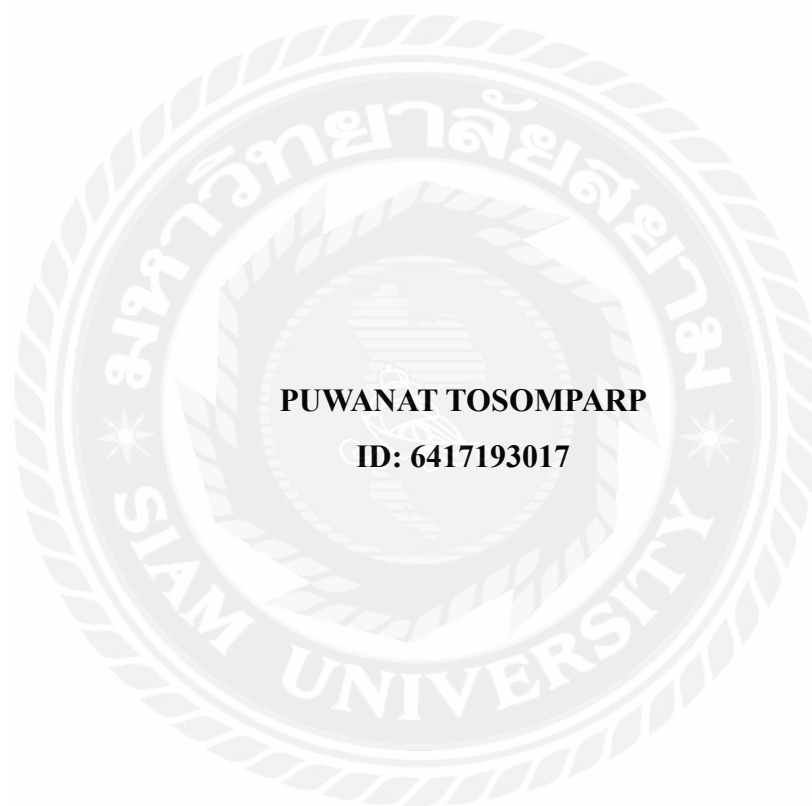




**NOMOPHOBIA EFFECT ON PURCHASING BEHAVIOR IN A NEXT NORMAL**



**SUBMITTED AS A PARTIAL FULFILLMENT REQUIRED FOR  
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### ABSTRACT

Nomophobia is the fear of being without a mobile phone. As technology has advanced over the years, the affection for developing mobile phones has led to high captivity of consistently possessing the hand-held device. Other factors such as the COVID-19 pandemic have also contributed to the accumulated symptoms of Nomophobia in many individuals. Nomophobia not only impacts the mental and physical conditions of an individual but has indirectly impacted their purchasing behavior. The intention of this research is to investigate the signs of Nomophobia that contribute to the changes in purchasing behavior of individuals for a promising new normal globally. The consolidation of past research is analyzed vigorously to support elements of the investigation of Nomophobia, purchasing behavior, and crises such as pandemics. The literature review will note the influences of application use such as Facebook, Instagram, Twitter, and TikTok in relation to purchasing behavior due to the convenience of use of mobile phones. Other factors that will be investigated include ease of use, quick making payments, and other mobile phone applications. The previous research will detail more influences on online shopping applications and mobile banking applications. The findings of this research revealed that Nomophobia does influence individual mobile phone usage, and individual purchasing behavior has increased due to some relations of Nomophobia. The influx of Nomophobia and increased purchasing behavior was more recognized during the current pandemic. Thus, recommendations to address a favorable next normal will be contributed. The recommendations will have an overall general intention to allow a favorable outcome to improve and develop purchasing behavior.

