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FACTORS AFFECTING ONLINE SHOPPING PREFERENCE AMONG UNIVERSITI UTARA MALAYSIA (UUM) STUDENTS

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Abstract:

Purchasing products online has been a new way of life since electronic devices were introduced to society. This phenomenon is increasing in Malaysia as youngsters prefer to purchase things online rather than purchase them in-store. This study is conducted to examine the level of online shopping preference and investigate the relationship between security, saving time, and payment methods with online shopping preference among UUM students. This study used a quantitative approach with 200 students from UUM. The data was collected by using Google Forms with a five-point Likert Scale. Other than that, this study uses Statistical Package for the Social Sciences (SPSS) in analyzing the data by conducting Reliability Test, Validity Test, Descriptive Statistics Analysis, Spearman Correlation Analysis, and Regression Analysis. Based on the findings, the security level of online shopping platforms has a positive and significant impact on online shopping preferences among UUM students.

Keywords:

Online Shopping Preferences, Security, University Students

Introduction

The advancement of ICT in this era brings so many benefits to humans in many sectors. The economy sector is one of the sectors that begin to enter the market. Companies must sustain business continuity in the face of new ICT developments in the business environment. Technology has infiltrated every aspect of human life, making it easier and more functional,

and so unimaginable without it (Kocijan, Zunac & Ercegovic, 2020). Online shopping surely become more convenient with the development of ICT as they can communicate online, and all the transactions can be done online. Statistics of the impacts of the COVID-19 pandemic on online purchase preference among consumers in Malaysia as of May 2020, by age group, show that there is 56% of the group of people aged between 16 to 24 tend to purchase more online and university students are among this age (Statista, 2022). The cause of this statistic is because of the pandemic but the advancement of ICT surely will be the reason the youngster purchase online. Hence, the development of ICT will directly affect the online shopping sector and the consumers which are university students. The buying preference of the students will slightly be affected by the development of ICT in online shopping. Consumers may favour the advantages of online shopping, but some challenges arising from the expansion of ICT, such as cyber security, will have an impact on purchasing preference. Consumers at the student age will tend to focus more on the product price and quality. Students prefer to get a product with a reasonable price and good quality because most of the students still are not financially independent (Farah et al., 2018). Most of the products online have a better value compared to the price of the product in the physical store (Anitha, 2017). This makes online shopping become more relevant among online shoppers, especially students. In addition, it is quite hard to make price comparisons among the physical store, this makes it hard for the consumers to get a product with a better price. Shopping at a physical store usually consumes more time compared to online shopping. This makes it hard for the students with a busy schedule. Therefore, the study aims to examine the level of online shopping preference among UUM students and to investigate the relationship between 3 determinant factors (security, save time, payment method) and online shopping preference among the students.

Literature Review

The development of ICT has surely brought an impact on the way people shop today. Consumers tend to buy things online since many companies starts to enter the digital market as the effect of the pandemic caused by COVID-19. Young people increasingly prefer to shop online compared to physically going to stores. This section will discuss further on this by highlighting the following five points.

Online Shopping and ICT

In the last several years, information and communication technology (ICT) has had a great impact on our lives. We can easily interact and purchase online, but we must be mindful of the dangers that computers pose to our health. The way individuals purchase, as well as how shops and retailers work, has changed because of technological advancements. Online shopping is a kind of electronic commerce (E-commerce) that let consumers buy items and services directly from stores via the Internet (Abd Aziz, & Abd Wahid, 2018). The number of items available for purchase online continues to grow, and people are getting more comfortable shopping online. Almost anything, including electronic devices, furniture, books, CDs, DVDs, and food, may be purchased on the Internet. Some businesses only function online and do not have physical locations. Consequently, their expenses are kept low, resulting in lower pricing for clients. People who construct, design, and administer websites have a variety of new employment because of the expansion of online commerce.

