



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECI2143
PROBABILITY & STATISTICAL DATA ANALYSIS

**IN-STORE VS ONLINE SHOPPING PREFERENCES AMONGST
UNIVERSITY STUDENTS IN MALAYSIA**

ASSIGNMENT 1

GROUP 1 SECTION 08

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TABLE OF CONTENT

TABLE OF CONTENT	1
1.0 INTRODUCTION & BACKGROUND	2
2.0 DATA COLLECTION	3
3.0 DATA ANALYSIS	4
4.0 CONCLUSION	21
5.0 APPENDIX	22

1.0 INTRODUCTION & BACKGROUND

The background of this study is to find out about the shopping platforms preferences of Malaysian's University Students. We chose this title because we want to see whether students still prefer doing in-store shopping over online shopping and how the decision makes an impact on their lives. For the past several years, many people have moved to online shopping since it is more convenient but it does have a lot of cons when the product arrives physically, meanwhile, in-store shopping still be the first choice of some people since it's easier to do the quality checking on the physical item. A total of 60 students from a variety of Malaysian Universities were asked through Google form to analyze their shopping platform preferences. The data that were collected has been grouped in different categories of measurement which is Nominal scale, Ordinal scale, Ratio scale and Interval scale. We are grateful since the collected data can be analyzed well through using the statistics methods.

2.0 DATA COLLECTION

In this survey, we collect a lot of data that is relevant to the study of this project. This first data we collect is the gender, the variables are only female and male. With this data, we can relate the answers to other questions with the gender of the responder. The next data we collect is the respondent's university. Our project is about shopping preferences among university students in Malaysia, hence why we put this because all our respondents come from different universities. The next data is age. We do collect this to see the age of our respondents and so we can relate them to their answers to other questions and make assumptions or conclusions based on their age. The next data is to see whether respondents prefer online shopping or in-store shopping, those are the only two variables we put. The next data asks if students have a good internet connection whenever they do online shopping. For the next data, we ask the respondent what online shopping platform they usually surf. The variables are Shopee, Lazada, Shein, AliExpress, Amazon, Zalora, WowShop and other brands' websites. This lets us know which online shopping platform is the most hit among the students. For the next one, we ask students how much money they spend during online shopping and in-store shopping. The respondents are free to write how much they want. This let us compare later on whether students spend more money on online shopping or in-store shopping. The next data we collect is how much time do students spend during online shopping and in-store shopping. For this answer, the students are also free to write how long they want, there are no fixed variables. This data will let us compare how much time students spend on those two shopping experiences. Moving on to the next question, we ask students what they usually buy on online and in-store shopping. This data lets us see which products do students prefer to buy online and which stuff do they prefer to buy in-store. The variables are groceries/food, clothes/accessories, electronics, entertainment stuffs, furniture, beauty products, books, merch, sport stuffs, books, essentials and stationery. Next one, we asked students to rate their online shopping experiences and how they rate the seller on online shopping. The parameters are from worst, bad, neutral, good and excellent. For the last question, we ask students if they think online shopping is more effective than in-store shopping, whether they think the time taken to deliver their parcels are appropriate, and if they think the prices on online shopping are affordable rather than in-store. The parameters are from strongly disagree, disagree, neutral, agree, and strongly agree.

3.0 DATA ANALYSIS

I. Respondents' gender distribution

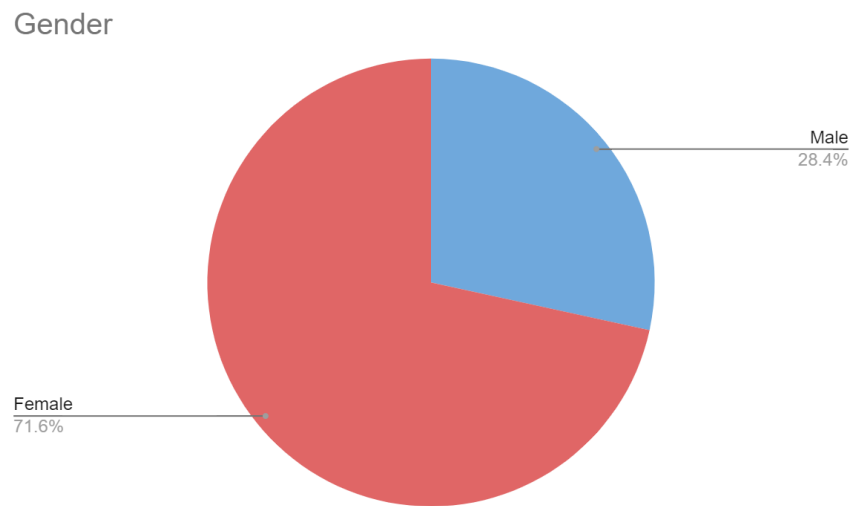


Figure 1

According to the survey, a total of 88 respondents have answered the questionnaire of in-store vs online shopping preferences amongst university students. 71.6% of the respondents are females whilst 28.4% of the respondents are males, as stated in figure 1.

