

The Impact of Covid-19 on Consumption Patterns Among Malaysian Youths

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ABSTRACT

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This study investigates the impact of the COVID-19 pandemic on the consumption patterns of youth Malaysians, focusing on three important variables: changes in income, savings habits, and consumer credit. This study also aims to comprehensively understand the changing consumption patterns during the COVID-19 pandemic and the differences in consumption patterns between gender, living area, and educational level. As the primary method of data acquisition, 169 Malaysian youths aged 18 to 30 were administered a questionnaire. The findings revealed that changes in income, savings patterns, and consumer credit had a significant impact on the consumption patterns of Malaysian adolescents, thus concluding that the pandemic had a substantial impact on one's financial behaviours. The results also revealed no significant difference in consumption patterns based on gender or residing area, but significant differences are obtained based on education level. Therefore, this study contributes to the existing body of knowledge regarding the effect of COVID-19 on consumption patterns and offers valuable guidance for various stakeholders in navigating the pandemic landscape.

KEYWORDS: *COV-19, consumption patterns, income changes, saving habits, consumer credit, disparities*

1. INTRODUCTION

The COVID-19 pandemic affects all aspects of life, including health, social, political, economic, and religious. The outbreak posed a significant global economic challenge, particularly when the lockdown was enforced as one of the alternatives to prevent the virus's transmission. There is ample evidence that the COVID-19 pandemic does pose economic challenges. For example, Zou et al. (2020) discovered that the pandemic caused a halt in operations for half of the firms in Guangdong Province. Many firms need to adapt and be ready to switch to online marketing. Panneer et al. (2022) in their study examined that the COVID-19 pandemic puts those in the informal sector at high risk of poverty due to loss of income and livelihoods. Thus, the challenges of poverty, hunger, and health disparities among vulnerable groups contribute to increasing global economic problems.

Shang et al. (2021) also agreed that the outbreak significantly impacted the economies of the affected countries. Weak cash flow in the market slows economic revenue growth (Shang et al., 2021). As a result, this research was inspired by the fact that there have been numerous studies on the impact of the COVID-19 pandemic on economics and aims to examine the impact of the COVID-19 pandemic on Malaysian youth consumption patterns. However, few studies forecast youth consumption patterns during the pandemic, whereas other past research ignored this aspect of consumption patterns. Accordingly, we pose the following three research questions:

1. How has the COVID-19 pandemic affected the consumption patterns of Malaysian youths?
2. Do consumption patterns among Malaysian youth vary across gender, living area, and education level since the COVID-19 pandemic?
3. What are Malaysian youths' consumption preferences and patterns during COVID-19?

1.1. Problem Statement and Research Objectives

COVID-19 has altered the lifestyle of most Malaysians, particularly when the Movement Control Order (MCO) is issued. Changes in lifestyle have influenced consumption patterns in various categories, including food, clothing, transportation, health, and many others. For instance, according to Rahul and Kumar (2020), 60% of the surveyed individuals in India believed that consumption and spending habits had changed dramatically during COVID-19 when consumers only spent on necessities and non-discretionary categories due to a decrease in income. Youths are one of the communities that are severely struggling to survive the pandemic due to their financial insecurity (Bafford et al., 2021). As a result, youth consumption patterns and preferences must be understood so that demographics that have fallen behind can be identified and assisted as soon as possible. Little attention has been given to the study of the impact of COVID-19 on Malaysian youth consumption patterns. Thus, this research survey was conducted with Malaysian youths between 18 and 30 to achieve the following objectives;

1. To investigate the impact of COVID-19 on Malaysian youth's consumption patterns.
2. To analyse the differences in consumption patterns among Malaysian youth across gender, living area, and education level.
3. To examine the consumption preferences and patterns among Malaysian youths during COVID-19.

1.2. Literature Review

Consumption Patterns

According to research by Chen et al. (2020), daily offline consumption in China dropped by 32% between late January and early April 2020. The researchers concluded that consumption reacted significantly to daily fluctuations in epidemic intensity, ultimately leading to a 1.2% decline in offline consumption in China that year. Accenture (2020) suggests that while consumers cut back on luxury purchases in favour of food, clothing, and shelter, the demand for cleaning and hygiene products has increased while the demand for other commodities has decreased. The report reveals that consumers prefer low-impact consumption. Similarly, Kumar and Abidin (2020) reported that the COVID-19 pandemic affected consumer income, with 38% of Indian respondents indicating a drop in income of 40% or more because of the epidemic, forcing them to cut back on their spending and buy just necessities.

Income Changes

Han et al. (2020) suggest that COVID-19 lowers income and worsens poverty, but government actions can mitigate these effects. However, pandemic effects on income and consumption vary by individual factors (Adams-Prassl et al., 2020; Crossley et al., 2021; Baker et al., 2020; Dang & Nguyen, 2021). Chetty et al. (2020) found that the pandemic reduces high-income Americans' spending, especially in COVID-19-heavy locations. Restrictive policies cause income and employment losses, which lower company expenditure and revenues and these are known as income shocks that affect the entire economy. Income shocks can be triggered by many factors, such as job loss, unemployment, and wage cuts and can happen numerous times in an individual's life, according to Stevens (1997) and Been et al. (2020). As many businesses shuttered during the COVID-19 lockdown in Malaysia, several employees had their salaries cut to pay rent and utilities (Zahid, 2020). During the pandemic, personnel and management agreed to decrease compensation by 15% to 75%, depending on seniority, according to Reuters (2020). Due to high expenses, subject to income shocks, people may struggle harder.