Online Shopping Preference

Nowadays, consumers tend to try online shopping as it is easier to access a wide range of products on the web. The transaction used to be difficult, but owing to e-commerce, it is now easier than ever. Because it requires less time and energy, online buying is faster and more

convenient than offline shopping. Besides that, consumers who purchase online have access to more product and service information, which allow the consumers to compare costs and product quality between online shop. The most significant characteristics of Internet shopping that motivate individuals to buy online are security, design, fast loading, navigation, and authenticity (Neger & Uddin, 2020). Most online services provide customer assistance all the time, letting consumers receive important product and service information on the spot, and persuading them to make online purchases. According to a study on online purchasing, the convenience of using the internet has a significant influence on users' inclinations to purchase online (Lui et al. 2017).

Security

While shopping through the Internet, consumers and companies must analyze a significant quantity of data and information about customers and their personal information. In this case, trade groups must emphasize the security and guarantee of consumers' personal information. Nowadays, online shopping needs to deal with difficulties such as identity theft and fraud. Security, hobbies, payment methods, acceptable price, privacy, social media, and group influences are among the most crucial variables for customers' online buying selections (Hossain, Jamil & Rahman, 2018). Consumers may be put off by a lack of security or poor security this is because they are concerned about the security of their personal information and data, especially their credit and debit cards, which might be used fraudulently or inappropriately in this scenario. Consumers are also concerned about the security of their transactions and bank information when purchasing financial products over the Internet because there have been several incidents of people losing money in banks and online scams that are false or exploit personal information for profit (Rasid, Fauzi & Asri, 2018). As a result, in-store transactions must be secure, and online retailers must protect the privacy of their customers.

Save Time

Online shopping is a fantastic way to save time and money. Consumers may shop for the sorts of clothing they want from the comfort of their own homes. If you're making a dish and don't have enough ingredients, all you have to do is buy them online and they'll be brought to your home in a matter of minutes. Consumers may choose and order a broad choice of things from the comfort of their own homes, rather than wasting time going to different places and making purchases. They don't have to waste time standing in big lines when they purchase online. They may have to wait in lengthy lines to get the things they require if they visit a well-known store, therefore internet shopping is always a preferable alternative. Consumers planning to spend more in areas that require less time, according to previous studies, are driving online shopping intentions (Neger & Uddin, 2020). Due to their hectic schedules, university students are also among the consumers who frequently aim to purchase online.

Payment Method

Consumers may conduct transactions online from anywhere on the earth using an e-payment system. The users may use the internet to pay for both domestic and international commerce transactions. E-commerce increases the need for e-payments, and e-payment availability eliminates cash-based payment methods, according to Azman, Yi, and Bakri (2020). Year every year, for example, the need for new e-payment solutions grows, notably during the Covid-19 epidemic. Every online and physical shop is gradually adopting electronic payments to counteract the rise of Covid-19 (Nguyen & Nguyen, 2020). As a result, providing clients with secure and simple payment methods will be used to encourage them to purchase online.

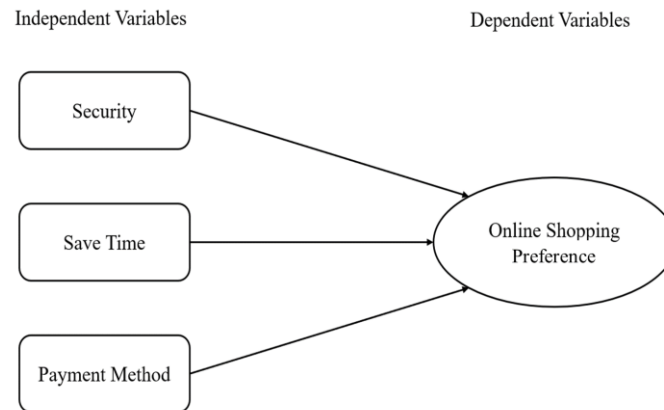


Figure 1: Research Framework

Based on the above research framework, three hypotheses have been proposed below:

- H1: The security feature of online shopping platform significantly influences the online shopping preference of UUM students.
- H2: The time-saving of online shopping platform significantly influences the online shopping preference of UUM students.
- H3: The payment method feature of online shopping platform significantly influences the online shopping preference of UUM students.

