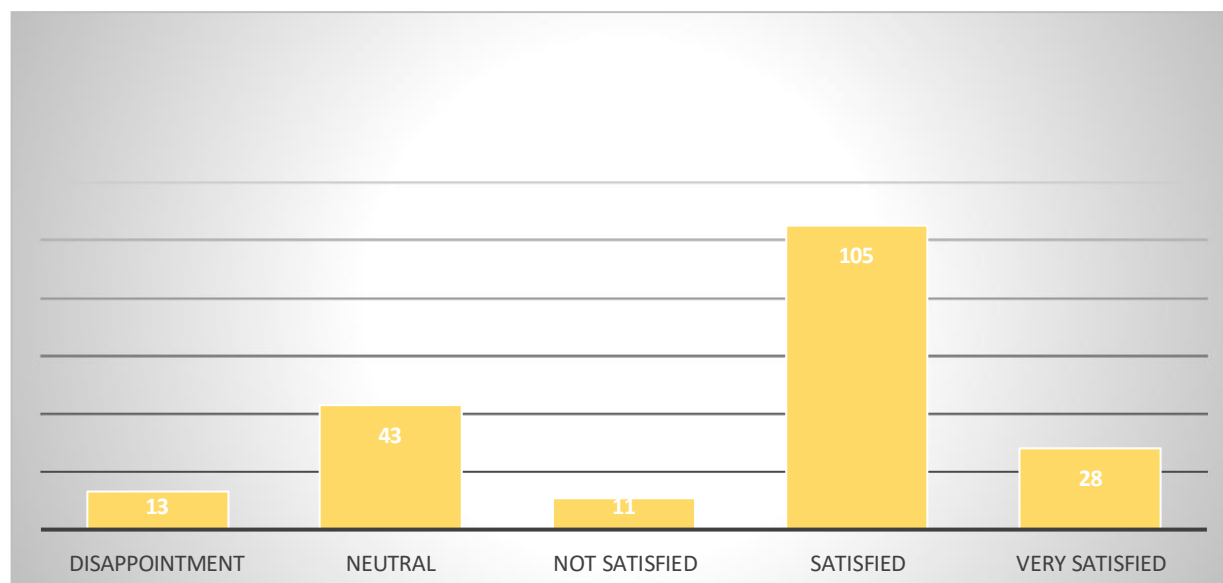
INTERPRETATION:

Among the 200 students 15.0% experience is very satisfied, 44.5% experience is satisfied, 28.5% experience is neutral, 7.5% experience is not satisfied and the remaining of them 4.5% experience is disappointment of the online shopping. The most is are generally customer friendly is a satisfied based on the survey.

TABLE 3.1.18: SATISFACTION ABOUT ONLINE SHOPPING EXPERIENCE

Experience	Frequency	Percent
Disappointment	13	6.5
Neutral	43	21.5
Not Satisfied	11	5.5
Satisfied	105	52.5
Very Satisfied	28	14.0
Total	200	100.0

FIGURE 3.1.18: SATISFACTION ABOUT ONLINE SHOPPING EXPERIENCE



INTERPRETATION:

Among the 200 students 14.0% experience is very satisfied, 52.5% experience is satisfied, 21.5% experience is neutral, 5.5% experience is not satisfied and the remaining of them 6.5% experience is disappointment of the online shopping. the result is most experience is satisfied based on the survey.

3.2 DESCRIPTIVE STATISTICS

TABLE3.2.1: DESCRIPTIVE STATISTICS

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Gender	200	1	1	2	1.46	.500
Current Educational Level	200	3	1	4	2.40	.577
Your College Type	200	3	1	4	1.96	.912
Frequency Of Online Shopping In A Month	200	3	1	4	1.89	.945
Age	200	3	1	4	2.43	.606
Your Favourite Website For Online Shopping	200	3	1	4	1.97	.850
Online Shopping Experience	200	4	1	5	2.38	1.010
Your Course Of Study	200	4	1	5	2.42	1.175
The return and refund of online shopping are generally customer friendly	200	4	1	5	2.42	.984
How much do you spend on online shopping for a month ?	200	2	1	3	1.38	.589
Types of products you prefer	200	3	1	4	1.94	.933
Which Products you Are Looking For Most of The Time Online?	199	3	1	4	3.11	.973
Discount offers	200	4	1	5	2.55	1.050
Have You Faced Problems In Online Shopping?	200	1	1	2	1.36	.480
Speed of delivery	200	4	1	5	2.38	1.000
How satisfied are you with the quality of the product?	200	4	1	5	2.51	.908
Type Of Payment For Online Shopping	200	3	1	4	3.10	.938
Have You Ever Tried To Get Exchange A Product?	200	1	1	2	1.34	.475
Do You Feel Online Shopping Is Safe?	200	1	1	2	1.19	.393
Do You Get The Product Delivered On Time?	200	1	1	2	1.23	.425
Valid N (listwise)	199					