**Keyword:** Nomophobia, Purchasing Behavior, Pandemic

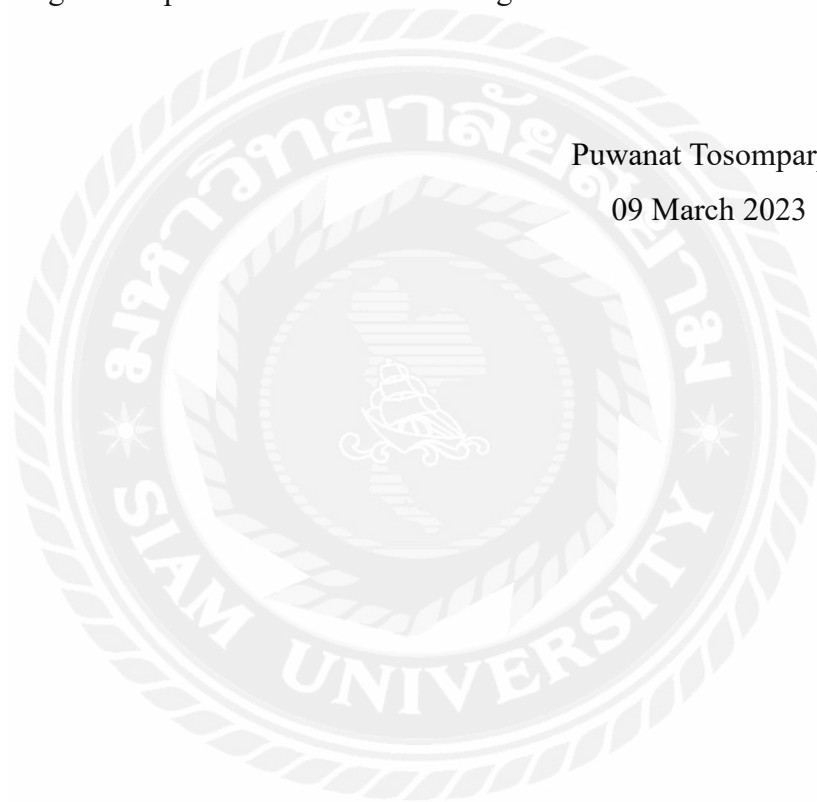


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## **1. Introduction**

### **1.1 Research Background**

Technology has quickly advanced overtime, especially surrounding the first handheld cellular phone to smartphones. One of the most crucial aspects of handheld technology is convenience, speed, and satisfaction. Mobile devices are indispensable in the means of the everyday scheme (Bae, 2019). Such that, it can be very difficult for people who don't have smartphones to accomplish certain tasks tailored to the need of a mobile device. Again, the development of mobile devices shifted to 'smart' applications, such as having integrated keyboards and advanced data features. The integration of applications is another example of the advancement, common social and media applications are highly used on smartphones such as Facebook, Instagram, Tik Tok, Snapchat, YouTube, and Netflix. Mobile devices have been developed in high technology to meet the demand of individuals. Forecasting statistics showed in 2022, the number of mobile devices manipulated by worldwide users will be about 7.26 billion and about 91% of the total of individuals will possess a phone today (Turner, 2022). The forecast of data for 2022 had a monumental gap between the numbers predicted for 2020, estimating 6.95 billion users in 2020 and 7.1 billion users in 2021 (O'Dea, 2021). Due to external factors, the predicted numbers differ plenty. For example, the impact of the COVID-19 pandemic was worldwide, the outbreak was first identified in Wuhan, China, in December 2019 and spread rapidly internationally (Zhu et al., 2020).

The pandemic was sudden, thus the response to cope with the unpredictable virus was difficult and influence many parts of an individual's livelihood. Aspects of change occurred quickly in areas such as finance, employment, health, and social. To reduce the impact of the unfamiliar virus, many countries applied mandatory policies and procedures for society to cooperate in lockdowns. The process of lockdowns in turn would support the decrease of spreading the virus (Wu et al., 2020). The lockdown indirectly contributed to the usage of mobile devices due to the changes occurring in the areas as stated before. The circumstances led individuals towards a high reliance on mobile devices, the high reliance and higher frequency of usage have slowly transitioned into conditions of being addicted to

smartphones. Even though a smartphone is an essential device, the technology can be a powerfully destructive weapon to disrupt the mental health of an individual (Steers, 2021).

The pandemic impulsively adopted the perspective of living the “next normal” life with COVID-19. As a result, individuals must continue to social distance themselves from others, follow mask policies, and adapt to other social policies established by local authorities (Biswas, 2020). Also, from an organizational perspective, new pathways to navigate the new normal process for consumers focuses on adapting to new consumer behavior and innovative strategies to increase sales of products such as integrating or increasing e-commerce methods (Stevenson, 2021).

## **1.2 Research Problems**

Area of investigation is to close a gap of understanding revolving around, the spike in using mobile phones during the pandemic. Due to the indescribable increased rates of usage and the rise of Nomophobia, there has been an indirect relationship affecting purchasing behavior of many individuals. However, as a crisis like the recent COVID-19 pandemic eases, will using mobile phones for daily and continuous purchases have exponential forecasts or be sustainable?