Research Methodology

This chapter will be explaining about the methodology that is used to conduct this research in order to collect the data that are needed for this research. The methodology can be classified into different categories on the basis of nature information which are qualitative research and quantitative research (Pandey & Pandey, 2021). In order to assess and predict the relationship of variables through a deductive method, quantitative data are therefore obtained, accumulated, encoded, and quantitatively processed (Moises, 2020). When deciding on a research method, time is an important concern (Dannels, 2018). Researchers choose a quantitative method because academic research is typically conducted under time constraints. The quantitative application involves gathering information from a large sample using surveys that measure the preferences and viewpoints of UUM's students. Researchers can evaluate independent variables that are related to UUM students' preference for online shopping with the help of quantitative methods. This study focuses on the factors that affect UUM students' online shopping preferences and the unit of analysis in this research is individual. The sample size of this research is 379 according to Krejcie and Morgan (1970) sampling method. The sample size was chosen among UUM students. The population of UUM students is about 32,000 students. The convenience sampling technique is used in this research to collect data. Generally, the researcher found all the respondents by blasting the questionnaire through an online platform that can be reached easily to the population which is UUM students. This means that the researcher will not have to move too far to get the respondents for this research.

Data Analysis and Discussion

In this study, Statistical Package for the Social Sciences (SPSS) is utilized to analyze the data acquired. The study's findings and analyses were provided in relation to the research objectives. For this study, SPSS was used to run certain tests, including a reliability and validity test for the pilot test, descriptive analysis, correlation, and multiple regression analysis. A pilot test was

carried out to determine the level of accuracy of the questionnaires. Multiple regression analysis is used to investigate the link between online purchasing preferences and independent variables including security, save time, and payment method. Google form was used as the main platform to collect data from the sample size, 200 people from the sample size participated in this survey.

Pilot Test

A pilot test is also known as a feasibility test which was used in the research to improve the quality and accuracy of the study. The pilot test is essential in research as it will remain a good research design. By conducting the pilot test, the researchers will find the problems that may occur in their research before starting the full research for the study (In, 2017). A reliability test and a validity test were done in SPSS in order to measure the questionnaire in this study. The table below shows the results of the reliability test for this study. According to the coefficient of Cronbach's Alpha, a value above 0.70 is good to excellent while a value below 0.70 is questionable to unacceptable. Based on the reliability test in Table 1, the value of Cronbach's Alpha for the independent variables (IV) and dependent variable (DV) were 0.773, 0.787, 0.833, and 0.804. This shows that the data and information in this research were between good to excellent levels. Other than that, a validity test is also important in this pilot test. The purpose of the validity test is the attempt to explain the truth of the study findings (Kubai, 2019). Empirical assessment for validity test is used in this by using quantitative analysis. Kaiser-Meyer-Olkin (KMO) is important in determining the level of acceptance for this research, the level of acceptance for KMO value from 0.70 to 0.90 is good to great while the KMO value above 0.90 is superb. Based on the validity test in Table 2 below, the KMO value for the IV and DV were 0.775, 0.796, 0.809, and 0.812. This depicts that the level of acceptance for IV and DV is between good to great.

Table 1: Reliability Test

Variables	Cronbach's Alpha	Number of items
Security	0.773	5
Save time	0.787	5
Payment method	0.833	5
Online shopping preference	0.804	5

Demographic Profile

The demographic section plays a crucial role in the survey research. This is because demographic information helps researchers to learn more about their survey participants. These questions give context to the survey data obtained, helping researchers to define their participants and evaluate their data more effectively. Table 2 below shows the demography data collected from the 200 respondents. The results show that the percentage of female respondents is more than male respondents which are 83% with 166 people and 17% with 34 people, respectively. Most of the respondents are students in the age range of 21 to 23 which is 61.5% with 123 people. Respondents in the age range between 18 to 20 29% with 58 people and only 9.5% of the respondents are from the age range of 24 to 26 while no respondent is between the age range of 27 to 29 years old.

Other than that, 63.5% of the respondents are among Malay students with 127 of them while Chinese respondents stand 23.5% with 47 people and Indian respondents stand 11% with 22 people. Respondents from the other races stand the least which is 2% with 4 people which are all Siamese. Other than that, 42% (84 people) of the respondents are currently in semester 7

followed by semester 1, semester 3, semester 6, semester 5, semester 2, semester 8, semester 4 which are 14% (28 people), 13% (26 people), 11% (22 people), 9% (18 people), 7.5% (15 people), 2% (4 people), and 1.5% (3 people), respectively.