Saving Habits

Regardless of income, many respondents have prioritised short-term shock protection over long-term goals. People are more prone to preserve money than spend it during public health emergencies, which slows economic development and recovery (Jin et al., 2020). The "preventive saving theory" predicts that during the COVID-19 outbreak, consumers will save more because the future is uncertain (Kimball, 1990). Many people saved more during the pandemic, consistent with the statement that more than half of Chinese households saved more and spent less because of the outbreak (Zeng et al., 2020). This is in line with the average savings rate of the younger generation,

which increased by 34% (Fidelity International & Alipay, 2020). The personal savings rate in the United States reached an all-time high of 33% in April 2020, up from 12.7% in March 2020 (Bureau of Economic Analysis, 2020). The COVID-19 pandemic has harmed consumers' ability to save and spend. Based on the theory and logic analysis, this study will establish whether young people's consumption patterns are affected by their saving habits during the pandemic.

Consumer Credit

Lifestyle influences financial necessities. Less affluent households use credit to buy food, clothing, and healthcare, while wealthy individuals are more likely to borrow than needy individuals (Kata et al., 2021). Numerous studies demonstrate that consumer credit demand has decreased as consumers have modified their consumption in response to the COVID-19 outbreak. According to a survey by the European Commission and the International Monetary Fund in 2021, the COVID-19 outbreak reduced debt in which consumers postponed purchases of automobiles and home appliances, lowering credit transactions (European Commission & ICF, 2021). This is supported by the research conducted by Canals-Cerdá and Lee in 2021.

The COVID-19 pandemic has directly affected consumption patterns and indirectly affected consumer confidence, unemployment, and the cost of living. Additionally, the pandemic affects consumption patterns and loan repayments (Andersen et al., 2020). Due to regulatory ambiguity, consumers who have used credit or borrowed money must set aside funds for inevitable expenses. This reduces their purchasing power and compliance with consumer credit obligations. The adverse effects of the epidemic extend beyond immediate expenses and consumers' ability to repay loans to their future financial outcomes, which may hinder their ability to obtain credit. Any change will impact consumer credit in the future (Davola, 2020).

The Differences in Consumption Patterns Across Gender, Living Area and Education Levels among Malaysian Youths

Gender

Gender differences in personal values have developed due to societal preferences for distinct characteristics shared by men and women (Di Dio et al., 1996). A person's level of altruism determines how much they care about the natural environment and their willingness to support environmental protection efforts. A person's level of egoism determines how committed they are to engaging in environmentally friendly consumption practises (Blocker & Eckberg, 1997). Other studies have repeatedly found that female shoppers are more likely to be actively engaged during the holiday season (Fischer & Arnold, 1990). Similarly, Palan et al. (2001) investigated how customers' gender identity affected their gift-giving behaviour. According to the study, female shoppers focus on the recipient as an individual, whereas male shoppers focus on the item when looking for a present. Analysis suggests that men and women may have distinct consumption habits due to behavioural differences.

Living Area

Rural and urban economies and societies in Malaysia are vastly distinct, affecting the spending of both communities and

allowing a comparison of rural and urban spending habits. A global study analysed domestic spending habits, where Çağlayan et al. (2012) discovered that, in Turkey, rural consumption expenditures decreased with age, whereas general and urban estimates rose. The only factors included in rural estimates are age, income, marital status, and family size. Using Taiwanese data from 1993 and 1998, Nguyen et al. (2007) discovered a mismatch between urban and rural distributions of education, ethnicity, and age. The second survey revealed that only the lowest quantiles met the requirement. The 2000 and 2006 Italian National Statistical Institute Household Consumption Expenditure Surveys (ISTAT) reported that the elderly, unemployed, and poorly educated households spent a disproportionate amount more on food, depending on the covariates of interest, as well as factors that influence urban and rural spending that vary across the nation.

Education Level

It was well recognised in the social sciences that higher levels of education correlate with higher incomes (Case, 2005). Using a Discrete-Choice-Experiment (DCE), Koc and Kippersluis (2015) analysed the impact of health knowledge gaps on the relationship between education and food intake in the Netherlands. An empirical study by Cain et al. (2010) utilised data on Indian households' consumption expenditures and found that the education level of household heads was a considerably more significant contributor to inequality than any other factor. According to Islam and Rafiqul (2021), their study shows that in rural areas, education was responsible for 8% and 9% of inequality in 1993 and 2004, respectively, but in urban areas, these percentages were 25% and 28%. They also stated that higher levels of education are associated with higher consumer spending after adjusting for educational attainment in the same age group. Many past studies demonstrate that educational attainment significantly affects one's consumption habits. However, data on how educational attainment influences the effect of COVID-19 on food purchases are scant. This investigation, therefore, employed this variable.

Based on the following review, little attention has been given to the study of the impact of COVID-19 in terms of income changes, saving habits, and consumer credit on consumption patterns among Malaysian youths. Before debating various points of view in these literature reviews, a clear argument on the impact of COVID-19 on consumption patterns, specifically among Malaysian youths, is required to propose a better solution for marketers to develop a better marketing strategy in the future.

Theoretical Framework

In this research, the variables employed are underlies under several theories. Firstly, Friedman's Permanent Income Hypothesis suggests that individuals smooth their consumption over time, adjusting it based on their perception of their long-term or permanent income rather than short-term changes (Meghir, 2004). This theory can explain how income changes impact consumption patterns, as individuals may be cautious in spending, especially if they view the change as temporary. Next, hyperbolic discounting is a concept in behavioral economics that suggests people tend to heavily discount the value of future

rewards compared to immediate rewards (Rubinstein, 2003). This concept can be relevant to understanding how saving habits and consumer credit influence consumption. Malaysian youths may prioritize immediate consumption over saving for the future, leading to changes in consumption patterns.