The capability of mobile phones in terms of high technology can help people in every aspect. For Example: making a phone call, using a map application, sending any crucial documents via email, sending money transactions via banking applications, texting messages to friends, surfing and browsing the internet to discover any information for any purpose, etc. (Aboje, 2022). Although, people perceived the usefulness of how the mobile phone operates in the productivity of work. On the contrary, the mobile phone could damage serious mental health, if people accidentally forget their phones at home, some people may unequivocally encounter sentiments of worry, fear, panic, and stress (Robinson, Smith, & Segal, n.d.) which can lead them to nomophobia (Legg & Myer, 2019). The number of mobile phone users worldwide are approximately 7.24 billion users in 2022, which is roughly 91.54% of the entire global population with mobile phone users and up to about 71% bring their phone to bed and sleep with it, which can be elements of signal in mobile phone addiction (Wise, 2022).



Mobile phone addiction became one of the effects of major problems widespread among people in every regional country (Olson et al., 2020). which dominated the consequence in a most negative way than a positive way, this excessive number of mobile phone users can directly impact humans mentally and physically as mentioned above but it also indirectly impacts the global biological environment caused by the phone production line and the disposal process in the manufacturers that generate the air pollutions and chemical residues which could be contaminated to all-natural stuff (Mani, 2019).

Moreover, the pandemic could be another justification to generate problematic smartphone addiction. People accomplish things more at home with their mobile phones such as meeting at online conferences, working online on tasks, shopping online, ordering online food, playing online games, etc. (Ong, 2021). Hence, this paragraph referred to the reasons that influence people accumulating more addicted to their phones while they struck in their isolated places caused by the pandemic (Sirt, 2020). Ever since people's activities have been aggressively associated with the phone lately due to the disaster of the pandemic. Accordingly, the consequence would gradually influence people's purchasing behavior to adopt other alternative procedures in the online method (Tao, Sun, Liu, Tian, & Zhang, 2022).

However, this detail of the transformation above caused serious issues for many entrepreneurs that rely on their business with physical purchasing visits to the place. As the consequence, the change in shopping behavior in online e-commerce sections is terminated in most store shops, retails, restaurants and many businesses and this particular influence can be negatively forced to convey a lagging rate of the new business owner that wants to invest the new physical business on the street during this situation (Clawson, 2019).

### **1.3 Objectives of the study**

The objectives of this study are as follows:

- To understand the effects of mobile device addiction
- To detail the impacts of Nomophobia in relation to purchasing behavior
- To further investigate future forecasts of purchasing rates due to properties of

Nomophobia.

## **1.4 Scope of the study**

The collection of secondary data was used to establish the research backgrounds. In detail, sources such as academic articles, websites, and digital newspaper print were used in synthesizing information to conclude the affects of the presented problem. The sources used during the investigation and analysis are dated from the last 5 years of 2022.

## **1.5 Research Significance**

The study of the topic will increase the comprehension of Nomophobia and the indirect correlation to purchasing behavior as a new normal aspect of the coming years. Also, the study will call attention to the influence of the COVID-19 pandemic as a key element shaping the changes that are being investigated.

## **2. Literature Review**

### **2.1 Nomophobia**

Mobile devices allow easier access to artificial applications to support human livelihood, such that many individuals have come to persistently use and rely on the devices. In many cases, mobile devices give an individual many advantages to complete a daily task, job task or leisure. The usage of mobile devices has increased rapidly and most individuals are attached to their phones. The extreme of this attachment transition to Nomophobia was when a study by a 2008 UK Post Office discovered individuals experiencing fear or anxiety of not having a mobile phone (Bhattacharya et al., 2019). Especially due to the constant time spent using a mobile phone as phones are integrated into the routine. Routine usage can also encounter the most harmful impact, damaging human behavior, especially social interaction of life spending in society (Bottaro,2022). However, the elements to lead people to have Nomophobia symptom are first explained by people are addicted to “Social media applications” on their phones, the list of the most recently popular social media apps such as Facebook, Instagram, Tik Tok, LinkedIn, and Twister (Price, 2022).

Other than social media’s influence on Nomophobia, individuals have become more comfortable with the use of handheld technology to conveniently support their everyday living routine. Fundamentally, manipulation of tasks can be completed simply using a

mobile phone. Many individuals have enjoyed the beneficial satisfaction of using mobile phones to gain information quickly such as receiving news around the world in real-time, checking the forecast weather for traveling, or upcoming unpredictable natural disasters (Lindra, 2020). Additional factors that make mobile devices all-important is the key aspect of communication with friends, and family.