This research questionnaire consisted of two questions to investigate the frequency of the respondents who shop online and the online shopping platform that they use the most to shop online. Based on Table 2, most of the respondents which is 72.5% (145 people) would like to shop online once a month while 17.5% (35 people) of the respondents would like to shop online once a week. 9% (18 people) of the respondents would like to shop online several times a week and 0.5% (1 person) would like to shop online once a half year and never shop online. Furthermore, the table below depicts that the most famous platform that people used to shop online is Shopee with 91% (182 persons) of respondents and the least is Amazon with no respondents. Lazada stands 4.5% (9 people) among the respondents, Zalora stands 3% (6 persons) of the respondents, and 1.5% (3 persons).

Table 2: Demographic Profile

Items	Category	Frequency	Percent (%)
Gender	Male	34	17.0
	Female	166	83.0
Age	18 - 20	58	29.0
	21 - 23	123	61.5
	24 - 26	19	9.5
	27 - 29	-	-
Race	Malay	127	63.5
	Chinese	47	23.5
	Indian	22	11.0
	Other	4	2.0
Semester	Sem 1	28	14.0
	Sem 2	15	7.5
	Sem 3	26	13.0
	Sem 4	3	1.5
	Sem 5	18	9.0
	Sem 6	22	11.0
	Sem 7	84	42.0
	Sem 8	4	2.0
College	CAS	41	20.5
	COB	138	69.0
	COLGIS	21	10.5
How frequently did you shop online?	Never	1	0.5
	Once a month	145	72.5
	Once a week	35	17.5
	Several times a week	18	9.0
	Other	1	0.5

Which online shopping platform did use the most?	Shopee	182	91.0
	Lazada	9	4.5
	Amazon	-	-
	Zalora	6	3.0
	Other	3	1.5

Descriptive Statistics

Descriptive statistics are used to analyze data by describing how variables in a sample or population are related. Descriptive statistics are a vital first step in research and should be calculated before conducting inferential statistical comparisons. Descriptive statistics contain variable types as well as frequency, mean, and standard deviation values (Kaur, Stoltzfus & Yellapu, 2018). Table 3 shows the mean value and interpretation for the security level in online shopping preference. Based on the table, the highest mean which is 4.55 with a strongly agree level of interpretation is they prefer to shop from a trustworthy website. The second highest mean is where the consumers think that online store offers secure payment methods with a mean of 4.35 and the level of interpretation is strongly agreed. The mean level followed by 4.30 with the strongly agreed interpretation is the consumers think that the store has adequate security features. Besides that, items with a level agreement of interpretation included that the consumers feel safe and secure while they shop online, and online shopping protects their security. The mean value is 4,08 and 4.00, respectively.

Table 3: Security Factor

Items	N	Mean	Std. Deviation	Interpretation
1. Online shopping protects my security.	200	4.00	.673	Agree
2. I feel safe and secure while shopping online.	200	4.08	.837	Agree
3. I like to shop online from a trustworthy website.	200	4.55	.655	Strongly Agree
4. The online store has adequate security features.	200	4.30	.769	Strongly Agree
5. The online store offers secure payment methods.	200	4.35	.700	Strongly Agree

Table 4 shows the mean value and interpretation level for IV items under save time in online shopping preference. There are four items that reach the level interpretation of strongly agreed based on the mean calculated from the data collected. The items included that the consumers agree that they can purchase products online anytime, consumers take less time in buying products, less time taken in selecting products, and online shopping does not waste time. The mean values are 4.47, 4.34, 4.27, and 4.25, respectively. Other than that, the item which states online shopping will get on-time delivery gets 4.13 for mean value and agree for interpretation level.

