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THE INFLUENCE OF SOCIAL MEDIA STRATEGIES ON
ONLINE SHOPPING BEHAVIOUR AMONG UNIVERSITY
STUDENTS: A STATISTICAL ANALYSIS

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Abstract:

This research investigates the influence of various social media strategies on the online purchasing habits of university students. Using descriptive statistics, independent t-tests, ANOVAs, and chi-square tests, the study identifies significant trends and differences in consumer behaviour when shopping online. A total of 382 students from Universiti Teknologi MARA (UiTM), Seremban Campus, participated in the study. Primary data were collected through an online questionnaire. The findings reveal that respondents generally display a positive attitude toward online shopping, with a moderate to high level of agreement. No statistically significant differences were found between male and female respondents regarding online shopping behaviours. However, a significant difference was observed across the three faculties involved in the study. Additionally, a statistically significant correlation was found between social media usage and gender, indicating that female students tend to spend more time on social networks, particularly within the 3–5 hour and over 5 hour daily usage categories. The study validates the substantial influence of social media on consumer purchasing decisions in the digital age. These insights are valuable for marketers seeking to optimise their digital marketing strategies. Future research should explore the long-term impact of different types of social media content on consumer loyalty and brand perception across various demographic segments.

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Keywords:**

Social Media, Online Shopping, Online Review, Live Streaming, Celebrity Endorsement, Promotional Tools

Introduction

Recently, developments in information technology (IT) have made people more likely to buy things. These companies make money by advertising and selling their goods and by interacting with customers online (Awa et al., 2015). Consumer behaviour has changed significantly in the digital age, and commonly, social media is a major factor in shaping patterns in online shopping (Anjorin et al., 2024). The emergence of social media has transformed consumer-brand interactions, transitioning the emphasis from traditional methods of marketing to more personalized and engaging content (Mahoney & Tang, 2024). Social media networks offer an environment for consumers to obtain recommendations, evaluations, and endorsements from influencers they regard as trustworthy and approachable (Ardley et al., 2022). The pervasive influence of social media marketing on consumer behaviour within the retail sector is the central theme of contemporary analysis, necessitating a thorough examination of the intricate relationship between social media marketing strategies and their effects on consumers' purchasing patterns, brand loyalty, and overall engagement. It is essential to comprehend the influence of social interactive tools on the buying decision process and the impact of product-related opinions from digital environments on purchasing decisions across various markets (Sokhatska & Siddharth, 2019). The emergence of social media has enabled consumers to make more informed purchasing decisions, fundamentally changing their buying patterns. Approximately 37% of consumers use social media platforms for product discovery. Additionally, 63% of consumers currently anticipate that brands will provide customer service through social media platforms (Dhingra, 2023).

According to Caputo et al. (2018), consumers may now readily find all the product information and reviews they need online. These internet platforms enable customers to disseminate personal experiences, opinions, and expertise to an engaged audience online. In contrast to social media, traditional media communication methods, such as television, radio, newspapers, and magazines or brochures, convey their content to a nonsegmented audience with the objective of reaching a limited number of consumers. Social media is significant in the lives of all individuals, including those in areas such as business, academia, marketing, and advertising. It not only enables businesses to derive advantages and revenues from engaging with consumers, retaining them, and attracting prospective consumers; it also empowers individuals to endorse or criticise their purchasing experiences through their evaluative reviews of the products (Parson, 2013). Thus, understanding the influence of social media strategies on online shopping behaviour very important. Based on various studies, there are several factors that can affect social media strategies, such as live streaming, celebrity endorsements, online reviews, and promotional tools.