Thus, the significant explanation of being addicted to mobile devices is due to the reliance and integration of all the capable use of a phone in an individual's daily routine. Screen time of a mobile device also increases with the operation of alerts. Notification bubbles popped up on the screen, it will be intended to use in red to catch your eye's awareness and your brain will instantly consider that there is something very important, when people notice the red color on the notification bubbles icon show up then they must look at it immediately (Vox, 2018). Nonetheless, the more manipulate a phone the more phone addiction will become, there are roughly 60% of young American people have accepted that they are addicted to cell phones, 71% sleep with their phone, and 44% said they could not leave their home without it. These statistics are indicated by how many people are associated with cell phone usage. (Cell phone addiction, 2019).

Altogether, there is evidence that many individuals will be affected by Nomophobia. Mobile phones are again indispensable because of the wanting of using social media, convenient completion of daily tasks, and applications that are created and invented to make individuals have more screen time.

## **2.2 Purchasing Behavior**

Purchasing behavior is the decision and acts of individuals who buy products and services. The purchasing behavior of the global population has followed trends from many personal and external factors. The investigated purchasing behavior revolves around individuals becoming addicted to phones and the external factor of the COVID-19 pandemic. These circumstances have droved and transformed people's behavior to consume in a different path via the phone such as more shopping online behavior (JPMorgan, 2020). In Hong Kong, the research said that approximately 90% of shoppers would prefer to shop and purchase everything via shopping online platforms on their cell phones. And the reason

why shopping online is very attractive to shoppers is because of the many good offerings from the platform to encourage them to shop such as offering free shipping, discount prices, and good promotions. Many products to shop and compare, some gifts complementary, and more. Moreover, it is very convenient to use and shop from anywhere, easy to purchase and everything can be done on the phone. As mentioned above, the behavior could lead people to get addicted to shopping along with phone addiction (Dahl, 2017).

Another purchasing behavior among people who are addicted to phones is purchasing more food online apps. These days, many people are using mobile phones to order food online and it seems to be getting more and more. The statistical number of food delivery users has shown that in the US, it was 44.1 million users in 2021 and the number has been raised to 49.5 million users in 2022, and the forecast of the number in 2023 may rise to 53.9 million users (AppMySite, 2022). Accordingly, online food delivery is additionally convenient, fast, real-time updates on the menu, and much more beneficial to mobile phone consumers (The Asian Age, 2020). The last statement of this influence on purchasing behavior is people tend to make their payment bills more online by using their phone since the phone has become the more beneficial tool. The world payment statistic revealed that it is worth \$1.97 trillion in the world market mobile phone payment in 2021, and worldwide users are 25.7% used mobile payment, and 43.2% of US users use mobile payment (Sekulic, 2022). Therefore, the benefit of making mobile payments is that users can make a payment anywhere, secure in payment, easy to use, and have massive options for payment (Atible, 2021).

### **2.3 Pandemic**

In the past two years, COVID-19 spread and infected many individuals, causing chaos in many parts of the globe. In 2019, The World Health Organization (WHO) announced the identification of the spread of COVID-19, the first found in Wuhan, China (Moore, 2021). The disease rapidly spread worldwide in many countries and the number of infections surged up to millions of people. In 2022, the information updated on October 28, 2022, confirmed the number of infections as 626,337,158 people; the number of this data could be changed in the future (WHO, 2022). However, during that period, each country's

government declared a lockdown. It mandated their population to stay at home for an extended time to stop the spread of the infection (Kantis et al., 2020). Consequently, during the Covid-19 pandemic outbreak, the disasters influenced most people to consume more time with mobile phones, such as surfing the internet, playing games, consuming entertaining apps, social media, etc. This situation could make people addicted to mobile phones and the statistic number detailed by the Statista website show that in 2020 global usage is approximately 70% increased, and if we specify in more detail by each country, it has shown that 40% in the US, 86% in China, 72% in Italy, 64% in Spain, 41% in France, and 33% in Germany (Watson, 2020).

During the COVID-19 pandemic many businesses that operations focused on online marketing as an alternative option instead of focusing on the store to survive in business during the lockdown situation (Jacobides & Reeves, 2020). Many businesses have been suffering from the disease pandemic and they have had to adapt and changed to be online, in March 2020 up to 20%-30% of many businesses have transformed to do business online and the expectation of e-commerce will reach 14%-18% in the next 3-5 years (Fryer, 2021).