Table 4: Save Time Factor

Items	N	Mean	Std. Deviation	Interpretation
1. I can purchase the products anytime 24 hours a day while shopping online.	200	4.47	.715	Strongly Agree
2. I feel that it takes less time to purchase.	200	4.34	.767	Strongly Agree
3. It takes less time in evaluating and selecting a product while shopping online.	200	4.27	.884	Strongly Agree
4. Online shopping doesn't waste time.	200	4.25	.873	Strongly Agree
5. I get on-time delivery by shopping online.	200	4.13	.870	Agree

Table 5 shows the mean value and interpretation level for IV items under save time in online shopping preference. The item with the highest mean value is the payment can be done faster online which is 4.39 and the level of interpretation is strongly agree. Other items with the same level of interpretation including the payment process can be relied on while shopping online with a 4.31 mean value, online stores have clear terms and conditions of transaction with a mean of 4.30, and consumers feel safe with transactions in online shopping with a mean of 4.22. Finally, the item of consumers feeling secure with the online shopping payment method with the mean of 4.20 and the level of interpretation is agreed.

Table 5: Payment Method Factor

Items	N	Mean	Std. Deviation	Interpretation
1. I feel safe with transactions in online shopping.	200	4.22	.871	Strongly Agree
2. I feel secure with payment methods in online shopping.	200	4.20	.862	Agree
3. Online stores have clear terms and conditions of the transaction.	200	4.30	.750	Strongly Agree
4. Payment processes can be relied upon during online shopping.	200	4.31	.779	Strongly Agree
5. Payment can be done faster online.	200	4.39	.701	Strongly Agree

Table 6 shows the mean value and interpretation level for DV items which is the consumers' online shopping preference. The item with the highest mean value is the consumers are willing to make more research while shopping online with a mean value of 4.48 and strongly agree with the level of interpretation. Other items with the same level of interpretation included consumers willing to shop online repeatedly with a mean of 4.44, consumers willing to spend time comparing prices among online stores with a mean of 4.30, consumers willing to make online payments with a mean of 4.28, and consumers willing to trust the internet with the mean of 4.23. Besides that, the items with agreed for the level of interpretation included consumers willing to pay shipping fees with a mean of 4.13, followed by the item of consumers willing to take risks in online shopping with a mean of 4.10.

Table 6: Online Shopping Preference

Items	N	Mean	Std. Deviation	Interpretation
1. I am willing to take risks in online shopping.	200	4.10	.897	Agree
2. I am willing to make online payments.	200	4.28	.643	Strongly Agree
3. I am willing to repeatedly purchase online.	200	4.44	.647	Strongly Agree
4. I am willing to pay shipping fees.	200	4.13	1.046	Agree
5. I am willing to trust the internet.	200	4.23	.872	Strongly Agree
6. I am willing to spend time comparing prices among online stores.	200	4.30	.723	Strongly Agree
7. I am willing to make more research on a product while shopping online.	200	4.48	.649	Strongly Agree

Spearman Correlation Analysis

Correlation is a measure of a relationship between variables in the widest meaning. A change in the magnitude of one variable relates to a change in the magnitude of another variable, either in the same or opposite direction in correlated data. A Spearman rank correlation can be employed as a measure of monotonic connection for nonnormally distributed continuous data, ordinal data, or data containing meaningful outliers (Schober, Boer & Schwarte, 2018). Spearman correlation analysis was used in measuring the data in this research. Table 7 depicts that security has the highest coefficient value which is 0.662 compared to the other IV which included save time with a coefficient value of 0.552, and payment method with a coefficient value of 0.623. Security and payment method have a strong positive with online shopping preference which the coefficient values are 0.662 and 0.623, respectively. The save time variable has a moderate positive relationship with online shopping preference since the coefficient value is 0.552. Thus, online shopping preference has a direct relationship with the independent variables including security, save time, and payment method, and all the variables are significant. This can conclude that the level of security in online shopping, saving time with purchases online, and the online payment method for online shopping did affect the online shopping preference among the young consumers in UUM.