II. Respondents' age distribution

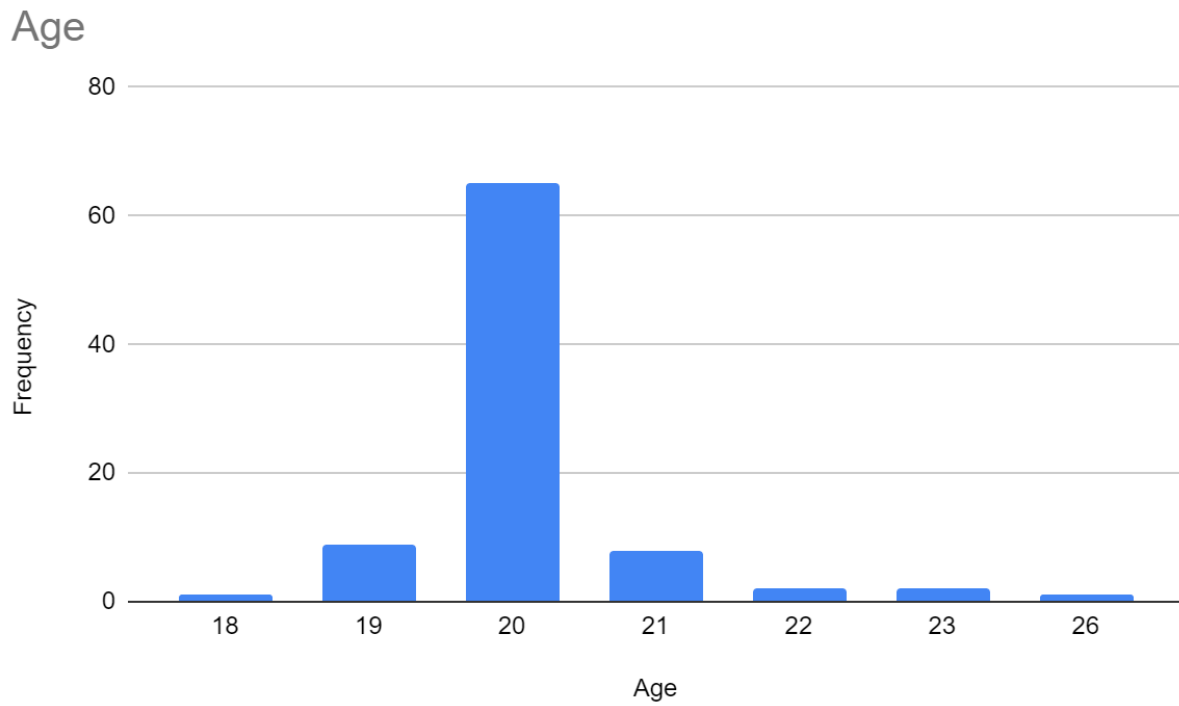


Figure 2

Age	Frequency
18	1
19	9
20	65
21	8
22	2
23	2
26	1

Table 1

A bar chart of the respondents' age is shown in figure 2 above. Based on the bar chart shown above, we could see that age 26 and 18 has the same frequency of the corresponding age, which totals up to 1 each. Other than that, age 22 and 23 also have the same total number of respondents which is 2. Most of the students that responded are in the age group of 19 to 21, whereas the total of students that are in the age of 19 is 9 students, followed by 20 with 65 students, and age 21 with 8 students.