3.3 CORRELATION:

TABLE 3.3.1: RELATIONSHIP BETWEEN MONTHLY SALARY AND FREQUENCY OF ONLINE SHOPPING:

Correlations

		Monthly salary	Frequency Of Online Shopping
Monthly salary	Pearson Correlation	1	-.154*
	Sig. (2-tailed)		.030
	N	200	200
Frequency Of Online Shopping	Pearson Correlation	-.154*	1
	Sig. (2-tailed)	.030	
	N	200	200

INTERPRETATION:

There is a low degree negative correlation between monthly salary and frequency of online shopping.

TABLE 3.3.2: RELATIONSHIP BETWEEN MONTHLY SALARY AND MONEY SPEND ON ONLINE SHOPPING.

Correlations

		Monthly salary	spend on online shopping
Monthly salary	Pearson Correlation	1	-.189**
	Sig. (2-tailed)		.007
	N	200	200
spend on online shopping	Pearson Correlation	-.189**	1
	Sig. (2-tailed)	.007	
	N	200	200

INTERPRETATION:

There is a low degree negative correlation between monthly salary and money spend on online shopping.

**TABLE 3.3.3: RELATIONSHIP BETWEEN MONEY SPEND ON ONLINE
FREQUENCY ONLINE SHOPPING**

Correlations

		Spend on online shopping	Frequency Online Shopping
spendon online shopping	Pearson Correlation	1	.427**
	Sig. (2-tailed)		.000
	N	200	200
Frequency Of Online Shopping	Pearson Correlation	.427**	1
	Sig. (2-tailed)	.000	
	N	200	200

INTERPRETATION:

There is a low degree positive correlation between money spend on online shopping and frequency of online shopping.

3.4.CHI -SQUARE TEST:

TABLE 3.4.1: CHI -SQUARE TEST FOR GENDER AND FREQUENCY OF ONLINE SHOPPING:

		Frequency Of Online Shopping In A Month				Total
		once	twice	Thrice	More than thrice	
Gender	Male	38	37	24	9	108
	Female	48	28	10	6	92
Total		86	65	34	15	200

NULL HYPOTHESIS:

There is no association between gender and frequency of online shopping in a month.

ALTERNATIVE HYPOTHESIS:

There is an association between gender and frequency of online shopping in a month.

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	7.542 ^a	3	.056

INTERPRETATION:

Since $p = 0.056 > 0.05$ the null hypothesis is accepted at 5% level of significance. Hence there is no association between gender and frequency of online shopping in a month.

TABLE 3.4.2 CHI -SQUARE TEST FOR GENDER AND TYPES OF PRODUCTS OF ONLINE SHOPPING

	Types of products you prefer				Total
	1	2	3	4	
Gender male	27	42	37	2	108
female	55	17	11	9	92
Total	82	59	48	11	200

NULL HYPOTHESIS:

There is no association between gender and types of products

ALTERNATIVE HYPOTHESIS:

There is an association between gender and types of products.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37653 ^a	3	.000

INTERPRETATION:

Since $p = 0.000 < \alpha = 0.05$, the null hypothesis is rejected at the 5% level of significance. Hence there is an association between gender and types of products.

TABLE 3.4.3: CHI -SQUARE TEST FOR WEBSITE AND TYPES OF PRODUCTS OF ONLINE SHOPPING:

		quality product					Total
		1	2	3	4	5	
Favorite	1	3	34	24	4	2	67
Website	2	6	38	20	12	4	80
	3	6	22	14	3	0	45
	4	2	4	1	0	1	8
Total		17	98	59	19	7	200

NULL HYPOTHESIS:

There is no association between most preferred websites and quality of product.

ALTERNATIVE HYPOTHESIS:

There is an association between most preferred websites and quality of products.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.086 ^a	12	.187

INTERPRETATION:

Since $p = 0.187 > \alpha = 0.05$ the null hypothesis is accepted at 5% level of significance. Hence there is no association between most preferred websites and quality of products.

