Adoption Of Preventive Behavior Among Young Adults: Leveraging Digital Media During The Covid-19 Pandemic

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ARTICLE INFO	ABSTRACT
	Purpose: The aim of this study is to examine digital media consumption, socio-demographic variables and preventive behavior among Young adults in Malaysia between the age of 18 – 25.
	Theoretical framework: The Uses and Gratification Theory is the best theory to explain why and how young adults leverage on digital media during the pandemic.
	Design/methodology/approach: The study uses random sampling method was used to administer an online questionnaire at various educational institutions. The study ran various tests including cross tabulation, Chi-square and Kruskal-Wallis to compare the results among the different digital media used.
	Findings: The results discovered that young adults have completely shifted from official news sites to accessing news and information mainly from social media. In addition, there is a substantial difference between the genders, education level, and ethnicity with their digital media consumption. Results also showed that young adults exercised adequate preventive behavior contrary to some beliefs. TikTok users were seen to engage in the most amount of preventive activity, followed by WhatsApp users, Instagram users, YouTube users, and finally Facebook users.
	Research, Practical & Social implications: The study suggested that health authorities could consider diversifying their use of digital media taking into consideration that there is a difference in the digital media consumption based on gender, education level and ethnicity.
	Originality/value: The study provides insight into which medium did the Young Adult use and diversification of medium based on gender, education level and ethnicity.
	Keywords: usage; consumption; digital media; preventive behavior; Covid-19; adoption; young adults;

INTRODUCTION

In today's world, one of the most efficient methods of communication is the use of digital media. Data from Statista (2021) shows that there are almost 4.7 billion active internet users in the world and another 4.2 billion people who actively use a variety of social media. These statistics clearly indicate a global level of penetration of the internet and digital media use.

In this global digital landscape, YouTube and Facebook continue to dominate the digital scene while young adults prefer Instagram, Snapchat and TikTok (Pew Research Center 2021). In Malaysia, internet penetration has reached 88.7%. More than half of Malaysians spend 1-8 hours per day using the internet. The top three online activities are social media, watching videos and obtaining information (Malaysian Communications and

Multimedia Commission (MCMC, 2020; J Bojei, and C.H. Wong (2012). Since the COVID-19 pandemic, digital media has become an even more important source for information symptoms, risks and prevention.

Zhong (2022) explains the new media consist of various forms of digital media such as online news, user generated content and social media while Liu (2020) includes online news, social media and mobile applications for social networking. Lemenager et al., (2021) considers social media, streaming, information searching and gaming.

In Malaysia, the Multimedia Commission and Malaysian Communications (2020) distinguished social networking applications from communication applications. The social networking applications are Facebook, YouTube, and Instagram while communication applications are WhatsApp, Facebook Messenger and Telegram. Despite this compartmentalization, digital media has been widely used, in providing health information to users as well as payment (Ebubedike, A. H., Mohammed, T. A., Nellikunnel, S., & Teck, T. S. 2022). It is apparent that more people are accessing such news via digital media as opposed to traditional media since the pandemic began.

Problem Statement

As far to our knowledge, this is the first research project being carried out in this country involving the use of digital media consumption in Malaysia during a pandemic. Similar research have been carried out in Germany (Lemenager, T. et.al, 2021), Ukraine (Krainikova, T., Krainikov, E., & Yezhyzhanska, T., 2021) and Nigeria (Apuke, O.D., Bahiyah O., 2021), but, not in Malaysia.

This research is aimed at identifying the gap that exists between gender, age, race and education level towards preventive behaviour among young adults and will propose specific action that should be taken if the gap exists. It add to the body of knowledge about the usage of specific digital media and its influence on the preventive behaviour of young adult.

Objectives of the study

This paper examines the digital media usage and demographic shifts in preventive behavior adoption among Malaysian young adults and to determine if there is a correlation between the consumption of digital media and the modifications in preventive behavior exhibited by consumers. The specific objectives are:

1. To determine the types of digital media and the subjects that are most popular among young adults in Malaysia as a result of the Covid-19 pandemic.
2. To identify the demographics of users (gender, age, education level, location and ethnicity) in terms of differences in digital media consumption patterns during the Covid-19 pandemic.
3. To examine the relationship of digital media consumption patterns and preventive activity among users during Covid-19 pandemic.