Table 7: Spearman Correlation Analysis

		Online shopping preference (DV)
Online shopping preference (DV)	Spearman Correlation Coefficient	1.000
	Sig. (1-tailed)	
	N	200
Security (IV)	Spearman Correlation Coefficient	.662**
	Sig. (1-tailed)	<.001
	N	200
Save time (IV)	Spearman Correlation Coefficient	.552**
	Sig. (1-tailed)	<.001
	N	200
Payment method (IV)	Spearman Correlation Coefficient	.623**

Sig. (1-tailed)	<.001
N	200

** Correlation is significant at the 0.01 level (1-tailed).

Multiple Regression Analysis

Multiple regression analysis is a statistical approach that investigates the connection between two or more independent variables and utilizes the data to estimate the values of the dependent variables. Because of its reliance on another variable, the predictive variable has become a dependent variable. The value of the dependent variable is influenced by two or more external factors in multiple regression. Table 8 indicates the multiple regression analysis from this study. Based on the table R square in this study result is 0.667 which means 66.7% of the observed variation can be explained by the model's input. The result of the study analysis shows that $F=131.127$, $p<0.001$, the model is statistically significant. Hypothesis H1 and H3 are supported as the significant value of each one is less than 0.05 ($p<0.05$) which the t-value and p-value for security are ($t=5.332$, $p<0.001$) and payment method is ($t=4.741$, $p<0.001$). Hence, the security of online shopping and payment method did significantly influence the online shopping preference of UUM students. Furthermore, the level of security of online shopping affects more to online shopping preference compared to the payment method of online shopping. This is because the standardized coefficient of security is 0.414 which is higher than the payment method which is 0.367. However, the proposed hypothesis which is H2 is rejected because the significant value of the save time variable is higher than 0.05 ($p<0.05$) which is ($t=1.444$, $p=0.150$). Therefore, time-saving of online shopping did not significantly influence the online shopping preference of UUM students.

Table 8: Multiple Regression Analysis

		Coefficients ^a				
Model		Unstandardized Beta	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.755	.185		4.074	<.001
	Security	.423	.079	.414	5.332	<.001
	Save Time	.080	.056	.090	1.444	.150
	Payment Method	.322	.068	.367	4.741	<.001
	R Square			.667		
	Adjusted R Square			.662		
	Sig. F				< .001 ^b	
a. Dependent Variable: Online Shopping Preference						
b. Predictors: (Constant), Payment Method, Save Time, Security						

Table 9 depicts the hypotheses that were proposed in this research. Based on the result below, H1 and H3 are accepted while H2 is rejected. This is because the significant value of H1 ($p<.001$) and H3 ($p<.001$) is significant based on the confidence level ($p<0.05$) while the significant value of H2 ($p=0.150$) is higher than 0.05 which did not reach the confident level.

Table 9: Hypothesis Testing Results

Hypothesis	Statement	Significant	Comparison	Decision
H1	The security feature of the online shopping platform significantly influences the online shopping preference of UUM students.	<.001	0.05	Accepted
H2	The time saving of online shopping platform significantly influences the online shopping preference of UUM students.	0.150	0.05	Rejected
H3	The payment method feature of online shopping platform significantly influences the online shopping preference of UUM students.	<.001	0.05	Accepted

Conclusion

This study aimed to examine the level of online shopping preference among UUM students and investigate the relationship between 3 determinant factors (security, save time, payment method) and online shopping preference among UUM students. The researcher managed to collect 200 respondents' data by using Google Forms and the data were analyzed with several tests in SPSS. The tests include a reliability test, a validity test, descriptive statistics, Spearman correlation analysis, and multiple regression analysis. According to the finding and discussion, the independents included security features in online shopping and payment method in online shopping do have significant correlations with the dependent variable which is online shopping preference. However, the study found that the independent variable which is time-saving in shopping online has no significant correlation with the dependent variable, online shopping preference. Hence, the hypothesis H1 and H3 were accepted while H2 was rejected. The finding does solve the research questions which are the frequency of the UUM students to shop online and the level of the factors that affect online shopping preference among UUM students. Generally, the researcher's conduct, testing, and analysis of this study in each of the variables were successful. As a suggestion for future research, researchers should use a larger size for the sample to get a better range of factors that affect online shopping preferences among youngsters. Future research should increase the age range which includes a sample size below 18 years old because young people in the new generation are very advanced in technology usage. Other than that, the future researcher can also expand the sample size by including students from other universities not only in UUM, but this will also help the researchers to get more data. Therefore, the researcher will get more excellent results in studying online shopping preferences among young people, especially among university students.