Live streaming is a growing e-commerce model that has gained popularity among an increasing number of individuals (Hu, 2022). In contrast with traditional e-commerce, live streaming is multidimensional and three-dimensional. It is more instinctive, authentic, and engaging. Consumers may comprehend products not only through images but also through short movies and the presenter's experience with the item. A significant number of consumers are more

likely to buy products endorsed by their preferred celebrities (Huo et al., 2022). The characteristics of the product or its category significantly affect the efficacy and success of endorsements, with celebrity endorsements extensively utilized to affect the purchasing intentions of food brands and goods (Zhou et al., 2019). Consumers are increasingly attracted to seeking product information from reviews in the context of internet shopping. In contrast to the official product information supplied by sellers, reviews are generated by users who have previously acquired the product through online shopping platforms (Baek et al., 2012). Today, businesses also use sales promotions, including giving consumers free samples at shopping malls, supermarkets, retail stores, and other channels to attract and retain consumers. Promotional activities benefit businesses. Promotional activities include sales offers that influence customer purchases. This method quickly encourages consumers to purchase the new brand product and increases sales (Ali & Muhammad, 2021).

Even though social media is having a bigger effect on how people act, we are still unsure how different types of social media strategies such as live streaming, celebrity endorsements, and online review and promotional tools, affect people's decisions to shop online in different cultures. While previous studies (Kotler et al., 2010) have explored digital marketing's role in consumer engagement, more research is needed to examine the effectiveness of these strategies in different markets and demographics. This study aims to address this gap by analyzing the influence of live streaming, celebrity endorsements, online reviews, and promotional tools on consumer purchasing decisions. By examining these factors, the research will provide valuable insights for businesses seeking to optimize their social media marketing strategies and enhance consumer engagement.

Research Objectives:

1. To determine the levels of engagement with live streaming, celebrity endorsement, online reviews, promotional tools, and online shopping behavior among university students.
2. To examine significant differences in online shopping behavior based on gender and faculty.
3. To analyze the association between the frequency of social media usage among university students and their gender and education level.

Literature Review

There are five sections that will be discussed in the literature review: live streaming, celebrity endorsements, online reviews, promotional tools, and online shopping behaviour.

Live Streaming

Live streaming shopping is a business idea that has a lot of promise in the world of social media marketing. In contrast to traditional live broadcasts, shopping by watching live streams allows real-time interactions between online streamers and customers (Song et al., 2024). Livestreaming commerce is an innovative form of e-commerce that integrates live video streaming with online purchases (Zhang et al., 2022). Livestreaming commerce platforms have evolved in two main directions: integrating e-commerce features into livestreams and incorporating livestreaming capabilities into traditional e-commerce platforms (Lu & Chen, 2021). Currently, live streaming is widely recognized as a leading trend. Its increasing popularity, diverse forms, and extensive platforms have made it a subject of enjoyment (Lu & Siegfried, 2021). The rapidly growing live streaming industry, together with other online enterprises, has swiftly spread worldwide. During the live streaming phenomenon, the platform

establishes a context through technologies such as live push streaming and real-time notifications. All stakeholders recognize the value of co-creation within the interactions focused on the live broadcast platform (He, 2019). Consumers' decisions to buy are affected by several factors in live streaming situations. Figuring out how these factors work is crucial for the growth of the live streaming business. Huang et al. (2023) claim that live shopping happens online, and that the streamer's job is to change the user's mind by interacting with them and other ways. It is a mixture of social marketing and social e-commerce. Based on Mufadhol et al. (2024), live streaming shopping has a significant effect on online purchase intention. Since live streaming can show products in real time, respond to customer inquiries, and give direct product demonstrations, it can help solve customer issues in various circumstances.

Celebrity Endorsement

Bergkvist and Zhou (2016) stated that celebrity endorsement is defined as the agreement between an individual who possesses public recognition (a celebrity) and a brand or product to utilize the celebrity for the purpose of promoting the brand or product. Meanwhile, Rifon et al. (2022) described celebrity endorsement as the celebrity's potential to influence buyers to buy the promoted goods or brand. Many businesses use endorsements and suggestions from famous people as a popular and effective way to communicate with customers. This leads to better contact with customers and a greater desire to buy (Singh and Banerjee, 2018). Ahmed et al. (2015) also agreed that a strategy involves employing celebrity influencers, prominent individuals recognized for their influence, to assist firms in promoting their products. A celebrity with a greater reputation may positively influence consumers' impressions of the promoted brand. Prior research has shown that employing celebrities in commercials enhances consumer engagement (Davis, 2017; Johansson and Bozan, 2017). Because of this, they are crucial in deciding which products can be personalized with the brand. According to Liu and Wang (2023), celebrities play a significant role as influential opinion leaders in the present trend of consumers checking online reviewers' opinions before making purchases. As a result, celebrity endorsers play an important role in making the brand unique, adding to the fun factor on social media, and altering customer behaviour.