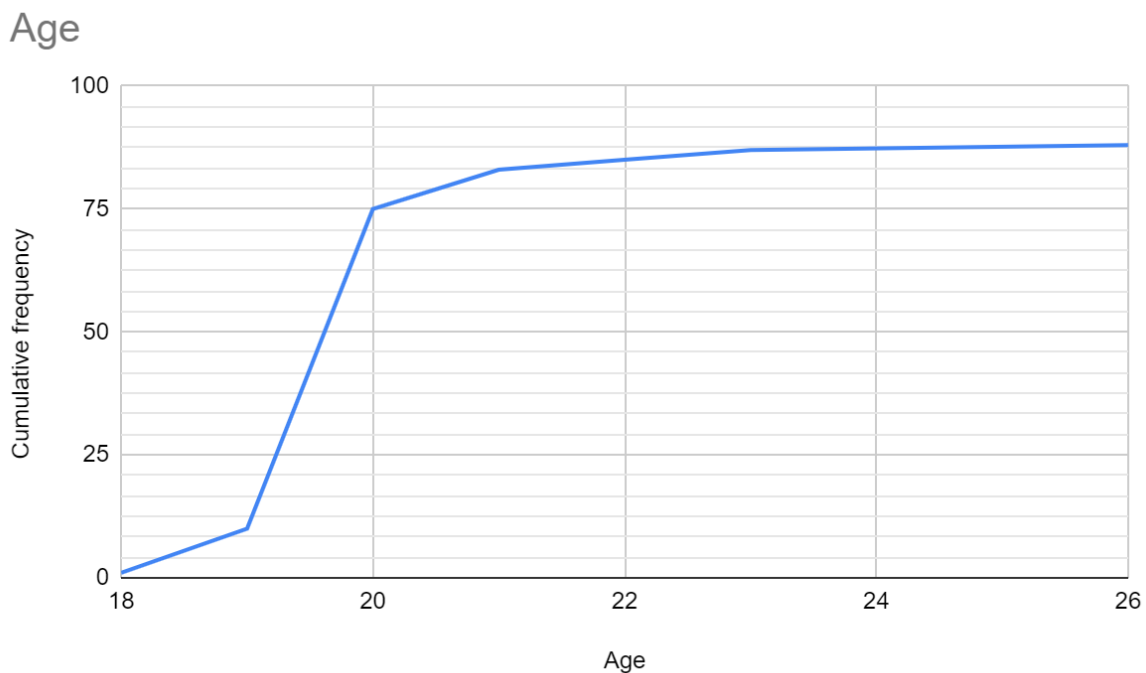


Figure 3

Figure 3 shows the cumulative frequency of the students' age using ogive.

III. Respondents' university

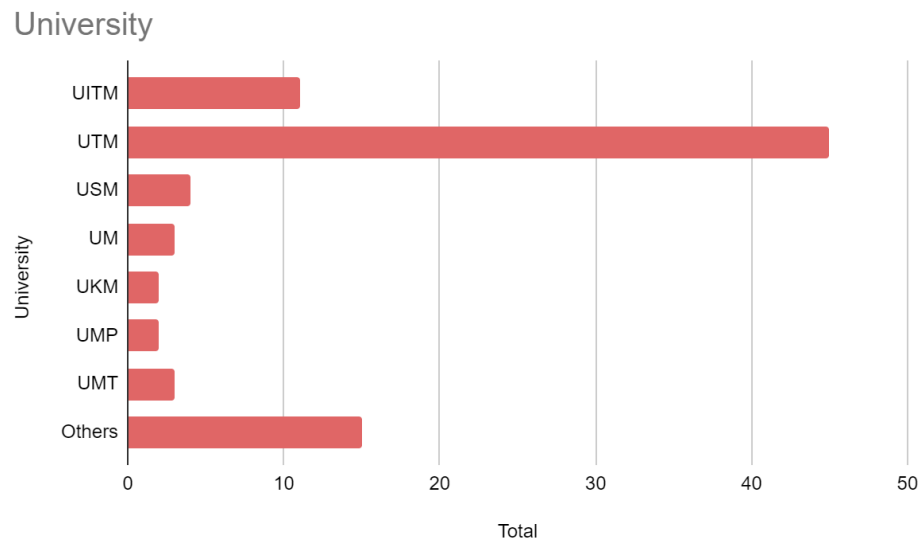


Figure 4

University	Frequency
UITM	11
UTM	45
USM	4
UM	3
UKM	2
UMP	2
UMT	3
Others	15

Table 2

Figure 3 above shows the respondents' university in a bar chart. We could see from the table above that most of the respondents are from UTM, followed by other universities, and UITM.