TABLE 3.4.4.: CHI -SQUARE TEST FOR GENDER AND DISCOUNT OFFERS OF ONLINE SHOPPING

		Discount offers					Total
		1	2	3	4	5	
Gender	1	15	36	28	17	12	108
	2	13	42	35	1	1	92
Total		28	78	63	18	13	200

NULL HYPOTHESIS:

There is no association between gender and discount offers.

ALTERNATIVE HYPOTHESIS:

There is an association between gender and discount offers.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.784 ^a	4	.010

INTERPRETATION:

Since $p = 0.010 \leq \alpha = 0.05$, the null hypothesis is rejected at 5% level of significance.

.Hence there is an association between gender and discount offers.

TABLE 3.4.5: CHI -SQUARE TEST FOR PART TIEM JOB AND WHOM YOU ARE SHOPPING:

		Whom You Are Shopping				Total
		friends	Parents	My self	others	
Part Time Job	yes	13	30	39	2	84
	NO	20	28	62	6	116
Total		33	58	101	8	200

NULL HYPOTHESIS:

There is no association between part time job and for whom you are shopping.

ALTERNATIVE HYPOTHESIS:

There is an association between part time job and for whom you are shopping.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.768	3	.288

INTERPRETATION:

Since $p = 0.288 > \alpha = 0.05$, the null hypothesis is accepted at 5% level of significance.
Hence There is no association between part time job and for whom you are online shopping.

TABLE 3.4.6: CHI -SQUARE TEST FOR EXCHANGE A PRODUCT AND TYPES OF PRODUCTS PREFER.

		Types of products prefer				Total
		1	2	3	4	
Exchange A Product	1	49	38	40	5	132
	2	33	21	8	6	68
Total		82	59	48	11	200

NULL HYPOTHESIS:

There is no association between exchange a product and types of products prefer

ALTERNATIVE HYPOTHESIS:

There is an association between exchange a product and types of products prefer

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.987 ^a	3	.019

INTERPRETATION:

Since $p = 0.019 > \alpha = 0.05$, the null hypothesis is accepted at 5% level of significance. Hence There is no association between exchange a product and types of products prefer.

CHAPTER IV

FINDINGS AND SUGGESTION

CHAPTER IV

FINDINGS AND SUGGESTIONS

FINDINGS:

- Most of respondents are male.
- Maximum of the respondents are from the age group between 18-21.
- Most of respondents are current educational status is under graduates .
- Maximum of the respondents are from not working part time job.
- Most of respondents place residence of are urban place.
- Maximum of the respondents are from college type in private college
- Most of respondents are the information about online shopping from online advertisement.
- Maximum of the respondents are from online shopping is easy to find rare products online.
- Most of respondents are of the students choosing the website is amazon
- Maximum of the respondents are from the result is highly purchased type prefer are clothing.
- Most of respondents are most looking for most time and the result is highly purchased are other products.
- Maximum of the respondents said that they are online shopping is safe yes.
- Most of respondents are paying for cash on delivery
- Maximum of the respondents type payment are from the result is highly paying for cash on delivery.
- The result is most of the students about quality of the product is satisfied.
- The result is most of the student's opinion about delivery speed on online shopping is satisfied.
- The result is most of the student's opinion about discount offers on online shopping is satisfied based on the survey.
- The result is students overall shopping are generally customer friendly is a satisfied based on the survey
- The result is students overall shopping experience is satisfied based on the survey.

Correlation

- There is a low degree negative correlation between monthly salary and frequency of online shopping.
- There is a low degree negative correlation between monthly salary and money spend on online shopping.
- There is a low degree positive correlation between money spend online shopping and frequency of online shopping.

Chi -square test

- Hence there is no association between gender and frequency of online shopping in a month.
- Hence there is an association between gender and types of products.
- Hence there is no association between most preferred websites and quality of products.
- Hence there is an association between gender and discount offers.
- Hence there is no association between part time job and for whom you are online shopping.
- Hence there is no association between exchange a product and types of products prefer

SUGGESTIONS

- 15-17age limit students not using online shopping maximum so the given more discount offers in online shopping.
- Students only use the online shopping others not interested using online shopping.
- We can use advertisement and newspaper for making awareness about online shopping, it will be helpful for others buying using online shopping.
- In online shopping most of the user buying only using cash on delivery so we can give some bank offers for online payment users.
- Give the quality of products to the customers it will be useful for trusting online shopping.
- Increase the fast delivery for customers.
- Introduce various products from world wide it will be attracting the customers for choosing online shopping.
- When users return or refund the products, we handled them user friendly.
- Offers a selection of trendy and affordable items including clothing, home goods, and electronics, it will be helpful for increase the online customers.
- Build a platform that integrated social media with E-commerce, allowing users to discover and purchase directly from social media post or influencers.