Online Reviews

According to Amelia et al. (2019), online customer reviews are written by satisfied customers who have used a product or service and want to share their thoughts and feelings about it. Online reviews, whether favourable or unfavourable, have a direct impact on potential buyers' decisions. Positive reviews enhance consumer confidence and stimulate sales, while negative reviews might discourage purchasers from completing a transaction (Ciu & Wijayanti, 2024). Basically, online reviews help people make decisions by providing them with information about the quality of a product based on the experiences of other users (Mo et al., 2015). Millions of people are virtually able to influence an individual's purchasing decision based on convincing personal knowledge; people constantly can influence an individual's buying decision by publishing their reviews and remarks to social media sites (Evans, 2008). Through evaluations and comments on goods and services, these online consumers and reviewers influence the choices of other buyers and have more power in spreading knowledge (Kietzman et al., 2011). Chen et al. (2015) mentioned that consumer purchasing decisions are influenced by the dimensions of online customer reviews, which include motivation, source, and content. Additionally, important indicators in customer reviews include the number of reviews, perceived benefits, source credibility, opinion quality, and review valence (Rinyanjaya & Andarini, 2022).

Promotional tools

As per Luick and Ziegler (1968), sales promotional marketing activities are thought to be more effective than personal selling and advertising publicity. Meanwhile, according to Mercer et al. (2002), promotion is a marketing strategy that is mostly employed temporarily to produce appealing products or services that will persuade consumers to buy them within a given time frame by offering more advantages. Mughals et al. (2014) argue that marketing serves as a mechanism employed by retailers or manufacturers to attract customers to purchase additional items and services. The promotional techniques enhance customer buying intention and boost online sales (Chandra et al., 2018). Promotions encourage consumers to examine various brands and assess purchasing options. Promotion is essentially a mechanism for disseminating information regarding products and services that are accessible to consumers. Promotional activities today encompass not only advertising but also various promotional tactics (Khan & Ghorpode, 2016). It was agreed by Bucko et al. (2018). The promotional tools enable consumers to consider and evaluate brand identity and awareness prior to making a purchase. Various promotional tools are offering marketers analytical insights that enhance sales and reveal consumers' primary preferences prior to online purchases. Advertisements on TV, social media, online coupons, special discounts, promotions, free delivery, and word-of-mouth are some examples of these methods. Various promotional strategies are employed by the seller to enhance sales and maintain brand loyalty (Bucko et al., 2018). As a result, internet retailers' usage of various promotional tactics leads to increased sales and customer invitations.

Online Shopping Behaviour

Studies have shown that online shopping provides convenience and more benefits than traditional shopping methods (Singh & Basu, 2023). The growth of the Internet as a commercial platform has changed traditional purchasing behaviours, making online shopping favored by customers globally. Deekshith et al. (2021) also conclude that consumers are mostly drawn to online buying because of the convenience and quality of service offered by e-commerce companies where customers can visit a website to buy theatre tickets, books, household appliances, electrical devices, trains, airline tickets, and much more. As a result, online shopping has become a popular and influential medium of commerce. Online shopping is becoming more popular due to the availability of many products at lower rates and convenient payment alternatives. The ease of searching through various possibilities with the push of a button has played a big role in the shift to online shopping, where customers like how easy it is to locate products. Studies indicate that physical stores frequently have limited stock due to space and inventory limits, which makes it difficult for customers to find certain products. On the other hand, internet merchants can merge inventory from different suppliers and warehouses, providing customers with a greater range of options and ensuring that even uncommon items are available (Chapman et al., 2021). Due to the convenience and availability of products, most consumers prefer online shopping. Aside from that, the time savings associated with online shopping is another reason why many customers favor it. In contrast to traditional stores, online platforms let customers buy without having to leave the comforts of their homes or while on their way somewhere. Doing this can prevent the time spent going to the store, searching for parking, and standing in line. Furthermore, online stores are available 24 hours a day, making it possible to shop at any time, which is convenient for individuals with hectic schedules or unusual working hours. For customers who are limited in time, online shopping is a good choice for them.