IV. Shopping preferences

Shopping preferences

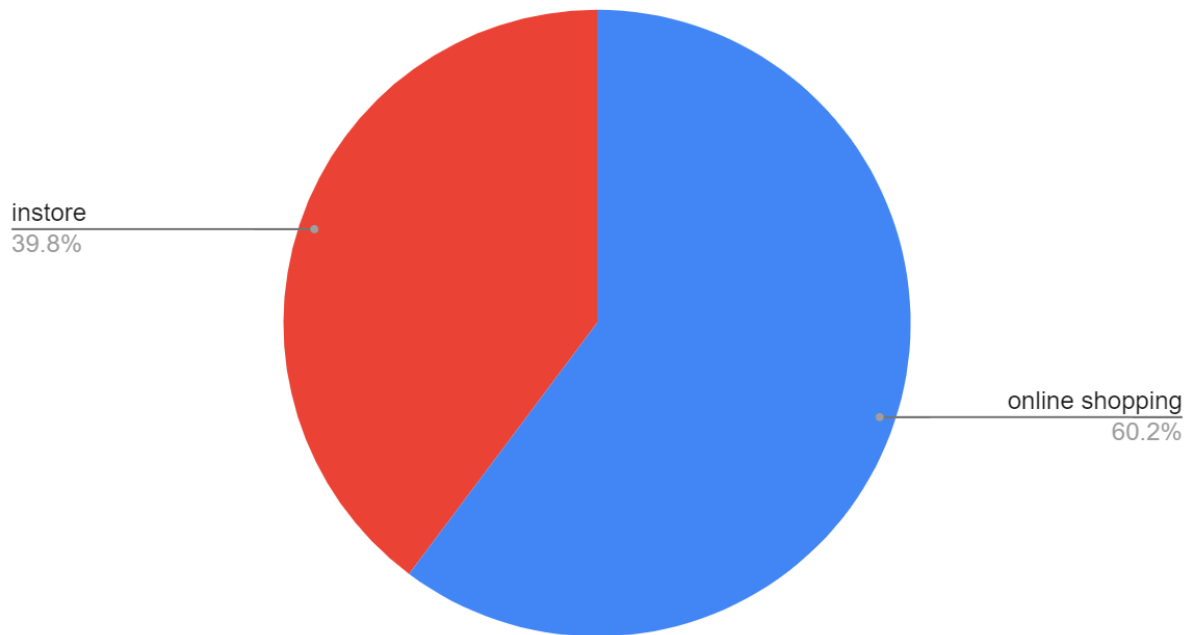


Figure 5

Based on the questionnaire we have prepared beforehand, we asked the respondents whether they preferred in-store or online shopping more. The result of it is as shown above, whereas 60.2% (53 people) responded that they prefer online shopping, whilst 39.8% (35 people) of the respondents chose in-store shopping instead.

V. Platform used for online shopping



Figure 6

Platform used for online shopping	Total respondents
Shopee	88
Lazada	32
Shein	14
Aliexpress	0
Amazon	1
Zalora	16
Wowshop	3
Brands own website	11

Table 3

Based on the table 3, we could deduct that most respondents chose Shopee as their most used platform for online shopping whilst aliexpress receives zero responses which clearly shows that it is not frequently used amongst university students in Malaysia.