LITERATURE REVIEW

Digital Media Usage

The pandemic has given rise to a more connected internet landscape as netizens spend more time obtaining information about current events. Research by the Oxford Business Group (2020) reported that in the U.S, Compared to 2019, people have spent 215percent more time to read news online. Japan, Thailand, Italy and Australia also saw higher media consumption.

In fact, Jella et al. (2020, p.107) found that the "coronavirus" keyword search was double in popularity compared to the search for the words "Zika", "Ebola" and "swine flu." In March-2020, the same research found that 12.3% % of all web traffic for "coronavirus" was searched for via daily news, 9.9% was directed to cable news networks and 6.7% was routed to the World Health Organization and the Centers for Disease Control (CDC).

According to Zakout et al. (2020) users relied on digital media as their main source of information about COVID-19 and health related information as opposed to using traditional media sources. Social media sites like Weibo and Twitter, Facebook, mobile social networking apps such as Wechat and Whatsapp, and online news media are all examples of digital media platforms.

In Malaysia, MCMC website has evolved from providing basic information to a dedicated webpage for Covid-19 information. The Ministry of Health also set up a specific website for this purpose (https://covidnow.moh.gov.my/). However, the data shown is not real time but delayed by a few hours. Initial modes of communication were Facebook, Twitter and YouTube.

Research also indicates that the usage of media platforms is dependent on internet speed. Young adults want news fast and in an instant manner, which is possible today with smartphones (Krainikova et al., 2021). These smartphones can deliver notifications when there is breaking news. For example, this study found that since the start of Covid-19 many users became more diligent in reading the news daily.

According to the findings of a study that was conducted by Auxier and Anderson (2021), young adults between ages of 18 and 24 years old use Instagram, Snapchat, and TikTok more than any other app. According to the findings of their research, the use of these apps increased after the epidemic first started, reaching as high as

several times per day. YouTube was found to be the most commonly used online video platform with a reportedly fast growing reach.

In another study by Chauhan and Shah (2020) on media consumption in India, they found that there are no significant differences in the types and usage of social media across males and females. However, when it comes to the purpose for using various social media, Chauhan and Shah (2020), found that there is a significant difference in the usage of Instagram between males and females primarily due to the entertainment value it provided users during the lockdown period.

Further research by Krainikova et.al. (2021) reported that double the number of females compared to males obtained news in various formats, however, females favored more photography content. Overall, most respondents preferred visual information about the pandemic, like videos, photos and infographics.

In addition, it was found that young adults turned to news mostly on Telegram and Instagram, and less from Facebook. Telegram proved to be the top choice for users to access the news. These young adults liked the fact that they could get daily notifications on their mobile phones and began using Telegram much more during the quarantine period. The second most used platform to obtain news is from YouTube. This video-type format saw a slightly higher preference among male users (Krainikova et al., 2021).

Research conducted by the Reuters Institute (2020) showed that many people depend on social media for news, irrespective of a crisis. In general, people looked for major media news channels that covered a variety of topics. Of note, is that users stated that they had an increase in contacts on social media particularly when it concerns information that affects them personally, For instance, the introduction of online learning and work-from-home. This shows a need to engage with more people when there is a major change to some aspect of one's life.

Behavioral Changes and Preventive Behavior

Over the years, many researchers (Gokalp, Karkin & Calhan, 2020; Amuta et. al., 2017; Gesualdo et al. (2010) discovered that social media may help bring about behavioral changes. In reality, during the H1N1 flu pandemic, as reported by Gesualdo et al., (2010), It was discovered that digital media's strong capability for delivering information fast was a powerful driving force in implementing preventive practices.

Research by Liu (2020) confirms that the use of digital media to collect pandemic relevant information can incite medical related thoughts and concerns and give rise to a worried mindset about getting ill and feeling stressed will have an impact on preventive behaviors. This study found that the majority of respondents adhered to most of the preventive behaviors. Most respondents reported that they would wear face masks when in a public setting, avoid talking with those who showed symptoms of the flu, and would not travel into COVID-19 affected areas.

In addition, the findings demonstrated that seeking information about the pandemic through the utilization of mobile social networking applications and the utilization of online news media was substantially associated with preventive behavior. Nevertheless, the results indicated there was no significant relationship between the high usage of social media in relation to pandemic related topics and preventive behaviors (Liu, 2020).