Methodology

Population and Sampling Technique

This quantitative study investigates the impacts of social media strategies on online shopping behaviour. The population consists of all students at Universiti Teknologi MARA (UiTM), Seremban 3 Campus, Negeri Sembilan Branch, with a total of 382 respondents participating in the study. A non-probability convenience sampling technique was used due to its efficiency in terms of time, cost, and effort. Primary data was collected through an online questionnaire distributed via Google Forms, chosen for its convenience, speed, and ability to enhance response rates.

Research Instrument

The questionnaire, adopted from Miah et al. (2022), is divided into three sections. Part A pertains to the demographic profile, which includes gender, age, education level, and faculty. Part B presents general questions related to social media usage and online shopping behaviour. There are three questions in this part. Meanwhile, Part C focuses on the impact of social media factors on online shopping behaviour; it contains 22 items. This section is split into five sections: live streaming, celebrity endorsements, online reviews, promotional tools, and online shopping behaviours. A 5-point Likert scale was used to measure responses, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. A pilot study was conducted to assess the reliability of the questionnaire. Figure 1 shows the theoretical framework for this study.

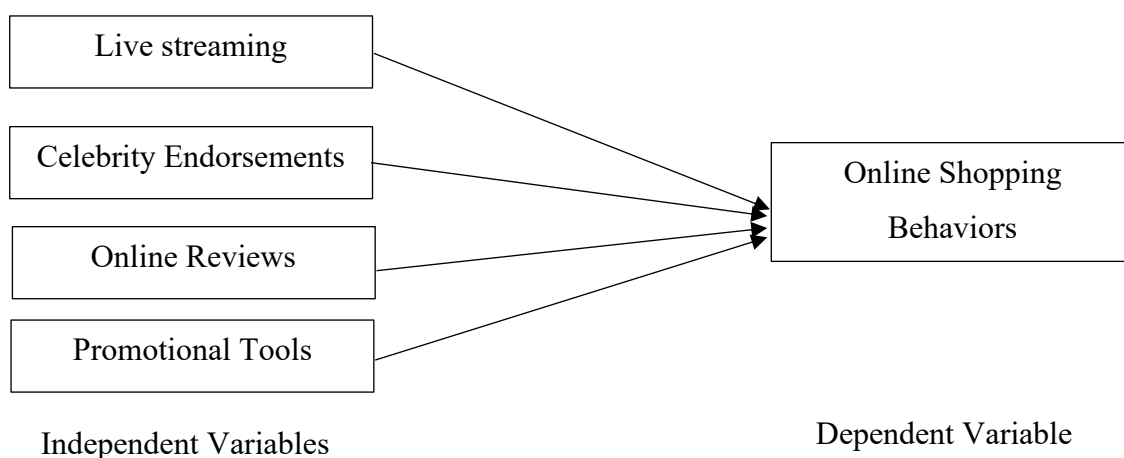


Figure 1: Theoretical Framework

The Cronbach's alpha values for all variables were above 0.7, indicating high internal reliability. Specifically, the Cronbach's alpha values were 0.94 for live streaming, 0.81 for celebrity endorsements, 0.836 for online reviews, 0.79 for promotional tools, and 0.80 for online shopping behaviour. Since all values exceed the accepted threshold of 0.7, the questionnaire is deemed reliable and valid for further analysis.