VI. Money spent in a month (in-store vs online)

Money spent in a month

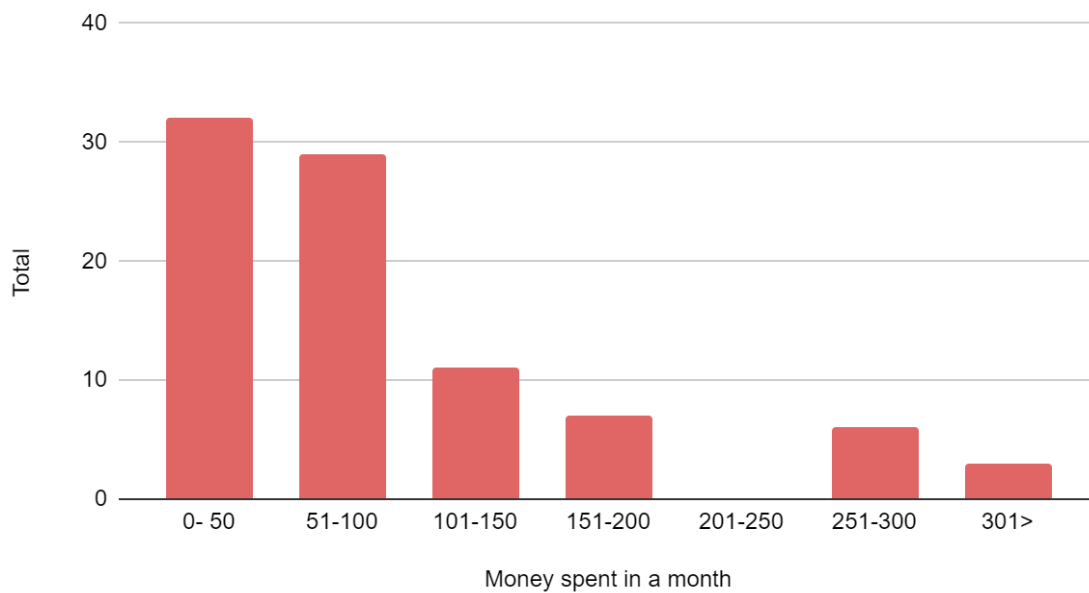


Figure 7



Figure 8

Money spent (RM)	Frequency for online shopping	Frequency for in-store shopping
0-50	32	36
51-100	29	27
101-150	11	9
151-200	7	8
201-250	0	0
251-300	6	4
301>	3	4

Table 4

On this part, we divided the questionnaire into two sections, the first one is online shopping, whilst the second one is in-store shopping.

For online shopping, we could see that most university students spent money below the value of RM 200, whereas the total respondents that spent below RM 50 in a month for online shopping is 32 students.

Mod for money spent on in-store shopping is 36 which its modal class is 0-50. Same as online shopping, most University students spent below RM100 for in-store shopping in a month.

VII. Time spent on online shopping platform (in-store vs online)



Figure 9



Figure 10

Time spent (min)	Frequency for online shopping	Frequency for in-store shopping
0-30	32	27
31-60	40	28
61-90	2	4
91-120	9	20
121-150	1	1
151-180	2	4
180>	2	4

Table 5

Based on table 5 above, we could see that most respondents do not spend a long time on online shopping platforms rather than in-store shopping.

The total number of respondents that spent time from 31 - 60 minutes a day is 40 people, which is the highest frequency for time spent on online shopping. However for class 151-180 and 180>, they got the same number on frequency for both online and in-store, which is 2 and 4 respectively whilst the least number of respondents is in class 121-150 for both online and in-store shopping.

In comparison, we could see that the total number of respondents for class 91-120 minutes in online shopping only totaled up to 9 students, whereas for in-store shopping, the total number of respondents is 20 students. This shows that students use longer time to shop in-store than online.

VIII. Products bought online (in-store vs online)

Products Bought Online

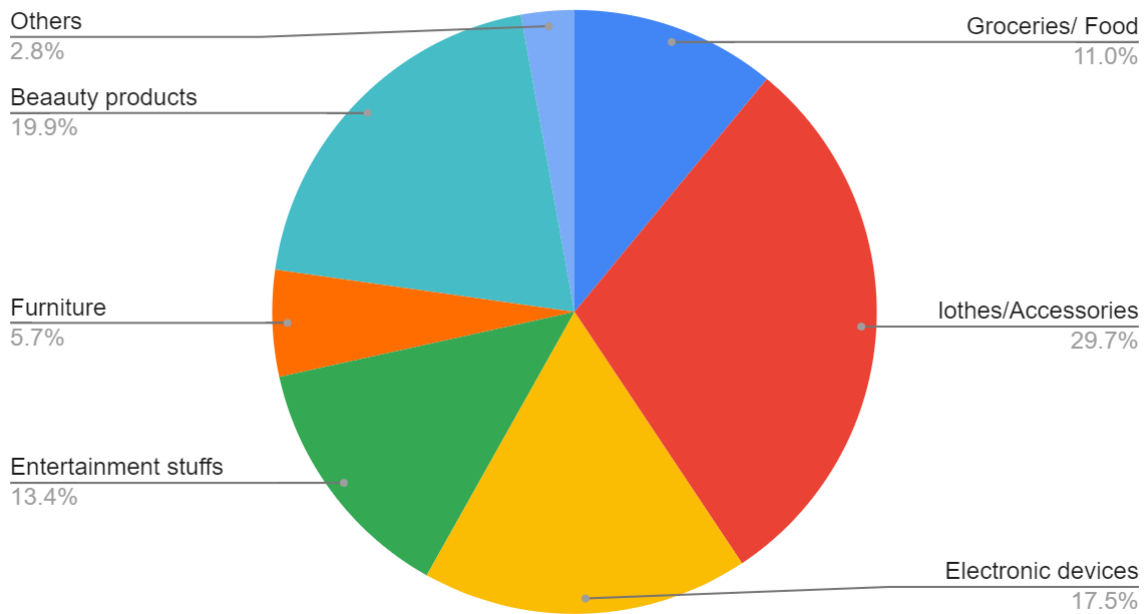


Figure 11



Figure 12

Products bought	Frequency for online shopping	Frequency for in-store shopping
Groceries/Food	27	78
Clothes/Accessories	73	57
Electronic devices	43	30
Entertainment stuffs	33	14
Furniture	14	14
Beauty products	49	41
Others	7	2