According to the findings of a study carried out by Harper et al., the threat posed by coronaviruses can cause individuals to change their behavior and begin engaging in Covid-19 prevention behaviors (2020). The findings of the study showed that when people have the perception that they are facing a significant risk, they are more likely to engage in behaviors that are preventative in nature.

Graupensperger (2021) found that young adults exhibited a high level of conformity to most preventive behaviors. The most significant preventive behavior was wearing a facemask in public places. This was followed by avoiding crowded places and huge gatherings. The disinfecting of frequently touched surfaces stood out as the preventive behavior that was least performed by young adults.

As a result, digital media can considerably assist in minimizing the risk of pandemic threats. There appears to be a connection between the consumption of health-related information and preventive or control behaviors, which means that if countries want to influence the outcome of their citizen's behaviors, then it would be vital for them to use digital media platforms as their main source for disseminating health related information.

Uses and Gratification Theory

In 1974, Blumler and Katz were the ones who initially presented the Uses and Gratification Theory. It asserts that consumers have an active participation in both the selection of and consumption of the media that they consume. Users of media will also look for a source of media that caters most closely to their individual requirements and preferences. It also claims that there is competition for our attention and time in the media, which can have varying effects on individuals. People are not passive but rather can accurately report their media use and motivation.

The Uses and Gratification Theory is appropriate to be used in this context due to the escalating usage of computer-mediated communication.

MATERIALS AND METHODOLOGY

Population of study
The study is exploratory in nature. A simple random sampling questionnaire was sent out to various Malaysian participants within the ages of 18-25 years across several public and private higher learning institutions in the Klang Valley and Negeri Sembilan. Institutions of higher learning were chosen as its population comprise young adults from diverse backgrounds and socioeconomic status from across Malaysia.

The questionnaire was distributed online from mid-June to mid-July of 2021 due to the Covid-19 pandemic. Using Raosoft sample size calculator, for a population size of about 3 million young adults, a sample size of 385 was required. The final response rate was 389 respondents.

Instrument
The tool was a three-part questionnaire that was self-administered.

In the first part of the questionnaire, participants were asked to select their top 5 most consumed media platforms, to estimate the amount of time spent in a day using the media and the top 5 news topics that they had read/watched since Covid-19 started.

In the second segment, participants were asked to rank their top 5 reasons for using the media that they had selected and answer questions about their behavioral change since the Covid-19 pandemic started. A Likert scale from 1 "*never*" to 5 "*always*" was used.

The third section of the questionnaire consisted of demographic details such as age, gender, place of residence, education level, race/ethnicity, and employment.

A pre-test was conducted with 39 participants prior to circulation and produced a Cronbach Alpha value of 0.816.

Ethical consideration and approval
Participants were informed of the risks or discomforts of participating in the survey, confidentiality matters and their right to withdraw. This research was given the go-ahead by the INTI International University Research Ethics Board, which is part of the Faculty of Business and Communications (Reference no. INTI/UEC/2018/001).

Prior to the participants taking the questionnaire, we got their informed consent in order to protect their privacy.

Analysis
The study included 389 participants and was analyzed using SPSS version 26 for Windows. Tests used include cross tabulation, Kruskal-Wallis and Chi-square. The results were checked and reconfirmed again to ensure its validity and reliability.

3. RESULTS AND DISCUSSION

3.1 Demographics of users
Table 1 provides an overview of the respondents' demographic characteristics.

Table 1: Demographic characteristics

	Number	Percent (%)
Age *M(SD)*	21.09	3.886
Gender		
Male	168	43.2
Female	221	56.8
Education Level		
Degree	182	46.8
Diploma	102	26.2
Pre-university	73	18.8
Others	32	8.2
Place of Residence		
Urban	201	51.7
Semi urban	166	42.7
Rural (village)	22	5.7
Ethnicity		
Chinese	212	54.5
Malay	107	27.5
Indian	54	13.9
Others	16	4.1
Employment		

Not Working	262	67.4
Working full time	75	19.3
Working part time	52	13.4
N	389	

Source: Prepared by authors (2022)

The respondents age ranged from 18 to 25 years old (M=21.09, SD=3.88), with females representing for 56.8%. Slightly over half the respondents are Chinese, followed by Malays and Indians. According to the findings, 73.0% of respondents are actively pursuing university studies or hold an undergraduate degree or diploma, with more over half of the respondents (51.7%) living in Malaysia's urban areas.