2. RESEARCH METHOD

2.1. Research Design

This study used a descriptive research design. It is used to collect detailed information on changes in spending habits, types of products or services consumed, frequency of purchases, any shifts in preferences or priorities, preferred products, shopping channels, and factors influencing their choices, as well as their demographic profile, including the level of education, gender, and living area. By analysing the data with statistical measures such as means, percentages, and coefficients of determination, any consumption and preference patterns or differences in consumption patterns based on these demographic variables can be identified. Descriptive research is therefore appropriate for answering these research questions because it permits the collection and analysis of data to describe and comprehend the impact of Malaysian youths on consumption patterns during the pandemic, preferences in consumption among Malaysian youths in the COVID-19 period, and the influence of demographic variables on their consumption patterns. It provides an exhaustive overview of these phenomena, allowing researchers to draw conclusions and insights confidently.

2.2. Sampling Technique, Population and Sample Size of the Study

This study utilised non-probability sampling, specifically convenient sampling, as a more efficient and cost-effective alternative to probability sampling. When studying a rapidly evolving situation, such as the impact of COVID-19 on consumption patterns, it is particularly advantageous for the researcher to collect data quickly from readily available participants. To achieve the study's objectives, the sample must consist of Malaysians aged 18 to 30 from various demographic groups and states. According to the Department of Statistics Malaysia (DOSM), there are 8.3 million Malaysians between 18 and 30. Consequently, the sample size for the research will be 399, as calculated by the following formula:

$$n = \frac{N}{(1 + N(e^2))}$$

Due to several factors, the researcher could not attain the desired sample size of 399 respondents; instead only managed to collect 169. First, some participants who initially agreed to participate have fallen out of the study or failed to complete it, resulting in attrition. These factors have contributed to the ultimate sample size being smaller. Lastly, some respondents gave contradictory or inconsistent responses to survey inquiries; they may choose multiple response options when only one is permitted, and their responses are logically inconsistent. In such situations, inconsistent responses are identified and excluded from the analysis to preserve data integrity and reduce bias.

2.3. Conceptual Framework

The researcher developed the conceptual framework depicted in Figure 1 after thoroughly examining the existing literature on COVID-19 and youth consumption in Malaysia. It

was assumed that the primary effects of COVID-19 would serve as independent variables, while consumption patterns would serve as a dependent variable within this framework. The concept

for this research was created with the three primary effects of COVID-19 that influenced new specific practices in youth consumption.

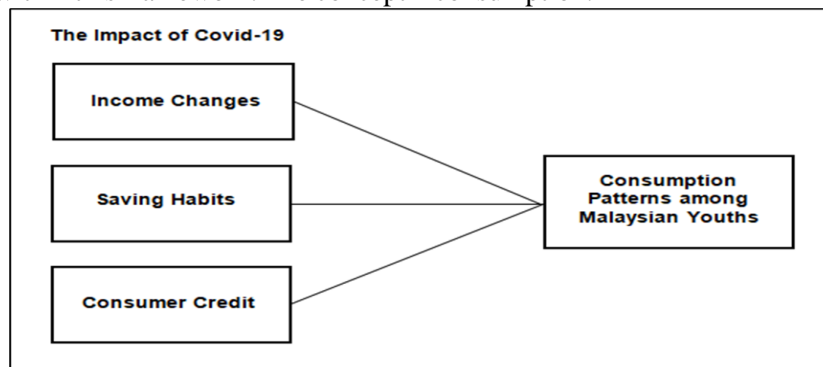


Figure 1. The Impact of Income Changes, Saving Habits, and Consumer Credit on Consumption Patterns among Malaysian Youths

2.4. Research Hypotheses

The impact of COVID-19 is measured using three independent variables: income changes, saving habits, and consumer credit. Thus, the researcher attempted to test the following hypotheses: There is a significant relationship between income changes, saving habits, and consumer credit on consumption patterns among Malaysian youths (H1). Next, this study also aims to analyze the differences in consumption patterns among Malaysian youths across gender and living area. Thus, the researcher attempted to test the following hypotheses: There is a significant interaction effect of gender and living area on consumption patterns among Malaysian youths (H2). This study also aimed to analyze the differences in consumption patterns among Malaysian youths across education levels. Thus, the researcher attempted to test the following hypotheses: There is a significant difference in consumption patterns among Malaysian youths across education levels (H3).

2.5. Data Collection

Using convenience sampling techniques, cross-sectional data were collected through an online Google Form survey. The questionnaire was distributed using various social media platforms, including Instagram, Telegram, WhatsApp, Facebook, and LinkedIn. In addition, the researchers emailed the questionnaire to UM students and employees via Siswamail. One hundred and eighty-six completed questionnaires were received, representing a response rate of 47%. During the data screening procedure, 17 responses with inconsistent answers were eliminated, leaving 169 for the data analysis.

2.6. Data Analysis

Table 1 below shows the type of data analysis used in every objective. The researchers compiled, modified, classified, encoded, and analyzed the questionnaire data using SPSS Software Version 27.

Table 1. Data Analysis Plan

Research Objectives	Data Analysis
To investigate the impact of COVID-19 on Malaysian youth's consumption patterns.	Multiple Linear Regression
To analyse the differences in consumption patterns among Malaysian youth across gender, living area, and education level.	Two-Way ANOVA and One-Way ANOVA
To examine the consumption preferences and patterns among Malaysian youths during COVID-19.	Descriptive Analysis

Source: Primary data processed, 2023

3. RESULTS AND DISCUSSION

3.1. Analysis of the Impact of COVID-19 on Consumption Patterns among Malaysian Youths

A study was conducted to investigate the influence of COVID-19 on the consumption patterns of young Malaysians. As COVID-19 primarily affected income, saving habits, and

credit utilization, this study, thus, utilized these variables to represent the impact of COVID-19, especially in determining their influence on the consumption patterns of Malaysian adolescents. The results of a multiple linear regression analysis using the enter method to investigate the relationship between variables are presented in Table 2.