### **3. Past Research**

Nomophobia has indirect impacts on purchasing behavior. Various articles have determined that the constant use of mobile phone indirectly increase people purchasing behavior. As this study is in Turkey, the experimenter implemented a survey of 234 people that revealed support for this study topic that nearly every single person who owned a mobile phone, especially adolescents consumed more time with their phone than other things in daily usage. The more screentime an individual has, the increase of action of purchasing products. Many individuals favor the purchasing behavior to be more online shopping instead of physical shopping in the store. In this case, the explanation for the purpose is online method could save time, shopping wherever they are, and quick and instantaneous methodology for them by simply using the mobile phone (Ertemel & Celik, 2019). Nevertheless, another study in Hong Kong also found that the increased usage of mobile phones could influence online shopping with the causality of perceived usefulness, perceived ease of use, and perceived bliss (Almsaeed, Feng, & Po, 2018). According to the

report from Statista, publicized of the percentage of mobile device users worldwide during the Covid-19 outbreak was 70% of mobile smartphones users, 40% of laptop users, 32% of PC/desktop users, and 22% of tablet users, etc. in March 2020 (Watson, 2020). However, the purchasing behavior of consumers has transformed slightly before during the Covid-19 pandemic. The contribution of this disease makes people consume more things on their phone devices, leading to changes in their purchasing behavior such as grocery shopping, online foodstuffs, and even some household products. For this reason, the statistic number according to the Forbes website on the US Census Bureau revealed that by the 2nd quarter of 2020 the shopper purchased approximately \$211.5 billion which was raised to 31.8% on e-commerce shopping online (Wertz, 2022).

Although, people perceived the usefulness of how the mobile phone operates in the productivity of work. On the contrary, the mobile phone could damage serious mental health, if people accidentally forget their phones at home, some people may unequivocally encounter sentiments of worry, fear, panic, and stress (Robinson et al., 2022). In turn, transitioning to have nomophobia. The number of mobile phone users worldwide are approximately 7.24 billion users in 2022, which is roughly 91.54% of the entire global population with mobile phone users and up to about 71% bring their phone to bed and sleep with it, which can be elements of signal in mobile phone addiction (Wise, 2022). Mobile phone addiction became one of the effects of major problems widespread among people in every regional country (Olson et al., 2020). which dominated the consequence in a most negative way than a positive way, this excessive number of mobile phone users can directly impact humans mentally and physically as mentioned above but it also indirectly impacts the global biological environment caused by the phone production line and the disposal process in the manufacturers that generate the air pollutions and chemical residues which could be contaminated to all-natural stuff (Mani, 2019).

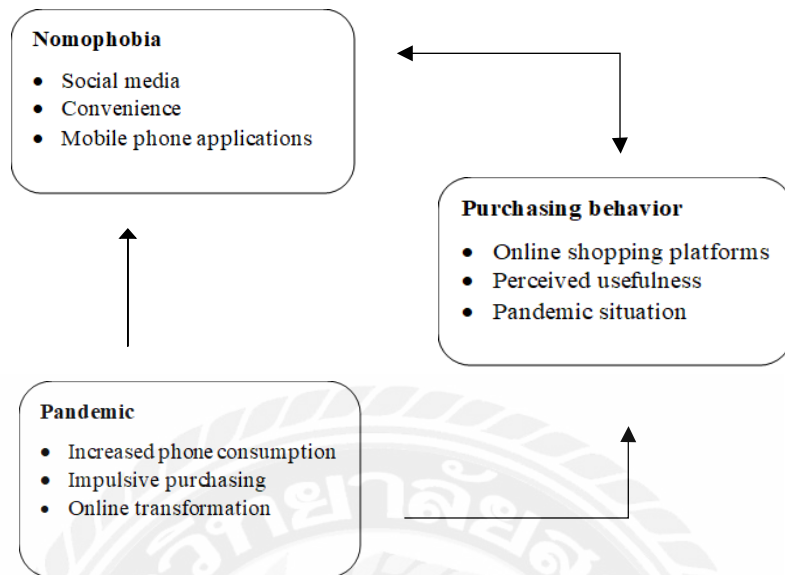
Moreover, the pandemic could be another justification to generate problematic smartphone addiction. People accomplish things more at home with their mobile phones such as meeting at online conferences, working online on tasks, shopping online, ordering online food and playing online games (Ong, 2021). Hence, this paragraph referred to the reasons that influence people accumulating more addicted to their phones while they struck

in their isolated places caused of the pandemic (Sirt, 2020). Ever since people's activities have been aggressively associated with the phone lately due to the disaster of the pandemic. Accordingly, the consequence would gradually influence people's purchasing behavior to adopt other alternative procedures in the online method (Tao et al., 2022).