Method of Analysis

In this study, the collected data was analyzed using SPSS software version 26.0. Several statistical methods were applied to examine the data, such as descriptive statistics, independent t-tests, analysis of variance (ANOVA), and chi-square tests of independence. A normality test was performed to ensure that the assumptions for conducting the independent t-test and

ANOVA were met. Table 1 presents the test of normality for the study variables. The results indicate that the skewness values for all variables fall within the acceptable range of ± 2 , as suggested by Sarstedt et al. (2021). According to this guideline, skewness values within this range are considered acceptable, indicating that the data is approximately normally distributed. Therefore, the distribution of mean scores for live streaming, celebrity endorsements, online reviews, promotional tools, and online shopping behaviour satisfies the assumption of normality.

Table 1: Test of Normality

Variables	Skewness	Assumption
Mean Score live streaming	-0.478	Approximately normally distributed
Mean Score celebrity endorsements	-1.076	
Mean Score online reviews	-1.152	
Mean Score promotional tools	-0.657	
Mean Score online shopping behaviour	0.803	

Descriptive statistics

Descriptive statistics were used to summarize the demographic profile of the respondents. The data collected by the researcher will be evaluated and summarised using a suitable graphic visual for clarity. The information derived from demographic data can be presented using various tables, graphs, and charts. To assess the levels of live streaming, celebrity endorsement, online reviews, promotional tools, and online shopping behaviour among university students, mean and standard deviation were employed.

Independent t-test

An independent t-test was conducted to compare the means between two independent groups. The formula for the t-statistic is as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where,

\bar{X} = Mean

s = Standard deviation

n = Sample size

Analysis of Variance (ANOVA)

ANOVA was applied to identify differences among more than two groups. The general formula used in ANOVA is

$$F = \frac{MS_{between}}{MS_{within}}$$

Where,

$$MS_{between} = \frac{SS_{between}}{df_{between}} = \text{Mean square between the groups}$$

$$MS_{within} = \frac{SS_{within}}{df_{within}} = \text{Mean square within the groups}$$

Chi-square Test of Independence

The chi-square test of independence, often referred to as the Pearson chi-square test, is a statistical method used to evaluate hypotheses when variables are nominal. It helps researchers determine whether two variables are independent or have a significant relationship. To perform the chi-square test of independence, the following assumptions must be satisfied:

1. Independence of Observations: Each respondent's data must be independent of others.
2. Expected Frequency: Each cell in the contingency table should have an expected frequency of at least 5.
3. Sample Size: The total sample size must be sufficiently large for reliable results.

The formula for the chi-square test of independence is as follows:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where,

O = observed frequency

E = expected frequency

Findings***Demographic Profile***

Table 1 presents the demographic profile of the respondents, consisting of 382 university students. The results indicate that the majority of respondents in this study are male (83.5%), while females constitute only 16.5%. Meanwhile, most of the respondents fall within the 21-24 age group (95.5%), while only a small portion (4.5%) are between 18 and 20 years old. A vast majority of the respondents (95.3%) are degree students, while only 4.7% are pursuing a diploma. The largest proportion of respondents (55.0%) comes from the College of Computing Informatics and Mathematics (KPPIM), followed by 24.6% from the Faculty of Administrative Science and Policy Studies (FSPPP) and 20.4% from the Faculty of Sports Science and Recreation (FSR).

Table 1: Demographic Profile of The Respondents

Variables	Frequency	Percentage (%)
Gender		
Male	319	83.5
Female	63	16.5
Age (years old)		
18 - 20	17	4.50
21 - 24	365	95.5
Education Level		
Diploma	18	4.70
Degree	364	95.3
Faculty		
FSPPP	94	24.6
KPPIM	210	55.0
FSR	78	20.4

The Usage of Social Media Per Day

Based on Figure 1, the findings show that more than half of the respondents spend their time using social media 3 to 5 hours per day, which is 78%. Next in line are those who use social media for more than 5 hours (17%) and those who use it for 1 to 3 hours (5%).

