

Received: 21 November 2022 Accepted: 21 March 2023

DOI: <https://doi.org/10.33182/rr.v8i2.12>

More Online Activities-Will This Behaviour Stay?: A Descriptive Study on the Change of People Behaviour as the Impact of COVID-19 Pandemic

Yosef Dedy Pradipto^{1*}, Kwartarini Wahyu Yuniarti², Diena Dwidienawati³, David Tjahjana⁴ and Rusli bin Ahmad⁵

Abstract

The aim of this research paper is to examine the impact of Covid-19 pandemic on people behavior and understand whether the change will only be temporary or permanent. A descriptive quantitative study was conducted to 300 respondents to answer open questions on old behaviors that they continue and have to stop and new behaviors that emerge. The finding of the studies showed that during crisis people were able to sacrificed activities that they like considering the high perceived risk to the situation. Such as they stop going out, hang out with friends and family, being outdoor and dining out. People also showed effort to adjust to the situation to shift to best alternative which was online activities such as online learning, online working, online shopping, and even online socialization. People also adjusted with developing new skills. Whether these habits will stay will depend on perceived risk, comfort, and level of sacrificing that people provide. Mobility restriction has significantly changed people behavior. COVID-19 pandemic has led to life-changing challenges to people all around the world. Confinement has drastically change people daily routine and lifestyle. This study examines the reason and the impact of the changes that happen. There was no deep discussion to explore more insight about how people behaved. Also, this study only conducted in Jakarta and its surrounding cities.

Keywords: COVID-19, Mobility Restriction, People Behavior, New Habits.

Introduction

Starting at the end of 2019, Coronavirus (COVID-19) is spreading worldwide rapidly and become a pandemic. This largescale pandemic outbreak is not only affecting human's health, but it is also affecting other aspects of human life (Huang et al., 2020). It is affecting day-to-day life significantly. The recommendation for countries with widespread transmission is to do mobility restriction, limit social interaction, and prohibit any crowd gathering. People have to be encouraged to stay home and if possible, work from home (Howard, 2013).

¹ Psychology Department, Faculty of Humanities, BINUS University, Jakarta, Indonesia, Email: ypradipto@binus.edu

² Faculty of Psychology, University of Gadjah Mada, Yogyakarta, Indonesia

³ BINUS Business School, BINUS University, Jakarta, Indonesia

⁴ Information System Department, Faculty of Engineering and Informatics, Multi Media Nusantara University, Indonesia

⁵ Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak, Malaysia

The recommendation to do mobility restriction, limit social interaction, and prohibit any crowd gathering (Fisher & Wilder-Smith, 2020) which leads to the change of people behaviors. Mobility restriction has significantly changed people behavior. COVID-19 pandemic has led to life-changing challenges to people all around the world. Confinement has drastically change people daily routine and lifestyle (Kumari, 2020). Will people permanently change their behaviors or will they go back to their old habits once the global crisis is over? (Fisher & Wilder-Smith, 2020; Kaufman, 2020). World has faced several crisis before. However, unlike any other crisis, this crisis caused by the COVID-19 pandemic, catches everyone by surprise. No one has a full understanding about the situation. It impacts not only particular area or region, but everyone worldwide in the large scale and it last moths and changes almost every aspect of people life. The situation is unknown with high uncertainty (Chigiluri, 2015).

Since the world has never seen a pandemic on this scale in over a century, there are limited studies can be used as our reference. Studies on how people behave during and after a crisis are still limited, moreover, studies on the change of behaviors because of the COVID-19 pandemic (Sheth, 2020) (Wang et al., 2020).

The purpose of this research paper is to examine the impact of Covid-19 pandemic on people behavior and understand whether the change will only be temporary or permanent. This study presents data from a descriptive quantitative study involving the change in the people behaviors. This data will help academics to understand how people adapt to the pressure of crisis. The study result will give insight to business to understand the new behaviors and predict whether it will be temporary or permanent to adjust business products offering or delivering.

This paper is structured as follows: the next session presents the literature review of people behaviors change in facing crisis. Thereafter, the methodology of qualitative study is described and the findings are presented. Finally, the conclusion, limitation and recommendation for further research are drawn.

Review of Literature

Starting at the end of 2019, Coronavirus (COVID-19) is spreading worldwide rapidly and become a pandemic and disrupted the life across the globe. It is not only affected people health, but also dramatically affected economics and societal system (Cappelen et al., 2021; Tjahjana et al., 2020). In order to prevent the restrict of the disease, governments issues advisories which include recommendations to restrict travelling, close schools, marketplaces, public places and mobility restriction (Soroya et al., 2021). These advisories have impacted people daily life that people never imagine before.