However, this detail of the transformation above caused serious issues for many entrepreneurs that rely on their business with physical purchasing visits to the place. As the consequence, the change in shopping behavior in online e-commerce sections is terminated in most store shops, retails, restaurants and many businesses and this influence can be negatively forced to convey a lagging rate of the new business owner that wants to invest the new physical business on the street during this situation (Clawson, 2019). During the crisis of the Covid-19 pandemic, most ordinary purchasing behaviors have changed to be more online purchasing of many concerns involved in this disaster disease. This study has shown strong support for the influence that changed people's shopping behavior due to Covid-19 that concerns health and safety conditions, financial circumstances, and the constraints mandated by the country's government (Akter, Ashrafi, & Waligo, 2021). Additionally, the Covid-19 pandemic has converted a small number of mobile phone user's behavior purchasing into a massive number of online platforms, but on the other hand, the study has also mentioned it depends on the personal shopper's standpoint for every business (Tyagi & Pabalkar, 2021).

#### **4. Findings and Conclusion**

In this study, the finding has shown the consequence of Nomophobia and the Covid-19 pandemic can be massively influential factors to drive consumers to transform their purchasing behavior. Cell phone addiction is predominantly caused by Social Media applications and perceives of convenience. Additionally, the pandemic also increased phone consumption which switched phone users purchasing behavior to many products online. Many online shopping advertisements have been adopted and frequently publicized on Apps which convinces consumers to increase their consumption.



**Figure 1.** Nomophobia and Pandemic influencing Purchasing Behavior

**Nomophobia** (Vox, 2018; Llindra,2020; Price, 2022)

**Purchasing behavior** (Dahl, 2017; Feng, 2018; The Asian Age, 2020; Atible, 2021; AppMySite, 2022; Sekulic, 2022)

**Pandemic** (Deloitte, 2020; Jacobides & Reeves, 2020; Watson, 2020; Fryer, 2021)

## 5. Recommendations

In this study, the researcher found many pieces of information to be the elements that influence people to addicted to mobile phones, which is officially called “Nomophobia” the mobile phone can be a crucial thing that offers many conveniences to support the execution of work for people. Conversely, we also found the negative consequence of these influences mentioned above, Hence, these recommendations are for people who are addicted and entrepreneurs that have been impacted by these influences.

Firstly, individuals should reduce excessive cell phone usage. People should accomplish more activities outside and leave their phones at the house because there are so many things to do besides being isolated with their phones. Such as going for a walk with friends, playing sports outdoors, often gathering with family, reading an interesting book,



watching favorite movies, and listening to beautiful music. Therefore, people should spend more time on their experience in the real world, not only having virtual reality on the narrow phone screen (Husniesham, Rabun, & Lai, 2022).

Secondly, the answer to solving this influence is for people to understand and raise perceive the problem and the consequences that may affect negatively by mobile phone addiction. Additionally, we need a huge supporter from the government, organizations, academic institutions, and medical institutions to collaborate and encourage to distribute of all the cognitive information about the advantages and disadvantages of Nomophobia throughout the metropolis such as posters, signs, news, TV shows, social media apps, etc. Importantly, once people perceive all the problems, they would get a better understanding and effort to stay in the life balance between about technology of mobile phones and normal life (Ou & Zouxia 2019).

Lastly, entrepreneurs to emphasize the trading online business, such as restaurants, grocery retail shops, selling products online shops, or even small-large enterprises to transform from prior only focusing on accepting physical purchasing in the store instead, heavily concentrating on online e-commerce marketing. Due to the Covid-19 pandemic, we already comprehend what has happened and the many limitations that influence people's lives. Eventually, now the pandemic crisis is nearly a normal circumstance but still, people heavily tend to depend on using a mobile phone to implement many things, especially shopping online, and the number of shopping via phone users around the world is expanding every year recently. Accordingly, this recommendation is for taking the beneficial influence power of Covid-19 to adapt how we conduct the business to the next normal of people purchasing behavior with an online marketing technique to maintain business growth (Ungerer, Portugal, Molinuevo, & Rovo, 2020).

The recommendations provided will enhance consumers and allow them to acknowledge the positives and the negatives of Nomophobia that could be affected their purchasing behavior. Nevertheless, if they can remain balanced and adapt to any circumstances, that would be ideal for purchasing behavior in the next normal era.

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