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References

- Abd Aziz, N. N. & Abd Wahid, N. (2018). Factors influencing online purchase intention among university students. *International journal of academic research in business and social sciences*, 8(7), 702-717.
- Anitha, N. (2017). Factors Influencing Preference of Women towards Online Shopping. *Indian Journal of Commerce and Management Studies*, 8(1), 38-45.
- Azman, H., Yi, T. Z., & Bakri, M. H. (2020). The Factors that Affecting Consumer Intention to Utilise the Electronic Payment System in Malaysia. *Journal of Technology Management and Technopreneurship*, 8, 129–138.
- Dannels, S. A. (2018). *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (2nd ed.). New York, NY: Routledge.
- Farah, G. A., Ahmad, M., Muqarrab, H., Turi, J. A., & Bashir, S. (2018). Online Shopping Behavior Among University Students: Case Study of Must University. *Advances in Social Sciences Research Journal*, 5(4) 228-242.
- Hossain, A., Jamil, M. A., & Rahman, M. M. (2018). Exploring the Key Factors Influencing Consumers' Intention, Satisfaction and Loyalty Towards Online Purchase in Bangladesh. *International Journal of Economics and Financial Research*, 4(7), 214-225.
- In, J. (2017). Introduction of a Pilot Study. *Korean Journal of Anesthesiology*. 70(6), 601-605. <https://doi.org/10.4097/kjae.2017.70.6.601>.
- Kaur P., Stoltzfus J., Yellapu V. (2018), Descriptive Statistics. *International Journal of Academic Medicine*, 4(1), 60-63. https://doi.org/10.4103/IJAM.IJAM_7_18
- Kocijan, S., Zunac, A. G., & Ercegovac, P. (2020). Changes to Social Patterns of Behaviour Stimulated by the Development of ICT and Digital Transformation. *Economic and Social Development: Book of Proceedings*, 1-9.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kubai, E. (2019). *Reliability and Validity of Research Instruments*. Retrieved from https://www.researchgate.net/publication/335827941_Reliability_and_VValidity_of_Research_Instruments_Correspondence_to_kubaiedwinyahocom
- Lui, F., Xiao, B., Lim, E. T., & Tan, C. W. (2017). The Art of Appeal in Electronic Commerce: Understanding the Impact of Product and Website Quality on Online Purchases. *Internet Research*, 27(4), 752-771.
- Moises Jr, C. (2020). Online Data Collection as Adaptation in Conducting Quantitative and Qualitative Research During The COVID-19 Pandemic. *European Journal of Education Studies*, 7(11).
- Neger, M., & Uddin, B. (2020). Factors Affecting Consumers' Internet Shopping Behavior During the COVID-19 Pandemic: Evidence from Bangladesh. *Chinese Business Review*, 19(3), 91-104.
- Nguyen, T. P. L., & Nguyen, V. H. (2020). Factors Affecting Online Payment Method Decision Behavior of Consumers in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(10), 231–240. <https://doi.org/10.13106/jafeb.2020.vol7.n10.231>
- Pandey, P., & Pandey, M. M. (2021). *Research Methodology Tools and Techniques*. Romania: Bridge Center.
- Rasid, N.N., Fauzi, A.N., & Asri, N.F., (2018). Factors Affecting the Consumer's Purchase Intention Towards Online Shopping: A Case Study Among Students at UiTM Kota Bharu. Retrieved from https://www.academia.edu/37511890/FULL_RESEARCH_FACTORS_AFFECTING

_CONSUMERS_PURCHASE_INTENTION_TOWARDS_ONLINE_SHOPPING_A
_CASE_STUDY_AMONG_STUDENTS_AT_UiTM_KOTA_BHARU

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation Coefficients: Appropriate Use and Interpretation. *Anesthesia & Analgesia*, 126(5), 1763-1768. <https://doi.org/10.1213/ANE.0000000000002864>

Statista (2022). *Impacts of COVID-19 Pandemic on the Online Purchase Behavior Among Consumers in Malaysia as of May 2020, by Age Group*. Retrieved from <https://www.statista.com/statistics/1128440/malaysia-impact-on-online-purchase-behavior-covid-19-by-age-group/>