The initiatives issued by government like lockdown or mobility restriction might intrude individual habits and behaviors. Consumer behaviors changes have been reported by (Hasan et al., 2021; Sheth, 2020; Wang et al., 2020; Zhang et al., 2020). According to a survey by Global

Web Index in the US and UK, 8 in 10 consumers have changed their behaviours because of the pandemic (Hasan et al., 2021). Consumers become more cost conscious, doing more online shopping, and restrict the 'investment consumption'. Schools have been shifted to online mode (Dwidienawati et al., 2020). Students are forced to pursue the education through synchronous and asynchronous learning. Work from Home (WFH) has been implemented by most of organization. Human beings are known to be able to adjust to the new conditions. People now are getting used to the new normal condition where they are required to implement social distancing. The critical situation has forced people's behavior into different directions, and some behaviours may reverse, but some may stay permanently (Mehta et al., 2020).

Bodosca et al., (2014) stated that people are a vulnerable creature which will feel threatened when facing the crisis. However, people are remarkably resilient psychologically. People are able to cope even with extreme stressors (Oksanen et al., 2021). Crisis situation will lead to uncertainty. This uncertainty, will cause fear, tension and confusion which will lead to feeling of discomfort. The state of disequilibrium from past condition is occurred. People would then make some transition in order to make adjustment to the new condition. Then the state new equilibrium occurred (Bodosca et al., 2014).

People's reaction to crisis is not similar. How people change their behaviour depends on internal and external factors. Internal factors which influence how people will behave when facing changes are such as psychological and personal characteristics. Personality, attitudes, motivation influence heavily on how people change for their survival during crisis. These factors may influence more than any other factors. External factors are those forced to make by environmental influences. These factors are very difficult to control (Gabriela, 2010).

Besides the internal factors which made people behave differently when facing crisis situation, people behave also influenced by how they assess the risk they face from the situation. (Mehta et al., 2020), (Mansoor & Jalal, 2010) and (Hasan et al., 2021) refer to study conducted by Amelia et al (2012) which showed that people do not have the same perception about the negative effect situation. People will behave based on their risk attitude and risk perception. Risk attitude refers to consumer's interpretation about the content of the risk and how much people dislikes the content of that risk. Risk perception refers to people's interpretation of the chance of being exposed to the risk content.

How people perceived the risk influence the individual's behaviour during pandemic (Hasan et al., 2021). During pandemic, people's assessment to risk perception is high, due to the health risk impact. People see that being infected by COVID-19 has significant risk to their life. To reduce their risk of infection, people have adopted preventive health behaviors. Such as adhere to mobility restriction and refrain from visiting crowded places (Kim et al., 2020). When people's feeling and cognition regarding the risk perception is high, people will adjust the behaviors in order to avoid all together or minimize the risk (Slovic, 2010). This is how new behaviour emerge.

A crisis is an opportunity to step back and think deeply. They will look for something “bigger than self”, from “active pessimism” to “proactive mindfulness”(Voinea & Filip, 2011). Whether, this new behavior will stay or reverse, it will depend on risk perception into the new condition all over again.

The Raise of Online Activities

Mobility restriction due to COVID-19 pandemic has led to life-changing challenges. Daily routine and lifestyle has changed dramatically due to the confinement. Because of this limitation as well as the closure of public places, people are shifting to online activities. The usage of new digital technologies and social media application has become the main modes for people communication and collaboration (Oksanen et al., 2021). Global reports has estimated the growth of total traffic of Internet traffic grew by 40 to 60% during global lockdown period. It showed that the access to newspaper sites, video chat applications, gaming and home-based work and learn programs has driven this increase (Colley et al., 2020). The crisis has been a major driver of technology adoption.

People who before COVID-19 pandemics still seek information through traditional modes such as mass media, print media are now forced to seek information through digital touch points (Mehta et al., 2020; Soroya et al., 2021). As a consequence of the COVID-19 pandemic and social-distancing policies, remote working has increased all over the world. Organizations were forced to work remotely and depended heavily to technology (Oksanen et al., 2021). Organization has been exploring new and more efficient ways of working, communication and collaborating. Many employees started to use new technology to work and information sharing. Schools also shifted to online. Students need to adjust their learning habit from dependent into more independent modes. They have to be more mature in order to ensure that they learn well with online delivery. Their synchronous session is less than what they usually have during face to face. Therefore, active interaction is also less. Therefore, students are required to be active to ensure their learning activities are effective.