Table 2. Regression Coefficients of Income Changes, Saving Habits and Consumer Credit on Consumption Patterns

Variables	B	SE	t	p	95%CI
Constant	0.95	0.14	7.01	.000	[0.68, 1.21]
Income Changes	0.39	0.04	9.91	.000	[0.31, 0.47]
Saving Habits	0.23	0.05	4.90	.000	[0.14, 0.32]
Consumer Credit	0.18	0.04	4.71	.000	[0.10, 0.25]

Source: Primary data processed, 2023

The R² value of 0.77 revealed that the predictors explained 77% variance in the outcome with $F(3, 165) = 182.65$, $p = 0.000$. It indicates that the overall regression model is statistically significant. Thus, H1 is supported, indicating that all regression coefficients are equal to zero and that the independent variables collectively have a significant impact on the dependent variable, which is consumption patterns. Furthermore, the individual predictors, namely income changes, saving habits, and consumer credit, have significant positive relationships with consumption patterns. The respective regression coefficients (β) for income changes ($\beta = 0.53$, $p = 0.000$), saving habits ($\beta = 0.25$, $p = 0.000$), and consumer credit ($\beta = 0.22$, $p = 0.000$) are all statistically significant at the chosen significance level ($p < 0.05$). Based on these results, we can conclude that income

changes, saving habits, and consumer credit have a significant and positive impact on consumption patterns among Malaysian youths. Additionally, as these predictors' values increase, so do the consumption patterns, which also tend to increase. The final estimated model was:

$$\hat{y} = b_0 + b_1I_1 + b_2S_2 + b_3C_3$$

$$\hat{y} = 0.946 + 0.390 I_1 + 0.230 S_2 + 0.175 C_3 \quad (1)$$

3.2 Analysis of the Differences in Consumption Patterns Across Gender, Living Areas, and Education Levels

In this study, the differences in consumption patterns across gender and living areas were studied. The researcher utilized Two-way ANOVA to analyze the data collected, and Table 3 below shows the results of the test:

Table 3. Means, Standard Deviations, and Two-Way ANOVA Statistics for Consumption Patterns

Variable	Male		Female		ANOVA			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	Effect	<i>F</i> ratio	<i>df</i>	<i>n</i> ²
Consumption Patterns								
Urban	34.32	7.33	35.54	6.92	G	1.79	1, 163	0.01
Suburban	34.18	5.15	33.36	5.29	LA	1.17	2, 163	0.01
Rural	29.00	3.46	35.13	3.91	G x LA	1.22	2, 163	0.02

Note. N = 169. ANOVA = analysis of variance; G = gender; LA = living area. Significance Level: 0.05

Source: Primary data processed, 2023

Results in Table 3 indicated no statistical significance of mean differences in consumption patterns on gender with $F(1, 163) = 1.79$, $MSE = 41.52$, $p = 0.183$, $n^2 = 0.01$, living area with $F(2, 163) = 1.17$, $MSE = 41.52$, $p = 0.31$, $n^2 = 0.01$, and gender x living area with $F(2, 163) = 1.22$, $MSE = 41.52$, $p = 0.30$, $n^2 = 0.02$, having a small effect size less than 0.50. Thus, H2 is not supported. Next, the findings revealed that in the urban area, females ($M = 35.54$, $SD = 6.92$) exhibited higher mean scores on consumption patterns as compared to males ($M = 34.32$, $SD = 7.33$). In suburban areas, males ($M = 34.18$, $SD = 5.15$) exhibited higher mean scores on consumption patterns than females ($M =$

33.36 , $SD = 5.29$). In the rural area, females ($M = 35.13$, $SD = 3.91$) exhibited higher mean scores on consumption patterns than males ($M = 29.00$, $SD = 3.46$). In summary, there are no statistically significant mean differences in consumption patterns based on gender, living area, or the interaction between gender and living area. However, it is important to note that the effect sizes are small, suggesting that these variables have a limited impact on consumption patterns in the sample. Due to no significant difference in consumption patterns across gender and living areas, Post Hoc analysis should not be conducted for group comparison.

Table 4. Means, Standard Deviation and One-Way Analysis of Variance in Consumption Patterns Across Education Level

Variable	N		S		D		U		P	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Consumption Patterns	28.78	6.08	24.40	9.42	33.37	5.22	36.34	6.25	34.0	5.22
<i>F</i> (4, 164)	8.32									
<i>n</i> ²	0.17									
Post-Hoc	4>2>3>1									

Note. N = 169. Significance Level: 0.05 N = none; S = SPM; D = Diploma/STPM/Matriculation/A-Level; U=Undergraduate (Bachelor's degree), P = Postgraduate (master's degree/PhD).

Source: Primary data processed, 2023

Table 4 shows the mean, standard deviation, and *F*-values for consumption patterns across education levels. Results indicated significant mean differences across education levels on consumption patterns with $F(4, 164) = 8.32$, $p < .001$. Thus, H3 is supported. Next, findings revealed that Undergraduates (Bachelor's degree) ($M = 36.34$, $SD = 6.25$) exhibited higher consumption patterns than other educational backgrounds. The

value was 0.17 (< 0.50), indicating a small effect size. Post-hoc comparisons were conducted to examine specific differences between education groups. At a significance level of 0.05, the results in the multiple comparisons table showed that the group with no high education background and the Undergraduate (Bachelor's degree) group differed significantly in their consumption patterns ($p = 0.004$). Similarly, the SPM and the

Diploma/STPM/Matriculation/A-Level groups exhibited significant differences in consumption patterns ($p=0.014$). Next, the SPM group and Undergraduate (Bachelor's degree) also differed significantly in their consumption patterns ($p < 0.001$). The Diploma/STPM/Matriculation/A-Level and Undergraduate (Bachelor's degree) groups also showed significant differences in consumption patterns ($p = 0.030$). However, no statistically significant differences were observed between the other conditions ($p > 0.05$).