3.2 The types of digital media and topics very popular among Malaysian young adults during the pandemic

Table 2 Top most consumed digital media

Media	*N*	Percent of Cases (%)
WhatsApp	348	89.5%
Instagram	345	88.7%
YouTube	345	88.7%
Facebook	260	66.8%
TikTok	203	52.2%
New sites	165	42.4
WeChat	122	31.4
Total	1945	

Source: Prepared by authors (2022)

Table 2 indicates that WhatsApp, Instagram, YouTube, TikTok and Facebook are top five media that young adults consume the most. WhatsApp usage is the top communication application among young adults.

Table 3 Top most consumed topics

Media	*N*	Percent of Cases (%)
Coronavirus	373	95.9
Social issues	302	77.6
Health related news	295	75.8
Entertainment news	265	68.1
Political news	220	56.6
Business news	127	32.6
Crime news	136	35.0
Cultural issues	122	31.4
Sports news	105	27.0
Total	1945	

Source: Prepared by the authors (2022)

The top three most consumed types of news items are about the coronavirus, followed by social issues and health related issues as indicated in Table 3. It is an indication that young adults are dependent on online media which may bring positive or negative impact (Panchanathan, S., & Raj, K. ,2022).

3.3 Gender, education level and ethnicity differences in digital media usage among young adults
Table 4 shows the Chi-square results of the demographics of users and their digital media usage patterns. It was found that the gender, education level and ethnicity of users showed a significant relationship with digital media consumption. The Pearson Chi-Square test results for these three variables show that the p-value is less than 0.05 indicating a relationship.

Table 4 Chi-square tests on demographics and digital media consumption

Demography	Pearson chi-square	p-value	Results	Cramer V Value
Gender	0.003	<0.05	Significant	0.216
Age	0.213	>0.05	Not significant	-
Education level	0.002	<0.05	Significant	0.166
Location	0.175	>0.05	Not significant	-
Ethnicity	0.000	<0.05	Significant	0.220

Source: Prepared by the authors (2022)

Table 5 highlights the differences between male and female digital media usage. Instagram appears to be the most popular digital media among men (26.2%) and women (31.7%). It is interesting to note that the second

highest digital media usage among females is WhatsApp (21.7%) followed by Tiktok (19.0%). Meanwhile, for young men it is YouTube (20.2%) and WhatsApp (18.5%).

Table 5 Gender and digital media consumption

Media	Males (%)	Females (%)
WhatsApp	18.5	21.7
Instagram	26.2	31.7
YouTube	20.2	9.5
Facebook	17.9	10.4
TikTok	10.1	19
Others	7.1	7.7
N	168	221

Source: Prepared by the authors (2022)

Table 6 shows that Instagram (30.1%) and TikTok (24.7%) are popular among pre-university students. Meanwhile, Instagram (38.2%) appeared to be the most popular application among diploma level students and WhatsApp (25.8%) among degree students. The masters level students seemed to prefer Instagram and Facebook (33.3%). An interesting finding is that the masters' students did not use YouTube and TikTok at all.

Table 6 Education level and digital media consumption

Media	Pre-University (%)	Diploma (%)	Degree (%)	Masters (%)	Others (%)
WhatsApp	13.7	17.6	25.8	25	5
Instagram	30.1	38.2	24.2	33.3	25
YouTube	16.4	13.7	15.4	0	5
Facebook	9.6	10.8	12.6	33.3	40
TikTok	24.7	13.7	14.3	0	5
Others	5.5	5.9	7.7	8.3	20
N	73	102	182	12	20

Source: Prepared by the authors (2022)

Table 7 indicates the differences between ethnicity and digital media consumption. The results showed Malays tend to prefer using WhatsApp (29.0%) and TikTok (25.2%). Meanwhile, Chinese show a higher usage of Instagram (27.8%) and Facebook (20.8%). While almost half (48.1%) of Indians prefer Instagram.

Table 7 Percentage of differences between ethnicity and digital media consumption.

Media	Malay (%)	Chinese (%)	Indian (%)	Others (%)
WhatsApp	29	17	18.5	12.5
Instagram	22.4	27.8	48.1	31.3
YouTube	13.1	15.6	11.1	12.5
Facebook	7.5	20.8	1.9	0
TikTok	25.2	8.5	16.7	31.3
Others	2.8	10.4	3.7	12.5
N	107	212	54	16

Source: Prepared by the authors (2022)

Age and location considerations indicate the chi-square value is greater than 0.05 demonstrates that no relation between these two variables and digital media consumption. As such, irrespective of age or location of residence, individuals would use social media particularly during the pandemic.