People, as social creatures, need to belong. People are missing gathering with friends and family. They have the need to stay connected, even though they have to keep social distancing. Therefore, people will make an effort with technology to maintain social contact with virtual events. There have been various social event conducted online such as a virtual reunion, virtual birthday party, virtual work out and so on (Kirk & Rifkin, 2020). Closure of public places such as mall and the fear of getting infected have force people to stay home. Despite the changing of spending pattern, it has been reported that greater use of ecommerce touch points for shopping from various digital platforms. That includes official site of products, social media and mobile platforms. This digital platform has been used by consumers during the pandemic which led to the digitalisation in shopping (Mehta et al., 2020).

More Indoor Activities

Being confined indoors has induced people with various indoor activities. People tried to find source of pleasure in limited indoor activities. (Kumari et al., 2020) reported that confinement at home has led to increased in screen time. (Kar et al., 2020), (Dominski & Brandt, 2020) and (Kim et al., 2020) also reported the substantial increased in time spending on watching television and electronic gadgets. (Kar et al., 2020) further raised the concern that this might lead to behavior addiction, especially in developing countries.

It is also reported that in order to stay active indoor, people do more household chores than before (Kumari et al., 2020). Aerobic exercise indoor is also reported as one indoor activity that people embrace during lockdown. As reported by (Kim et al., 2020) an indoor leisure-sports activities such as “Corona Home Training” has become popular all over the world. In his study (Colley et al., 2020) reported that during lockdown more people are exercising indoor. The reasons for exercising indoors are for mental and physical health.

Learning New Skills and habits

People develop habits about their consumption and the way they do things. Those are developed overtime. However, while behavior is habitual, it is also contextual (Sheth, 2020). Crisis is one of the reason people change their behavior. Crisis provides the opportunity for people to develop new habits and new skills (Bodosca et al., 2014). This new skills are one of positive spill overs of COVID-19 pandemic.

Batez (2021) reported that the new skill of ICT literacy among students and teachers during pandemic. This ICT literacy skills include online communication, internet usage, email usage, file creation and file management. The IT literacy of older generation is also improved. More-older generation can operate zoom and shopping online.

Uggioni et al., (2020) stated that home cooking activities is increasing in Brazil. Social distancing can be an opportunity to revive home cooking and stimulate cooking skills as an enjoyable, stress-reducing practice. (Uggioni et al., 2020) also reported that a study at 1005 individuals in the United States showed that more than half of the participants reported cooking more frequently than before the pandemic. Half of these participants felt more confident in the kitchen. More than half expressed their intention to continue to frequently cook at home after the pandemic.

Other habits that emerge during pandemic is that people become more health conscious. (Mehta et al., 2020) refer to a survey which showed that people are interest in saving through investment, insurance, health and hygiene product. The fear of COVID-19 risk, people pay attention to essential requirement for the disease prevention such as wearing mask, washing hand frequently, using hand sanitizer, and consume vitamins.

Method

Because the crisis caused by the COVID-19 outbreaks is unlike any other crisis, the impacts of the crisis to people behaviours will be different and complex. Descriptive Quantitative method is used for this study. This study using questionnaire instrument. The questionnaire started with brief explanation of the study, followed by the anonymous statement and informed consent and thereafter five questions about respondents behaviour during COVID-19 pandemic. The questions on respondents behaviors included: “What activities did they stop doing during pandemic?”; “What activities that they stopped did they miss?”; “What are new activities that they embrace?”; “What are among the new activities they will continue after pandemic?”; and “What are among the new activities they will stop after pandemic?”. In order to gain more background information on the participants, they were asked to answer some socio-demographic data, such as age, gender, business scale and experience, business location and educational background. Questionnaires were distributed online via google form which was setting not to allow one person to submit more than one time. Convenience sampling method was used to target 300 respondents. All answered them categorized thematically.

Result and Discussion

Questionnaires were distributed to 300 hundred respondents. Two-hundreds and sixty-six questionnaires were returned with returned rate 87,7%. Fifty-six percent of respondents were female, forty-three percent were male and two percent of respondents were choosing not to answer. Forty-five percent were from Generation Z who were born between 1995 to 2005.