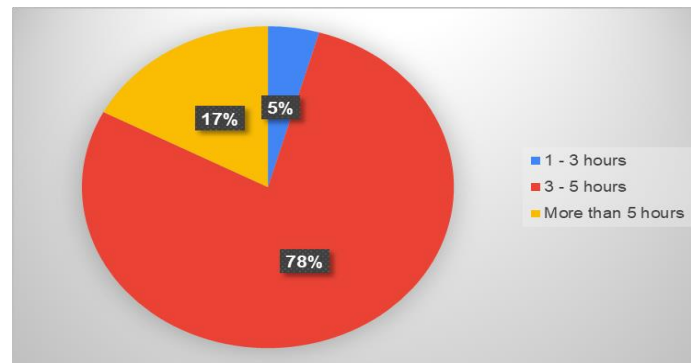


Figure 1: The Usage of Social Media Per Day

The Most Popular Online Shopping Platforms among Respondents

Table 2 demonstrates the frequency table of the most popular online shopping platforms preferred by respondents. The Shopee platform shows the most popular online shopping, with all respondents (100%) using it. Then the second-highest online shopping platform preferred by respondents is TikTok Shop (92.7%). Lazada, with an 89.3% preference, follows closely behind.

Table 2: The Most Popular Online Shopping Platforms

Variables	Frequency	Percentage (%)
Shopee		
Yes	382	100.00
No	0	0.00
Tiktok Shop		
Yes	354	92.7
No	28	7.3
Lazada		
Yes	341	89.3
No	41	10.7
Amazon		
Yes	142	37.2
No	240	62.8
Caraousell		
Yes	71	18.6
No	311	81.4
Mudah.my		
Yes	25	6.50
No	357	93.5

The Level of Live Streaming, Celebrity Endorsement, Online Review, Promotional tools and Online Shopping behaviour among University Students

Based on Table 1, the mean score for live streaming is 3.26 with a standard deviation (SD) of 0.633. This variable had the lowest mean, suggesting that it has the least impact compared to other factors. Meanwhile, the celebrity endorsement (mean = 3.77, SD = 0.633) and promotional tools (mean = 3.87, SD = 0.670) also show moderate influence. Among the independent variables, online reviews (mean = 4.31, SD = 0.463) received the highest rating, indicating that feedback may play a significant role in influencing purchasing decisions. The mean score for online shopping behaviour is 3.84 (SD = 0.676) on a 5-point Likert scale, suggesting that respondents generally exhibit a positive tendency towards online shopping, indicating a moderate to high level of agreement.

Table 3: Level of Live Streaming, Celebrity Endorsement, Online Review, Promotional tools and Online Shopping behaviour

No	Items	Mean	SD	Interpretation
C1	I often watch live streaming.	3.27	0.678	Moderate
C2	I had impulsively spent money in a live streaming.	3.19	0.899	Moderate
C3	I often shop when I see live streaming.	3.14	0.800	Moderate
C4	I easily get influenced to buy the product when I watch live streaming.	3.24	0.915	Moderate
C5	I feel more trustworthy to buy the product during live streaming as I can ask the seller directly.	3.47	0.741	Moderate
Live Streaming		3.26	0.807	Moderate
C6	I feel more confident about buying the products when I see a lot of celebrities or influencers promote the products.	3.41	0.640	Moderate
C7	I agree that people will be influenced to buy the products when they see their favourite celebrity or influencer promote the products.	4.20	0.566	High
C8	I agree that choosing the right celebrity endorsement is important for the brand to be more recognizable.	4.13	0.612	High
C9	I tend to buy the products that my favourite celebrities or influencers used.	3.35	0.715	Moderate
Celebrity Endorsement		3.77	0.633	Moderate
C10	If the product has a lot of bad reviews, I will not purchase it.	4.28	0.451	High
C11	I will be more confident to buy the products if it has positive reviews	4.29	0.455	High
C12	I agree that a shop's rating can influence people's decision to buy from that shop.	4.37	0.485	High
Online Review		4.31	0.463	High
C13	I always do online shopping as the price is cheaper than at the store.	4.00	0.846	High
C14	I often wait until promotion days to buy the things I want.	3.76	0.534	Moderate