3.4 Preventive behavior and digital media consumption patterns among young adults during pandemic.

A normality test was carried out to identify the right type of test between young adults' digital media usage and their preventive behavior. The results are shown in Table 8 below.

Table 8 Normality plot

Digital Media	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WhatsApp	.204	79	.000	.746	79	.000
Instagram	.193	114	.000	.822	114	.000
YouTube	.179	55	.000	.765	55	.000
Facebook	.216	53	.000	.830	53	.000
TikTok	.247	59	.000	.627	59	.000
Others	.262	29	.000	.717	29	.000

Source: Prepared by the authors (2022)

Table 9 depicts the Kruskal-Wallis test, which was used to investigate differences in respondents' preventative behavior based on the top five most consumed media.

Table 9 Kruskal Wallis H Test

	Preventive behavior
Kruskal-Wallis H	13.801
df	4
Asymp Sig.	0.008

Source: Prepared by the authors (2022)

The p-value is 0.008, and the test statistics are 13.801. This demonstrates a considerable disparity between the five types of digital media and users' preventive behavior.

The mean ranking values of preventive behavior were calculated using the top five most frequently utilized media. According to the findings, TikTok users had the greatest preventive scores (Mean=220.86), followed by WhatsApp users (Mean=184.49), YouTube users (Mean=182.12), Instagram users (Mean 167.57), and Facebook users (Mean=155.76).

Table 10 shows that all top 5 digital media recorded high preventive behavior in wearing a face mask. This is accompanied by avoid traveling and persons having flu-like symptoms, staying at home, avoiding public transportation, and maintaining the 1-meter distance.

Table 10 shows the mean rank values for preventive behavior simply based on the top five media.

Prevention	TikTok Mean (N=59)	WhatsApp Mean (N=79)	YouTube Mean (N=55)	Instagram Mean (N=144)	Facebook Mean (N=53)
Avoid public transport	4.61	4.39	4.47	4.15	3.96
Avoid travel to infected areas	4.71	4.52	4.69	4.25	4.02
Avoid people with flu-like symptoms	4.64	4.51	4.44	4.31	4.02
Wearing a face mask in public	4.83	4.68	4.82	4.70	4.25
Staying home	4.53	4.25	4.53	4.39	4.06
Maintaining 1-metre distance	4.41	4.35	4.38	4.27	4.00

Source: Prepared by the authors (2022)

The top 3 preventive behaviors for TikTok and WhatsApp users are similar. It includes wearing a face mask, avoiding travel to infectious areas and avoids people who exhibit flu-like symptoms. While, among YouTube users, the top 3 preventive behaviors are wearing a face mask, avoiding travel to infected areas and staying home. Meanwhile, the results with Instagram and Facebook users are similar, using a mask, staying at home, and avoiding persons with flu-like symptoms are the top three preventive behaviors. On Facebook, there is a tie for the third highest preventive behavior, i.e. avoiding travel to infected areas.

4. RESULTS AND DISCUSSION

4.1 Social media supersedes news sites.
WhatsApp remains the top communication application used among young adults (Table 2) as it allows users to share a wide variety of online content. It allows users to obtain immediate and up-to-date information and news. It also enables young adults to be more aware of what is happening in their community.

The findings also reveal that young adults obtain significantly more news and information from social media compared to news sites. This is mainly because young adults are high users of social media.

According to Limaye et al. (2020), users of social media have access to more dynamic and two-way communication opportunities than are available through conventional media. Audience can watch live video and join in conversation in real time. In addition, Song et al. (2020) states that social media has become the most convenient and prevalent way for obtaining and assessing instant information.

This is consistent with Zakout et.al (2020) and Reuters Institute (2020) who found a higher reliance on digital media as the main source of information about Covid-19 and health related information.

4.2 Top most consumed topics reflect that young adults are abreast with what is happening.
The top three most consumed types of news items are about the coronavirus, social issues and health related issues (Table 3). These results are not surprising considering the global turmoil during the height of the pandemic. More importantly, the results indicate that young adults in Malaysia kept themselves well informed.