CHAPTER V

REFERENCES

CHAPTER V REFERENCES

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APPENDIX

A STATISTICAL STUDY ON ONLINE SHOPPING BEHAVIOUR COLLEGE STUDENTS IN COIMBATORE DISTRICT

PROJECT

Email *

Valid email

This form is collecting emails. [Change settings](#)



Age *

- ☐ 15-17
- ☐ 18-21
- ☐ 22-24
- ☐ Above 24

Gender *

- ☐ Male
- ☐ Female

Questions Responses 200 Settings

Place of Place Of Residence *

☐ Urban

☐ Rural

☐ Semi Urban

Are You Depending On Your Family *

☐ YES

☐ NO

Where Did You Know About Online Shopping? *

☐ Online Advertisement

☐ Newspapers

☐ friends

☐ Television

What Is Your Preferred Time For Online Shopping?

☐ Morning

☐ Break Hours

☐ Evening

☐ Night

Current Educational Level *

- ☐ Diploma
- ☐ Under Graduate
- ☐ Post Graduate
- ☐ Others

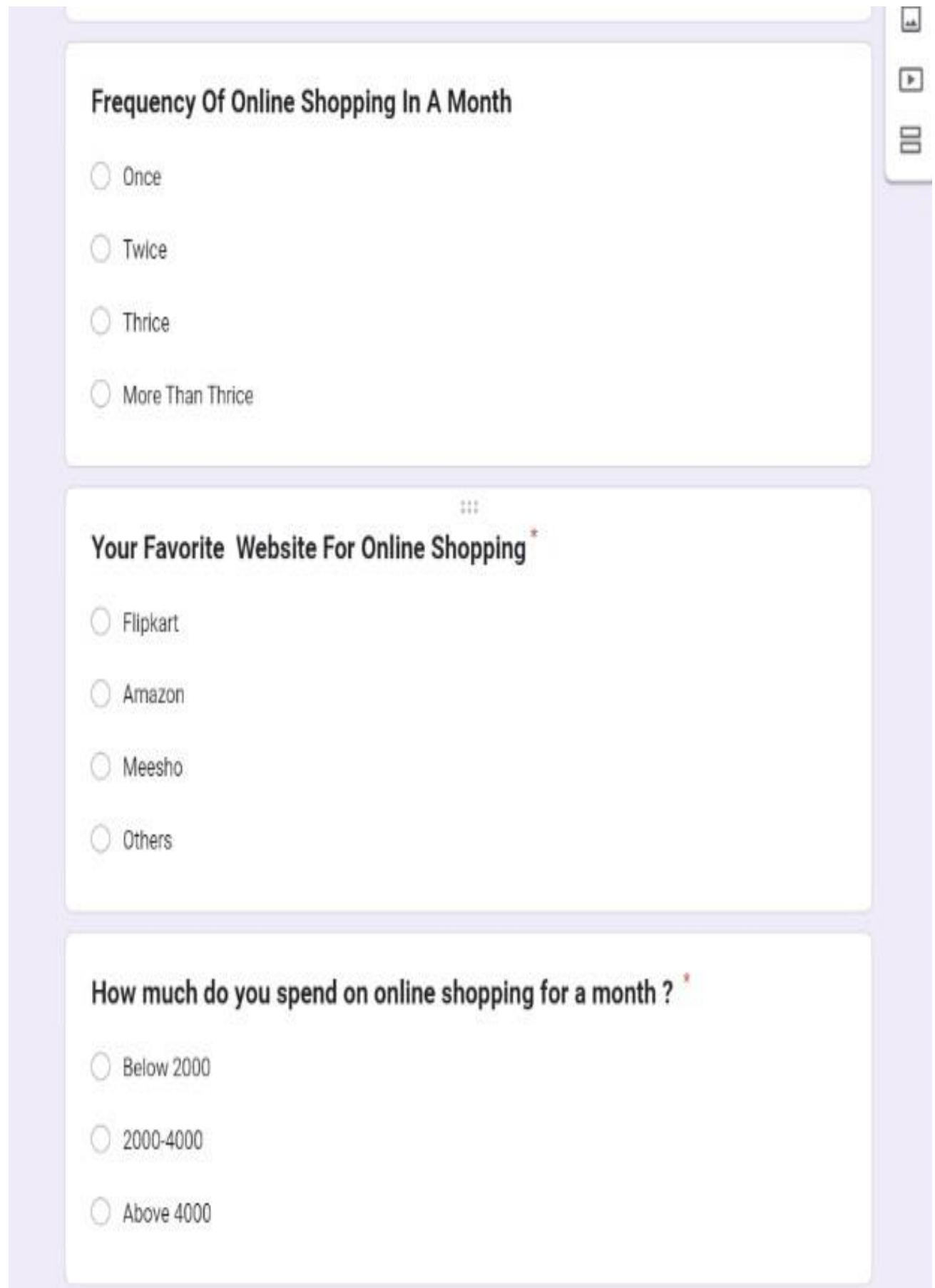
Your College Type *

- ☐ Government
- ☐ Private
- ☐ Aided
- ☐ Affiliated

Your Course Of Study *

- ☐ Arts
- ☐ Science
- ☐ Engineering
- ☐ Medical
- ☐ Agriculture





The image shows a survey form with three sections. Each section has a title and four radio button options. The first section is titled 'Frequency Of Online Shopping In A Month' and has options: 'Once', 'Twice', 'Thrice', and 'More Than Thrice'. The second section is titled 'Your Favorite Website For Online Shopping' with a red asterisk, and has options: 'Flipkart', 'Amazon', 'Meesho', and 'Others'. The third section is titled 'How much do you spend on online shopping for a month?' with a red asterisk, and has options: 'Below 2000', '2000-4000', and 'Above 4000'. On the right side of the form, there are three icons: a camera, a play button, and a list icon.