C15	I agree people will be tempted to buy the product when it has a discount price.	4.04	0.667	High
C16	I easily get influenced to buy things when an e-commerce platform (TikTok or Shopee) has a promotion day.	3.66	0.634	Moderate
Promotional tools		3.87	0.670	Moderate
C17	I am aware of the consequences of buying things online.	4.27	0.586	High
C18	I often shopping things online.	3.68	0.618	Moderate
C19	I prefer to buy things online instead of buying at a store.	3.82	0.838	Moderate
C20	I find that online shopping is enjoyable.	3.87	0.816	Moderate
C21	I am satisfied with the products that I purchase online.	3.95	0.679	Moderate
C22	I often recommend my friends to purchase the product that I buy.	3.46	0.520	Moderate
Online Shopping Behaviour		3.84	0.676	Moderate

The Difference between Online Shopping behaviour based on Gender

From Table 4, an independent samples t-test was conducted to compare the mean scores between female (mean = 3.852, SD = 0.495) and male respondents (mean = 3.791, SD = 0.450). The results indicated that the p-value is greater than 0.05; thus, there is no statistically significant difference between the male and female groups. It indicates that gender does not have a meaningful impact on online shopping behaviour. The mean score for online shopping behaviour of female respondents was the same as that of male respondents.

Table 4: The Difference between Online Shopping Behaviour and Gender

Gender	N	Mean	Standard Deviation	t	P-values
Female	319	3.852	0.495	0.909	0.364
Male	63	3.791	0.450		

The Difference between Online Shopping behaviour based on Faculty

Table 5 shows the difference in mean score for online shopping behaviour between three faculties, which are the Faculty of Administrative Science and Policy Studies (FSPPP), the College of Computing Informatics and Mathematics (KPPIM), and the Faculty of Sports Science and Recreation (FSR). A one-way ANOVA is used to see the difference between these three faculties. According to the findings, the F-statistic was 9.560, with a corresponding p-value of 0.000, indicating a statistically significant difference between the three faculties. Since the p-value is less than $\alpha=0.05$, we reject the null hypothesis, suggesting that at least one group's mean differs significantly from the others.

Table 5: The Difference between Online Shopping Behaviour and Faculty

Model	Sum Squares	df	Mean Square	F	P-values
Between Groups	4.350	2	2.175	9.560	0.000
Within Groups	86.232	379	0.228		
Total	90.582	381			

The Association Between Social Media Usage and Gender Among University Students

Based on Table 6, the results indicate that the expected frequency for each category is above 5 and the condition that no more than 20% of cells have frequencies below 5 is met. Therefore, the chi-square test can be reliably applied to assess the association between social media usage and gender.

Table 6: Crosstabulation Table social media usage and gender

Social Media Usage	Female	Male
1 to 3 hours		
Frequency	16	1
Percentage	5.0%	1.6%
3 to 5 hours		
Frequency	237	62
Percentage	74.3%	98.4%
More than 5 hours		
Frequency	66	0
Percentage	20.7%	0.0%

Table 7: Chi Square Test Results between Social Media Usage and Gender

Statistic	Values
Chi-Square (χ^2)	18.33
p-value	0.0001
Degrees of freedom (df)	2

From Table 7, the p-value ($p = 0.0001$) is below the significance value ($\alpha = 0.05$), indicating a statistically significant association between the use of social media and gender. The evidence suggests that women are more likely to spend extended periods on social networks than males, with higher engagement observed in the 3 to 5 hours and more than 5 hours categories.

The Association Between Social Media Usage and Education Level Among University Students

As shown in Table 8, since all expected frequencies satisfy the assumption that no more than 20% of cells have values less than 5, the chi-square test results are valid for this analysis.