4.3 Significant differences in gender, education level and ethnicity in digital media usage among young adults
In regard to gender differences (Table 5), Instagram usage remains a top favorite among both gender with females (31.7%) showing a slightly higher usage than males (26.2%). These results indicate that young adults favor up to date information and engaging social media sites. Apart from Instagram, males tend to favor You Tube while females favor WhatsApp and TikTok. This finding bears similarity with the research of Krainikova et al. (2021) who found that both males and females preferred a more interactive type of format.

The results differ significantly with the level of education.

Instagram remains popular among pre-university and diploma students. This is because it is seen as more contemporary as opposed to Facebook. Instagram allows users to engage with their friends and remain connected with other peers in the same age group. It also allows young adults to explore new products and captivate their creativity with advertisements and social media influencers.

At the degree level, WhatsApp is used frequently since the platform allows users to both communicate and collaborate as part of their online learning during the pandemic. The platform provided an alternative learning tool apart from mainstream teaching and learning tools.

As for the education level, an interesting finding is that the masters' students did not use YouTube and TikTok at all. This could be due to the nature of the applications as it may not be the most suitable application for their assignments or project-based work.

Meanwhile, Table 7 indicates a trend of differences among 3 major ethnicities in using digital media. While the Malays tend to favor WhatsApp and Tiktok, the Chinese favor Instagram and Facebook. Almost half of Indians favor Instagram. Instagram usage came in third among the Malays. It is interesting to note that Instagram is popular among young adults due to the nature of the application that allows young adults to choose and display infographics or carousel posts which is popular with young adults today. On the other hand, many young people prefer TikTok because of the value-added functionality of content sharing that it offers. This feature enables users to publish videos from TikTok in virtually all communication apps.

Overall, the results of this study indicate a preference of digital media usage among young adults. This supports the Uses and Gratifications Theory whereby when users have choices, they will actively select the media they wish to consume and are aware of the reasons for their selection.

4.4 Preventive behavior and digital media consumption patterns among young adults during the pandemic.

Young adults tend to be early adopters of social media applications, so it is not surprising that TikTok has the highest mean value for preventive behavior as it is highly used among a younger demographic. TikTok is the fastest growing digital media in Malaysia (digital-business-lab.com, 2021).

TikTok, WhatsApp and YouTube have been shown to be able to convey influential messages to its users about preventive behaviors. Liu (2020) and Harper et al. (2020) have found that digital media usage can give rise to individuals engaging in more preventive behaviors.

These findings also show that young adults in Malaysia are aware of what is happening around them and are intentional about their practice of preventive behavior. The Malaysian government continues to advocate for the wearing of a face mask especially indoors and in crowded areas, and, practicing the 3Ws while avoiding the 3Cs. The 3Ws are wash hands often, wear face masks and be warned of surroundings. The 3Cs are avoiding crowds, avoiding confined places and avoiding close conversations.

The results show that the influence of digital media has contributed to reducing the risk of further threats arising from the pandemic.

CONCLUSION

Contribution to the study

As the world continues to live with the global ramifications of the Covid-19 pandemic, the results from this study show that diversification and personalization of messages appeal to the young adult as seen in differences in gender, education level, and ethnicity. There is no one size fits all.

Secondly, young Malaysian adults also showed clear adherence to the prevention information disseminated through digital media outlets which is an indication that they understood the severity of the coronavirus pandemic.

Thus, health communication practitioners need to consider this as they devise strategies to reach this demographic of young adults. The results clearly show that digital media is effective in creating health awareness and instituting preventive behavior.

The results further prove that users choose the media they want to use, and digital media is giving them what is essential in news consistent with the Uses and Gratification Theory.

Limitations of the study

As the study is a self-reported questionnaire, the study may be subject to variations depending on individual circumstances. Secondly, the study was conducted during the pandemic when the use of digital media is assumed to be the highest during the lockdown period.

Suggestions for future research

It is suggested that future research include contextual environments such as social influence in selecting and choosing which digital media to use.