Table 6

Table 6 shows the products bought and the frequency for online and in-store shopping. This question is a multiple choice selection and the options are groceries/food, clothes/accessories, electronic devices, entertainment stuffs, furniture, beauty products and others.

Based on the table, students mostly choose online shopping platforms to buy clothes and accessories with a frequency of 73. Besides that, 78 responses for buying groceries and food in-store and only 27 choose buying online.

Students like to buy entertainment stuff online, 33 responses rather than buying in-store, 14 responses. Moreover, beauty products with 49 responses for online shopping and 41 responses in-store. They are almost similar since beauty shops such as Watson and Guardian have their own online shop. Only 14 responded buying furniture for both online and in-store.

IX. Rate of satisfaction on online shopping

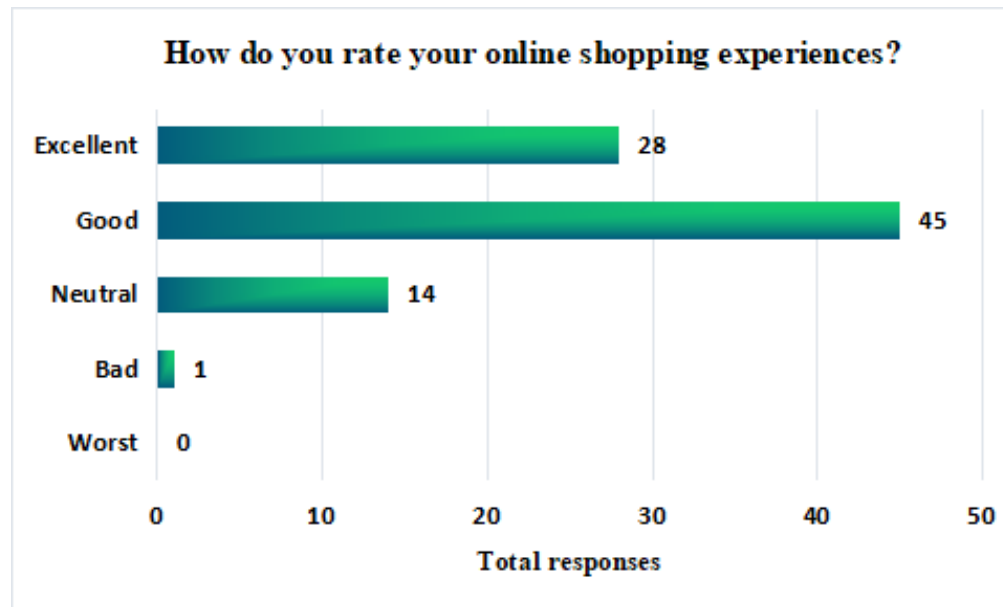


Figure 13

Rate	Total respondents
Excellent	28
Good	45
Neutral	14
Bad	1
Worst	0

Table 6

Figure 13 shows the result of the question: How do you rate your online shopping experiences. Most of the respondents rate their online shopping experiences as good with a frequency of 45. 0 respondents voted for the worst. In total, 42 students vote for an excellent and neutral rating. This concludes that most of the university students are satisfied with their online shopping experiences.