Frequency Of Online Shopping In A Month

☐ Once

☐ Twice

☐ Thrice

☐ More Than Thrice

Your Favorite Website For Online Shopping *

☐ Flipkart

☐ Amazon

☐ Meesho

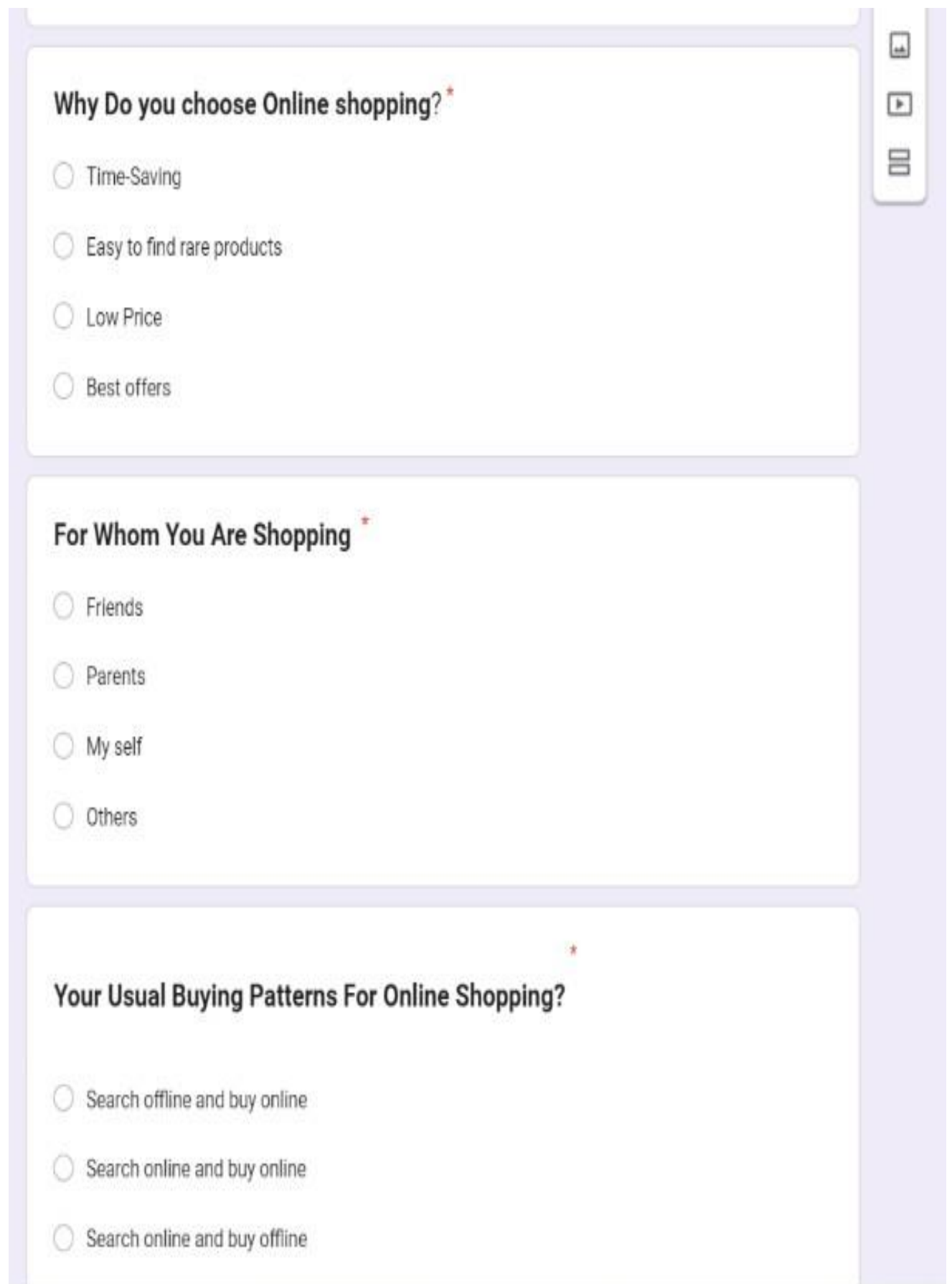
☐ Others

How much do you spend on online shopping for a month ? *

☐ Below 2000

☐ 2000-4000

☐ Above 4000



The image shows a survey form with three sections, each with a title and four radio button options. The form is set against a light purple background. On the right side of the form, there is a vertical toolbar with three icons: a camera, a play button, and a list icon.

Why Do you choose Online shopping? *

- ☐ Time-Saving
- ☐ Easy to find rare products
- ☐ Low Price
- ☐ Best offers

For Whom You Are Shopping *

- ☐ Friends
- ☐ Parents
- ☐ My self
- ☐ Others

Your Usual Buying Patterns For Online Shopping? *

- ☐ Search offline and buy online
- ☐ Search online and buy online
- ☐ Search online and buy offline

Why Do you choose Online shopping? *

- ☐ Time-Saving
- ☐ Easy to find rare products
- ☐ Low Price
- ☐ Best offers

For Whom You Are Shopping *

- ☐ Friends
- ☐ Parents
- ☐ My self
- ☐ Others

Your Usual Buying Patterns For Online Shopping? *

- ☐ Search offline and buy online
- ☐ Search online and buy online
- ☐ Search online and buy offline