Table 1. Demographic data of Respondents

Demographic		
Gender	No	%
Female	143	56%
Male	109	43%
Prefer Not to Say	4	2%
	256	100%
Year of Birth		
1965-1976	75	29%
1977-1994	59	23%
1995-2005	114	45%
Others	8	3%
	256	100%
Location		

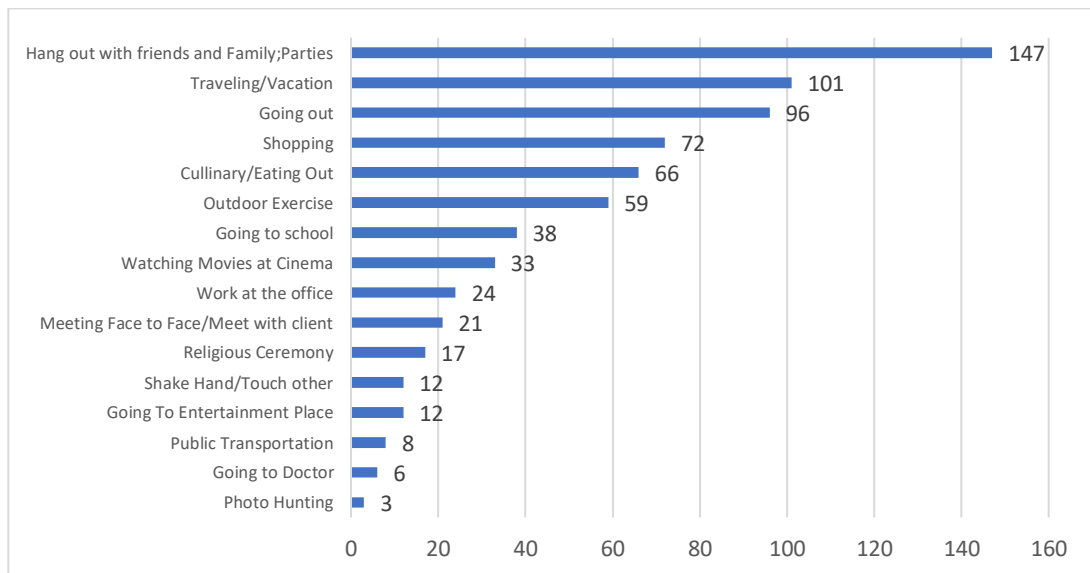
Jakarta	73	29%
Bodetabek	129	50%
Others	54	21%
	256	100%

Education

University Student	93	36%
Bachelor Degree	84	33%
Master Degree	46	18%
Doctoral Degree	11	4%
Others	22	9%
	256	100%

Twenty-two percent were from Generation Y who were born between 1977 to 1994. There were twenty-nine percent from respondents from Generation X and three-percent from others. Fifty percent of respondents were from cities surrounding Jakarta, twenty-nine percent were from Jakarta and twenty-one percent were from other cities outside Jakarta and Bodetabek. Thirty-six percent of respondents were university students, thirty-three percent held bachelor degrees, eighteen percent held master degrees, four percent held doctoral degrees and eight percent were from others. Demographic data were depicted in table 1.

The response of respondents of question “What activities did you have to stop or reduce during COVID-19 pandemic?” was depicted in figure 1.