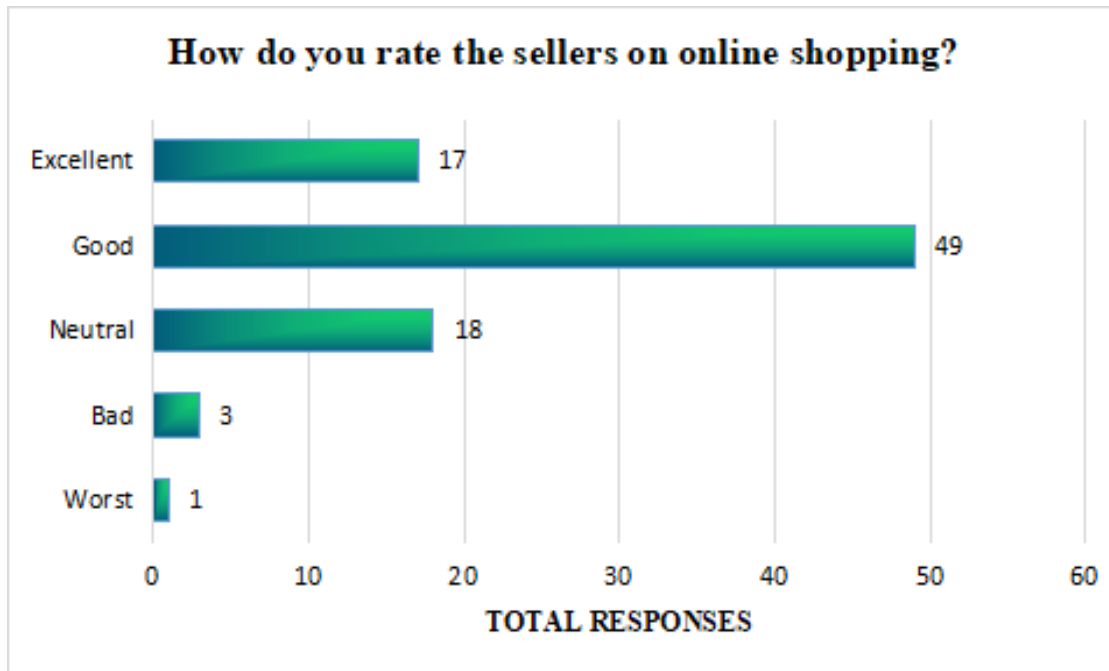


Figure 14

Rate	Total respondents
Excellent	17
Good	49
Neutral	18
Bad	3
Worst	1

Table 7

Based on figure 14, the mod for data collected from the question: How do you rate the sellers on online shopping is 49 which is a good rating. Neutral rating on the second highest vote which is 18 followed by excellent, 17. Only in total 4 students voted for bad and worst for their online shopping sellers.



Figure 15

Rate	Total respondents
Strongly disagree	0
Disagree	6
Neutral	40
Agree	24
Strongly agree	18

Table 8

Figure 15 until 17 also questions for online shopping experiences. 18 students strongly agree that online shopping is more effective than in-store shopping. The highest frequency is 40 which is neutral with the statement followed by agree with 24 votes. The majority agree that online shopping is more effective than in-store and only 6 students disagree with this statement.