Types of products you prefer *

- ☐ Clothing
- ☐ Study materials
- ☐ electronics
- ☐ Cosmetics

Which Products you Are Looking For Most of The Time Online?

- ☐ Laptop
- ☐ Furniture
- ☐ Footwear
- ☐ others

Type Of Payment For Online Shopping *

- ☐ credit cards/Debit cards
- ☐ Online bank transfer/Net banking
- ☐ UPI payment
- ☐ Cash on delivery

Have You Faced Problems In Online Shopping? *

- ☐ Yes
- ☐ No

If Yes, Your Problems May Be

- ☐ Missing product at delivery
- ☐ Extra charge & delivery delay
- ☐ Failure transactions
- ☐ Value-added tax

Do You Feel Online Shopping Is Safe? *

- ☐ Yes
- ☐ No

Have You Ever Tried To Get Exchange A Product? *

- ☐ YES
- ☐ NO

Do You Get The Product Delivered On Time?

- ☐ Yes
- ☐ No

How satisfied are you with the quality of the product? *

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Not satisfied
- ☐ Disappointment

Speed of delivery *

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Not satisfied
- ☐ Disappointment

The return and refund of online shopping are generally customer friendly

*

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Not satisfied
- ☐ Disappointment

Online Shopping Experience *

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Not satisfied
- ☐ Disappointment

z