Table 8: Crosstabulation Table social media usage and education level

Social Media Usage	Degree	Diploma
1 to 3 hours		
Frequency	16	1
Percentage	5.4%	0.3%
3 to 5 hours		
Frequency	283	16
Percentage	94.7%	5.3%
More than 5 hours		
Frequency	65	1
Percentage	21.7%	0.3%

Table 9: Chi Square Test Results between Social Media Usage and Education Level

Statistic	Values
Chi-Square (χ^2)	1.83
p-value	0.401
Degrees of freedom (df)	2

From Table 9, the p-value ($p = 0.401$) is above the significance value ($\alpha = 0.05$), indicating that there is no statistically significant association between social media usage and educational level. This finding suggests that degree and diploma students have similar social media usage patterns.

Discussion

The findings show that the online reviews received the highest rating among other independent variables. This data indicates that feedback may play a significant role in influencing purchasing decisions. It was agreed by Bevan-Dye (2020) that online reviews are a crucial element of e-commerce, significantly impacting consumers' purchasing decisions and expenditure in numerous ways. The growing impact of the internet indicates that review platforms provide consumers with insights on pricing, quality, environment, and experience (Kingsnorth, 2022). Yaylı and Bayram (2012) also found that online reviews influence consumers' decision-making processes and their subsequent purchase frequency. An increase in reviews correlates with a heightened perception of a product or brand's popularity, attributed to the volume of online engagement. Meanwhile, in this study, the results showed no statistically significant difference between the male and female groups regarding online shopping behaviour. It indicates that gender does not have a meaningful impact on online shopping behaviour. The findings align with the research conducted by Jonyoa and Oduorb (2019). Their findings also proved that there is no substantial difference between male and female students regarding e-commerce adoption. This indicates that both genders have equal opportunities in terms of e-commerce adoption. Baba and Siddiqi (2013) also revealed that gender did not influence internet buying views among universities in the Kashmir area of India.

Additionally, the findings indicated a significant association between social media use and gender. The result suggests that women are more likely to spend extended periods on social networks than men, with higher engagement observed in the 3–5 hour and more than 5 hour categories. It was consistent with Twenge et al. (2020). They proved that girls, especially in Generation Z, spend more time on social media. Girls send texts via their smartphones more often than boys, who are more interested in games and other gadgets. Based on Richa (2012), women were more inclined to engage in online shopping, purchasing from online retailers 3–4 times compared to men, who only shop 1–2 times. Female shoppers tended to shop more frequently than male shoppers, leading to their higher online shopping frequency. The study by Krasnova et al. (2017) also found that women's usage of social media is motivated by their need to maintain relationships with both close and distant friends, their ability to obtain social media information, and their optimistic outlook on information distribution in relation to males. However, the findings show that there is no statistically significant association between social media usage and educational level. According to research findings, undergraduates, including both diploma and degree students, actively use social media for both academic and daily information searches (Duggan et al., 2016). Similarly, Park (2010) argues that undergraduates use social media to a greater degree. This data indicates that students pursuing degrees and diplomas demonstrate similar social media usage trends.

Conclusions and Recommendations

Social media play a significant role in shaping consumer behaviour in virtual environments, particularly through the extent of message exposure and the diversity of information available to potential consumers. The study confirms that social media has a substantial impact on consumer purchasing decisions in the digital age. It is evident that social media has transformed the dynamics between consumers and businesses. Research further reveals that consumers are highly selective in their purchasing decisions. Despite the vast amount of data and information available on social media, consumers' behaviour is still strongly influenced by various factors during the decision-making process. Moreover, proactive social media marketing communications can enhance the hedonic value for online consumers. Therefore, marketers should leverage social media to deliver valuable content and encourage active consumer engagement, thereby creating effective marketing messages and enriching the overall online shopping experience. Based on the findings, businesses and marketers are encouraged to adopt a more strategic and consumer-centric approach in their social media campaigns. This includes tailoring content to match consumer interests, utilizing data analytics to understand online behaviours, and engaging with users through interactive and personalized communication. Additionally, companies should invest in influencer collaborations, customer reviews, and real-time customer support to build trust and drive purchase decisions. Future research should explore the long-term impact of different types of social media content on consumer loyalty and brand perception across diverse demographic groups.

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