3.3 Analysis of the Evolving Consumption Preferences and Patterns Among Malaysian Youths during COVID-19 Era

A study was conducted to determine the consumption preferences of Malaysian youths during the COVID-19 period. It is believed that youths have developed new consumption patterns since COVID-19, particularly when the lockdown was implemented. Table 5 reveals that most respondents (29%) have slightly increased their consumption patterns, followed by 26.6%, who have slightly decreased their consumption patterns, and 21.9%, who have maintained the same consumption patterns despite the pandemic. Only 7.7% of respondents have significantly decreased their consumption, while 14.8% have significantly increased theirs.

Table 5. Changes in Consumption Patterns during the COVID-19 Pandemic

Consumption Patterns	N	%
Increased significantly	25	14.8
Increased slightly	49	29.0
Remained the same	37	21.9
Decreased slightly	45	26.6
Decreased significantly	13	7.7

Source: Primary data processed, 2023

Table 6 below shows the main factors that have influenced the change in consumption patterns since the pandemic. The findings revealed that the uncertainty about the future (27.9%) and increased expenses related to COVID-19 (25%) are the most

relevant basis for influencing consumption patterns, followed by income reduction at 16.4%. At the same time, increased online shopping options had the least influence in affecting the changes in consumption patterns (15.1%).

Table 6. Factors Influencing Consumption Patterns

		Responses		
		N	Percent	Percent of Cases
Factors Influencing Consumption Patterns	Reduced income	63	16.4%	38.0%
	Fear of job loss	60	15.6%	36.1%
	Increased expenses related to COVID-19	96	25.0%	57.8%
	Uncertainty about the future	107	27.9%	64.5%
	Increased online shopping options	58	15.1%	34.9%
Total		384	100.0%	231.3%

a. Dichotomy group tabulated at value 1.

Source: Primary data processed, 2023

Table 7 shows the frequency of goods and services purchased in greater quantities than before the COVID-19 pandemic. The results revealed that food and non-alcoholic products were primarily purchased in greater quantities during the crisis at 16.3%, followed by utilities (12.9%), personal care

(11.9%), home appliances (10.9%), and medicines (10.7%). While alcoholic drinks (0.2%), gourmet products or delicatessen (1.0%), and traveling and transport (1.6%) had the lowest frequencies, indicating that the number of purchases did not increase during the COVID-19 crisis.

Table 7. Assessment of Increased Purchases in Selected Products during the COVID-19 Crisis

		Responses		
		N	Percent	Percent of Cases
Goods and Services	Food and non-alcoholic drinks	82	16.3%	48.5%
	Alcoholic drinks	1	0.2%	0.6%
	Gourmet products or delicatessen	5	1.0%	3.0%
	Personal care	60	11.9%	35.5%
	Cosmetics and perfumes	22	4.4%	13.0%
	Medicines	54	10.7%	32.0%
	Cleaning products	29	5.8%	17.2%
	Home entertainment and online educational courses	28	5.6%	16.6%
	Utilities	65	12.9%	38.5%
	Consumer electronics	36	7.2%	21.3%
	Home appliances	55	10.9%	32.5%
	Clothes and fashion accessories	48	9.5%	28.4%
	Travelling and transport	8	1.6%	4.7%
	Leisure services, like restaurants and cinemas	10	2.0%	5.9%
Total		503	100.0%	297.6%

a. Dichotomy group tabulated at value 1.

Source: Primary data processed, 2023

Table 8 depicts the goods and services the respondents have developed with new interests and tastes since COVID-19. The results revealed that most respondents had developed a new interest in clothes and fashion accessories (12.1%), followed by personal care (11.3%), cosmetics and perfumes, as well as

medicines at 9.4%. In contrast, alcoholic drinks and gourmet products or delicatessen are the least goods that the respondents have developed new interests and tastes. Finally, it is reported that 2.7% of respondents had no new interest or taste in any goods and services.

Table 8. Emerging Interests and Tastes in Goods and Services across Categories

		Responses		
		N	Percent	Percent of Cases
Goods and Services	Food and non-alcoholic drinks	41	7.9%	24.1%
	Alcoholic drinks	4	0.8%	2.4%
	Gourmet products or delicatessen	5	1.0%	2.9%
	Personal care	59	11.3%	34.7%
	Cosmetics and perfumes	49	9.4%	28.8%
	Medicines	49	9.4%	28.8%
	Cleaning products	33	6.3%	19.4%
	Home entertainment and online educational courses	46	8.8%	27.1%
	Utilities	19	3.7%	11.2%
	Consumer electronics	41	7.9%	24.1%
	Home appliances	18	3.5%	10.6%
	Clothes and fashion accessories	63	12.1%	37.1%
	Travelling and transport	43	8.3%	25.3%
	Leisure services, like restaurants and cinemas	36	6.9%	21.2%
	None of the above	14	2.7%	8.2%
Total		520	100.0%	305.9%

a. Dichotomy group tabulated at value 1.

Source: Primary data processed, 2023

Table 9 illustrates the frequency of online purchases. The findings revealed that most respondents purchased goods and services online a few times a month (56.8%), followed by once a

week (19.5%), multiple times a week (16.0%), and rarely (once a month) (5.9%). While 1.8% never purchased online during the period.

Table 9. Frequencies of Online Purchases in Post-Pandemic

	N	%
Multiple times a week	27	16.0
Once a week	33	19.5
A few times a month	96	56.8
Rarely (Once a month)	10	5.9
Never	3	1.8

Source: Primary data processed, 2023

Table 10 shows the comfort level of Malaysian youths in purchasing goods and services online during the COVID-19 pandemic. The results revealed most respondents (43.8%) are somewhat comfortable purchasing online, 24.3% stated they are

neutral about online purchases, 17.6% reported that they are very comfortable purchasing online, and 13.6% are somewhat comfortable. Only 0.6% stated that they are very uncomfortable.