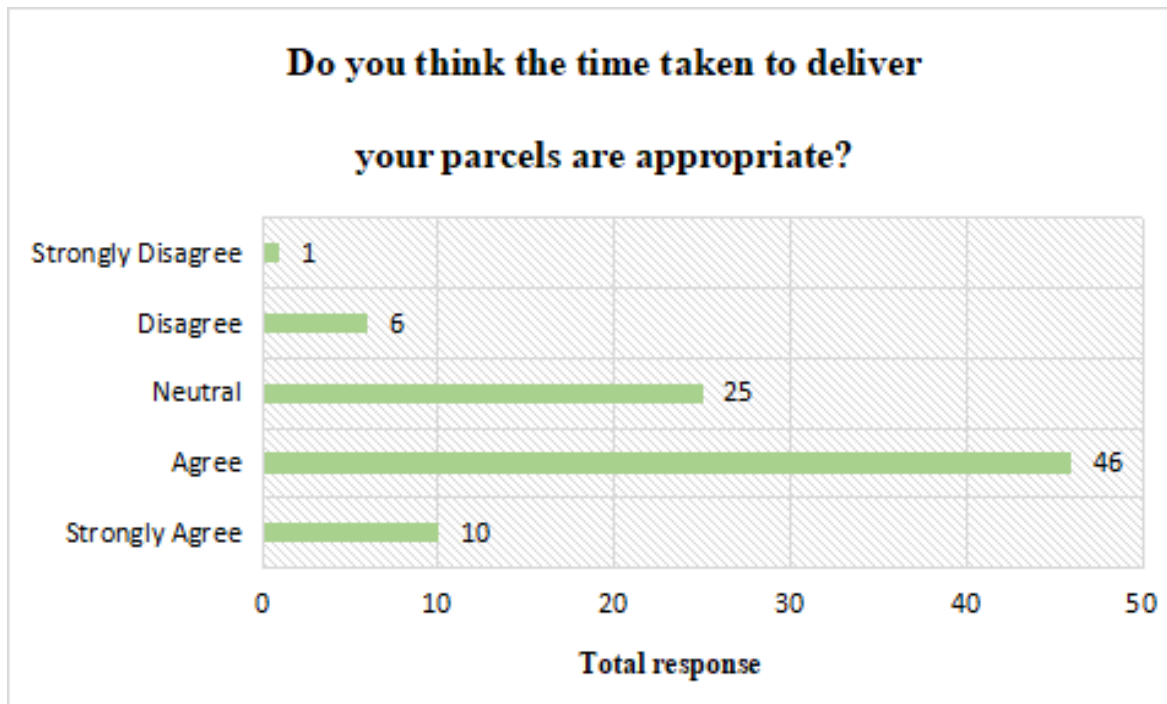


Figure 16

Rate	Total respondents
Strongly disagree	1
Disagree	6
Neutral	25
Agree	46
Strongly agree	10

Table 9

Based on figure 16 and table 9, 46 students agree the time taken for the parcel delivery is appropriate. 10 of the respondents strongly agree since they are very satisfied with the delivery period. Total 7 students disagree and strongly disagree about the delivery time.



Figure 17

Rate	Total respondents
Strongly disagree	2
Disagree	3
Neutral	8
Agree	34
Strongly agree	41

Table 10

This section asks the respondents about the prices and money spent on online and in-store shopping. Is it because the prices on online shopping are affordable than in-store. Sum of 75 over 88 university students agree and also strongly agree that online shopping is more affordable than in-store. Only 5 students did not agree with this statement.

4.0 CONCLUSION

From all the data that we have received and analyzed, we can conclude that online shopping is the most preferred shopping platform among the university students in Malaysia. As a student, we do also think that online shopping is better than in-store since we do not have enough time to do the shopping. This is due to the fact that we are busy with assignments, classes, and tutorials. Shopping online does help a lot to lighten the burden as it can reduce the time taken for shopping and also the total spending.

5.0 APPENDIX

Google form link - <https://forms.gle/gymdB4FS7u7HCobd6>

The survey is prepared by

1. Farah Izzah Bt Aisha Nuddin
2. Khalisah Najah Bt Nawawi
3. Nurfaiziana Suraya Bt Baharuddin
4. Nor Alya Bt Mohamad Nor

Gender *

☐ Male

☐ Female


University name (e.g UTM) *

Your answer _____


Age (e.g 19) *

Your answer _____

Do you prefer online shopping or in-store? *



☐ Online Shopping



☐ In-Store

Next

Clear form


Figure 18 : Section 1


Online Shopping


Do you have a good access on internet for online shopping? *


☐ Yes
 ☐ No


What platform do you used for online shopping? *



☐ Shopee



☐ Lazada


☐ Shein


☐ AliExpress


☐ Amazon


☐ Zalora


☐ Wowshop



☐ Brands' Website (e.g Uniqlo, H&M, etc)

Figure 19 : Section 2


How much money do you spend in a month on online shopping platform? (e.g 100) *

Your answer _____


How much time do you spend on online shopping platform? (e.g 30 minutes) *

Your answer _____


What kind of product do you buy online? *




☐ Groceries/ Food




☐ Clothes/ Accessories




☐ Electronic devices



☐ Entertainment stuffs



☐ Furniture



☐ Beauty products

☐ Other:

Figure 20 : Section 2

In-Store Shopping

How much money do you spend in a month on in-store shopping? (e.g 100) *

Your answer _____

How much time do you spend on in-store shopping? (e.g 30 minutes) *

Your answer _____

What kind of product do you buy in-store? *



☐ Groceries/ Food



☐ Clothes/ Accessories



☐ Electronic devices



☐ Entertainment stuffs



☐ Furniture

☐ Other:



☐ Beauty products

Figure 21 : Section 3

Please answer the questions according to your experiences.

Hold tight! 5 more to go!

Rate Your Experience :3 *

	Worst	Bad	Neutral	Good	Excellent
How do you rate your online shopping experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
How do you rate the sellers on online shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Rate your Experiences 2.0 :D *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Is online shopping more effective than in-store shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Do you think the time taken to deliver your parcels are appropriate?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Do you think the prices on online shopping are affordable rather than in-store?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Thank you for your cooperation 🌸🌸🌸
 Have a nice day and selamat berbuka puasa to all muslim <3

Figure 22 : Section 4