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**Appendix 1 Differences of digital media consumption and gender**
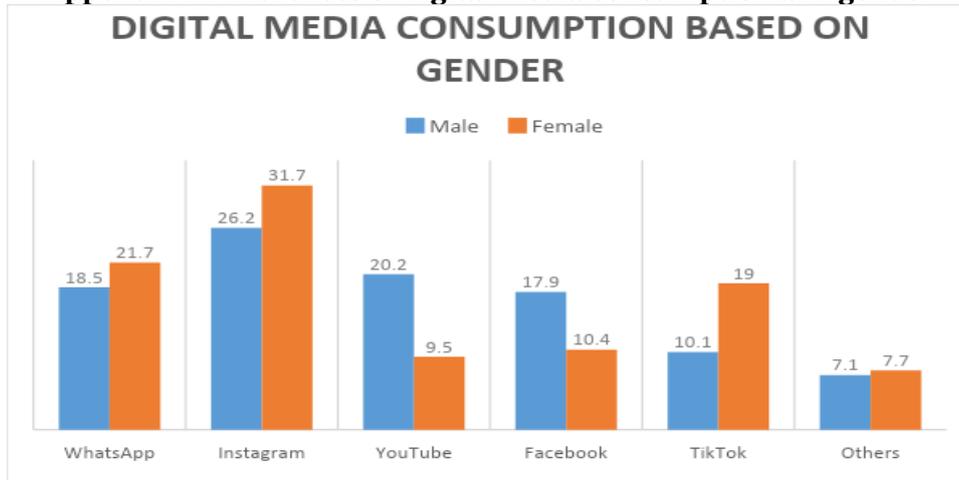
Source: Prepared by the authors (2022)

Appendix 2 Differences between education level and digital media consumption
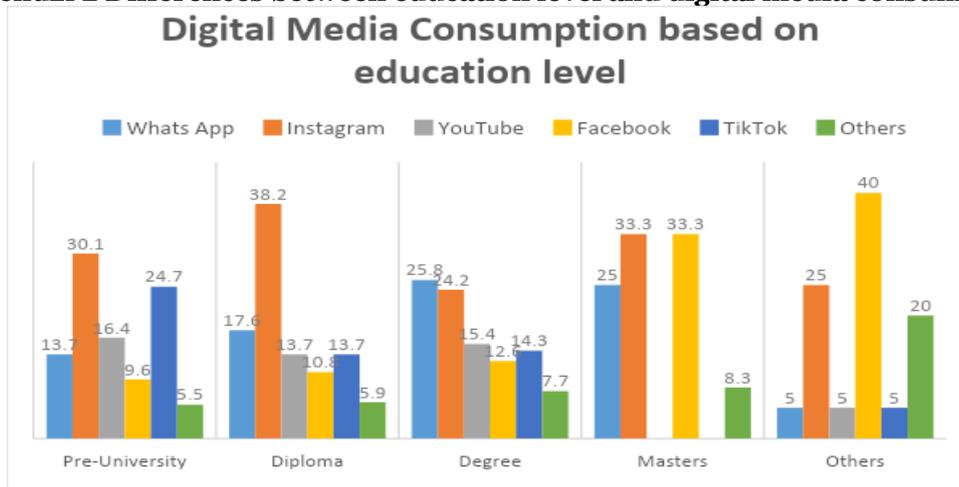
Source: Prepared by the authors (2022)

Appendix 3 differences of ethnicity and digital media consumption
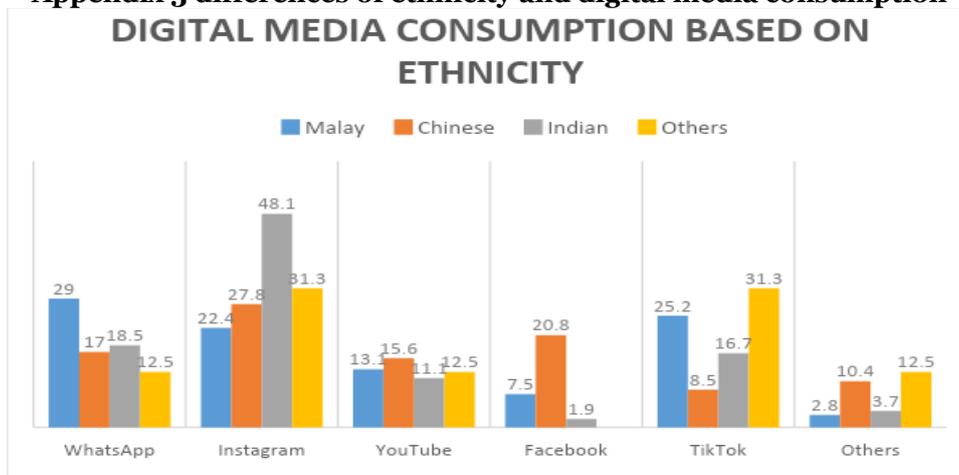
Source: Prepared by the authors (2022)

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