Table 10. Comfortability of Malaysian Youths in Purchasing Goods and Services Online in the Post-Covid Era

	N	%
Very comfortable	30	17.8
Somewhat comfortable	74	43.8
Neutral	41	24.3
Somewhat uncomfortable	23	13.6
Very uncomfortable	1	0.6

Source: Primary data processed, 2023

Table 11 shows the frequency set of preferred goods and services to purchase online during the COVID-19 pandemic. The result shows that most respondents prefer to purchase cleaning products (13.6%), followed by food and non-alcoholic drinks (11.5%), clothes and fashion accessories (11.3%), and personal

care (10.0%). Meanwhile, alcoholic drinks (0.2%), leisure services like restaurants and cinemas (1.8%), gourmet products, or delicatessen (2.7%) are the least preferred products and services to be purchased online.

Table 11. Online Shopping Preferences for Goods and Services Post-Pandemic

		Responses		Percent of Cases
		N	Percent	
Goods and Services	Food and non-alcoholic drinks	69	11.5%	41.6%
	Alcoholic drinks	1	0.2%	0.6%
	Gourmet products or delicatessen	16	2.7%	9.6%
	Personal care	60	10.0%	36.1%
	Cosmetics and perfumes	58	9.7%	34.9%
	Medicines	39	6.5%	23.5%
	Cleaning products	82	13.6%	49.4%
	Home entertainment and online educational courses	42	7.0%	25.3%
	Utilities	41	6.8%	24.7%
	Consumer electronics	42	7.0%	25.3%
	Home appliances	53	8.8%	31.9%
	Clothes and fashion accessories	68	11.3%	41.0%
	Travelling and transport	19	3.2%	11.4%
	Leisure services, like restaurants and cinemas	11	1.8%	6.6%
Total		601	100.0%	362.0%

a. Dichotomy group tabulated at value 1.

Source: Primary data processed, 2023

Table 12 shows the Malaysian youths' support for local businesses during the COVID-19 pandemic. The findings depicted that over 50% of Malaysian youths are very likely to support local businesses, 24.9% are somewhat likely, and 16.5% are neutral. In comparison, only 6.5% are somewhat unlikely to support local businesses.

Table 12. Malaysian Youths Support for Local Business Post-Pandemic

	N	%
Very likely	88	52.1
Somewhat likely	42	24.9
Neutral	28	16.5
Somewhat unlikely	11	6.5
Very Unlikely	0	0.0

Source: Primary data processed, 2023

Table 13 shows the frequency set of factors influencing support for local businesses. The findings revealed that positive reviews or recommendations from friends and family (23.9%) and discounts or special offers (19%) are the most relevant basis for influencing the support for local businesses. We also can say that access to unique or locally made products (15.9%) potentially influences the support for local businesses. In comparison, improved safety measures in stores (12.0%) had the most minor influence in affecting the support for local businesses.

Table 13. Factors Influencing Support for Local Businesses among Malaysian Youths

		Responses		Percent of Cases
		N	Percent	
Factors Influencing Support for Local Businesses	Discounts or special offers	105	19.0%	62.1%
	Access to unique or locally made products	88	15.9%	52.1%
	Positive reviews or recommendations from friends and family	132	23.9%	78.1%
	Improved safety measures in stores	66	12.0%	39.1%
	Convenient location	75	13.6%	44.4%
	Social media	86	15.6%	50.9%
Total		552	100.0%	326.6%

a. Dichotomy group tabulated at value 1.

Source: Primary data processed, 2023

Table 14 shows the preferences towards eco-friendly and sustainable goods during the COVID-19 pandemic. The findings revealed that at least 50% of respondents would like to prioritise more eco-friendly or sustainable products, and 31.4% already prioritized eco-friendly or sustainable products even before the pandemic happened. Only 18.3% of respondents stated that their preferences remain the same as before the pandemic.

Table 14. Shifting Malaysian Youths Preferences Towards Eco-Friendly and Sustainable Goods during COVID-19 Pandemic

	N	%
Yes, I prioritise eco-friendly or sustainable products more now	85	50.3
No, my preferences remain the same	31	18.3
I was already prioritising eco-friendly or sustainable products before the pandemic	53	31.4

Source: Primary data processed, 2023



Table 15 shows the Malaysian youths' willingness to continue the consumption patterns developed during the COVID-19 pandemic. 28.4% are somewhat likely to want to continue the patterns developed, 16.0% are very likely to want to

continue, and 42.6% are neutral. In comparison, 11.8% are somewhat unlikely to continue the consumption patterns that they have developed during the pandemic. Only 1.2% are very unlikely to continue the consumption patterns developed.

Table 15. Continuation of Consumption Patterns Developed during the COVID-19 Pandemic

	N	%
Very likely	27	16.0
Somewhat likely	48	28.4
Neutral	72	42.6
Somewhat unlikely	20	11.8
Very unlikely	2	1.2

Source: Primary data processed, 2023

3.4 Discussion of the Findings

The study's first objective is to investigate the impact of COVID-19 on the consumption patterns of Malaysian youths. By examining the factors of income changes, saving habits, and consumer credit, this study sheds light on how the pandemic specifically influenced these factors and subsequently affected the consumption patterns of Malaysian youths. The regression coefficient ($\beta = 0.53$, $p < 0.001$) in Table 2 indicates a positive correlation between income and consumption pattern variations. It demonstrates that when an individual's income rises, they typically have more money to spend on products and services. This increase in disposable income permits them to consume more, resulting in a transition in their consumption patterns in the upward direction. Conversely, when income decreases, individuals frequently have less money to spend and, thus, may decrease consumption, forcing them to reduce their expenditures and prioritize essential requirements. They may purchase fewer non-essential items, choose less expensive alternatives, or forego certain activities. Thus, a decrease in income typically leads to a reduction in consumption. To reconcile the statement, Kumar and Abdin (2020) found that a significant decrease in income led to diminished spending and the prioritization of necessities. Moreover, according to Muellbauer (2020), a decrease in household income will reduce expenditure, which can be partially explained by purchasing fewer items, contributing to the negative impact. The second factor is that people are concerned about their future earnings due to the historically rapid increase in unemployment. Further explanations include the decline in asset prices and a substantial reduction in the total quantity of available credit (Muellbauer, 2020).

In addition, the regression coefficient ($\beta = 0.25$, $p < 0.001$), as shown in Table 2, indicates that saving habits and consumption patterns are positively related. This finding contradicts Kimball's (1990) preventive saving theory as the theory suggests that during uncertain periods or outbreaks, consumers are more likely to engage in precautionary saving, prioritizing the saving of a portion of their income to create a financial cushion or safety net. They will devote less of their income to consumption and intentionally set aside funds for future expenses or unanticipated events. Consequently, their consumption patterns tend to be lower than those of individuals without precautionary savings. It can be explained by the fact that those prioritizing saving have a greater propensity to save. They reserve a more significant portion of their income for savings instead of immediately spending it. As a result, their consumption patterns are comparatively low, reflecting their conservative

approach to financial planning and their emphasis on accumulating savings reserves. It illustrates the inverse relationship between saving and spending behaviors. A study conducted by Jin et al. (2020) indicates that many respondents saved more during the pandemic and spent less. In addition, a survey conducted in China revealed that due to the pandemic, more than half of the country's households increased their savings and decreased their expenditures compared to the same period last year, when the world was free of the epidemic (Survey and Research Centre for China Household Finance, 2020).

However, this does not inherently imply that individuals with a strong propensity for saving have low consumption or forego all discretionary spending. The relationship between saving and consumption is complex and variable based on individual circumstances, financial objectives, and preferences. For instance, individuals who practiced mindful expenditure tended to engage in better-saving behaviors and more deliberate consumption patterns. Conscious spending involves being aware of one's financial goals and values, contemplating the long-term effects of purchases, and making decisions consistent with one's financial objectives. Several factors can cause the adoption of strategic spending and saving, and extremely stressful is one of the situations. Most people are believed to experience tension due to the pandemic, leading them to implement strategic spending. To reconcile these assertions, Durante and Laran (2016) proposed that individuals employ strategic consumer behavior to regain control in stressful situations. Consequently, elevated levels of stress cause consumers to save money and spend strategically on products deemed necessities.

Next, the regression coefficient ($\beta = 0.22$, $p < 0.001$) as shown in Table 2, indicates that consumer credit and consumption patterns are positively related. Because the availability of consumer credit can influence the spending behavior of individuals, some people may be more likely to spend when they have access to credit as they view it as an expressway to satisfy their desires or requirements, resulting in increased consumption habits. Standard consumption theory (Hall, 1978; Carroll, 1997) and empirical findings (Braxton et al., 2020) indicate that consumers typically use credit cards to smooth consumption when confronted with a negative income shift. This shows that there is a positive correlation between consumer credit and consumption patterns in the context of mitigating income fluctuations. Recent empirical evidence, however, contradicts this notion. Ganong and Noel (2019) and Hundtofte et al. (2019) stated that consumers may use credit cards for consumption smoothing sparingly, but instead, they modify their consumption

to manage credit card debt, thus, introducing the possibility of a negative relationship between consumer credit and consumption patterns, as increased credit card debt may contribute to decreased spending or changes in consumption patterns. The two statements above imply that the relationship between consumer credit and consumption patterns in the context of local pandemic severity is not unambiguous and can vary depending on individual behavior and circumstances.

The COVID-19 pandemic significantly influenced the consumption patterns of Malaysian youths. Income changes, saving habits, and consumer credit played crucial roles in shaping these patterns. The pandemic-induced income fluctuations, reduced financial stability, and increased uncertainty impacted individuals' spending decisions and priorities. Since the onset of the COVID-19 pandemic, the findings of this study provide valuable insights into the variations in consumption patterns among Malaysian youth by gender, living area, and educational level. Regarding gender differences, the analysis shown in Table 3 revealed no statistically significant differences in the consumption patterns of Malaysian youth based on gender. These findings contradict previous research demonstrating the disproportionate impact of health and economic crises on women, including food security, access to healthcare, economic opportunities, and gender-based violence (Food and Agriculture Organization of the United Nations, 2020). Previous research has highlighted the vulnerability of women during economic downturns, as they are more likely to work in low-wage and precarious sectors (Croda & Grossbard, 2021). These factors contribute to global gender inequality, with women having inferior personal finances and job security than men (Ben et al., 2021). In contrast, gender did not affect the consumption patterns of the sample in the present investigation, because factors other than gender, such as education, play a more significant role in determining consumption patterns. In this study, the significant interaction between levels of education and consumption patterns suggests that gender differences in consumption patterns may become less significant.

According to this study, there were no statistically significant differences between urban, suburban, and rural participants' consumption patterns (Table 3), which contradicts previous research that was applied to identify disparities in consumption patterns between urban and rural areas, given that urban living is associated with higher income, higher levels of literacy and education, better health, and greater access to social services than rural living (Dias & Dewi, 2018). Therefore, when rural and urban households allocate their consumption expenditures to attain utility and satisfaction, urban households receive higher incomes. Therefore, urban households can spend more than their rural counterparts. Moreover, empirical data indicates that the consumption patterns of urban households in East Java are generally superior to those of rural households (Dias & Dewi, 2018). It is essential to note that the effect sizes were small in this study, indicating that the sample's living environments had a small effect on consumption patterns. These results may be unique to the Malaysian sample or may also be influenced by other study-specific factors that require further investigation in future studies.

The study revealed substantial discrepancies in the average consumption patterns of young Malaysians based on their educational backgrounds. Specifically, participants with a bachelor's degree consumed more than those with other educational credentials (Table 4). This finding is consistent with previous research by Cheng (2021), indicating that a higher education level is associated with larger consumer spending. He stated that a higher level of education had been linked to increased household consumption per capita, consumption inequality, and consumption among those with higher incomes. The education level of household administrators has also been identified as a significant contributor to disparities in consumption expenditures (Cain et al., 2010). The concept of human capital, in which education is viewed as a form of capital that influences earning potential, is consistent with economic theories positing that education influences consumption patterns. Individuals with a higher level of education and a higher income have greater purchasing power (Grossman, 2006). This study reveals the complex relationship between gender, living area, education level, and consumption patterns among Malaysian adolescents during the COVID-19 pandemic. While gender and living area did not demonstrate significant differences in consumption patterns, educational attainment emerged as a significant factor.

Significant changes and preferences have resulted from COVID-19's influence on the consumption patterns of Malaysian youth. The study's findings cast light on these shifting consumption patterns during the COVID-19 period. As shown in Table 6, one significant finding was that uncertainty about the future had the greatest impact on consumption patterns. The current findings corroborate previous research conducted by Vanlaer et al. (2020), who found that uncertainty affects consumer confidence, which directly negatively affects household savings and consumption during the pandemic. These findings demonstrate the income effect, in which changes in income influence spending decisions, and the precautionary savings motive, which also leads to increased savings and decreased consumption during uncertain periods.

In addition, the study revealed that increased quantities of essential items such as food, non-alcoholic products, utilities, personal care items, home appliances, and medicines were purchased during the pandemic depicted in Table 7. It indicates that the pandemic has also led to increased consumption of certain products previously consumed in smaller quantities or not at all (Kirk & Rifkin, 2020). These effects have caused substantial increases in the market demand for these products. Such changes are referred to as 'new demand' and examples of the term include cleaning and personal hygiene products like Lysol (disinfectant spray) and hand sanitizers (Chaudhuri, 2020), health and wellness products like vitamins, healthy foods, and other immunity boosters (Hess, 2020), packaged goods and beverages, household care products, fresh and organic foods, and personal care products (Knowles et al., 2020).

The emphasis on essential items during the pandemic reflects consumers' priorities for essentials and their transition towards self-care and health-related products. This study can be supported by Kim et al. (2021), who also emphasized the role of

protection motivation in explaining consumers' commitment to hygienic behavior, preference for local establishments, and conscientious consumption. During the pandemic, the study also highlighted the emergence of new interests and preferences among Malaysian millennials. Table 8 shows youths' new preferences for clothes and fashion accessories, personal care products, cosmetics and perfumes, and medicines. Debadyuti et al. (2002) demonstrated that consumers had changed brands and products, substituted spending when stocked out, and become more health and sanitation conscious. Consumption shifts (Kansime et al., 2021; PakravanCharvadeh et al., 2021) and product and brand substitution (Knowles et al., 2020) are also among the COVID-19-induced behaviors.

Regarding shopping behavior, Table 9 depicts that Malaysian youths made online purchases a few times per month using digital platforms during the COVID-19 period. The COVID-19 pandemic became a blessing in disguise for the E-commerce market in Malaysia, contributing up to 37% growth (GlobalData, 2020). Debroy (2020) found that the pandemic caused the increased frequency and prevalence of online shopping. However, respondents' trust and comfort levels with online shopping differed widely, with varying levels of comfort and trust reported in Table 10, reflecting people's diverse attitudes and experiences with online purchasing during the pandemic. During the COVID-19 pandemic, cleaning products, food and non-alcoholic beverages, clothing and fashion accessories, and personal care items were the most frequently purchased products and services online (Table 11).

According to Table 12, over fifty percent of Malaysian youths are likely to support local enterprises during the COVID-19 pandemic. It was discovered that factors such as positive reviews or recommendations from friends and family, as well as discounts or special offers, significantly impact local business support, as shown in Table 13. The findings are consistent with previous research that emphasized the influence of word-of-mouth recommendations, social influence, and price incentives on consumer behavior (Harahap et al., 2018). In addition, Table 14 revealed that Malaysian adolescents strongly prefer eco-friendly or sustainable products, with a significant proportion already holding these preferences before the pandemic. This finding is consistent with Debadyuti's (2022) study, which revealed that consumers' consumption patterns have shifted during the current sustainability and local products epidemic. Lastly, Table 15 revealed varying degrees of willingness among Malaysian adolescents to continue the consumption patterns they developed during the pandemic, with a significant proportion expressing neutrality.

4. CONCLUSIONS

Based on the results and discussions, the COVID-19 pandemic had significant impacts on consumption patterns

among Malaysian youths. Changes in income, savings habits, and consumer credit played crucial roles. Decreased income led to reduced consumption as individuals prioritized essential needs, while increased income resulted in higher consumption due to more disposable income. Some practiced precautionary saving, prioritizing savings over immediate consumption. Availability of consumer credit influenced spending behavior. Gender did not show significant differences in consumption patterns, but education level was a major factor, with higher-educated individuals tending to consume more. Living areas did not play a significant role. The uncertainty about the future led to decreased consumption, increased demand for necessities and health-related products, and increased online purchasing. Malaysian youth displayed a preference for eco-friendly and locally sourced products, indicating a tendency to maintain pandemic period consumption patterns is indifferent. These findings emphasize the need for marketers to align their strategies with the changing preferences and behaviors of Malaysian youths during the COVID-19 pandemic, with a particular emphasis on essential items, online shopping, local businesses, and sustainability.

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