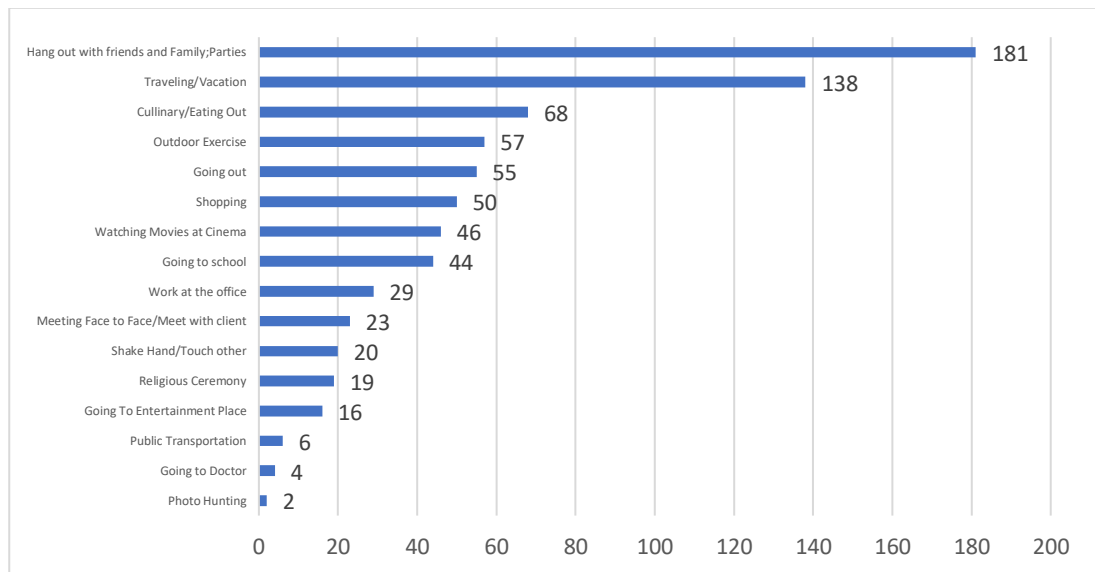


N= 251

Figure 1. Activities respondents needed to stop or reduce during COVID-19 pandemic

Hangout and gathering with friends and family was the top activity that 147 respondents (58%) needed to stop or reduce. It was followed by traveling and vacation (101 respondents). The next most response belong the top 5 answers were going out, shopping and dine out which were claimed by 96 (38%) and 72 (29%) respondents respectively. It seemed that people still considered to visit their doctors during mobility restriction to seek treatment since only 6 respondents (2%) claimed they stopped it.

The response of respondents of question “What activities do you most miss during COVID-19 pandemic?” was depicted in figure 2.

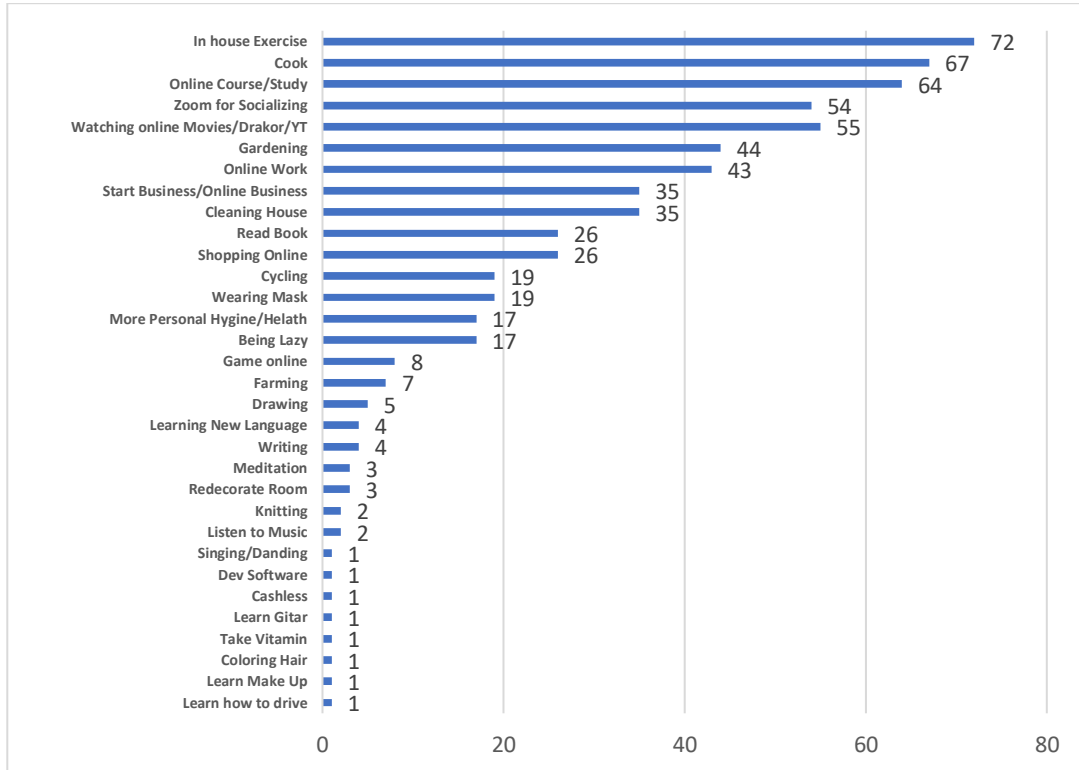


N=254

Figure 2. Activities respondents most missed during COVID-19 pandemi

Hangout and gathering with friends and family was the top missed activities during this pandemic which was claimed by 181 respondents. It was followed by traveling and vacation as no 2 answers (138 respondents or 54%). Dine out, outdoor exercise and going out were the no 3, 4 and 5 answers, which were claimed by 68 (27%), 57 (22%) dan 55 (21%) respondents respectively.

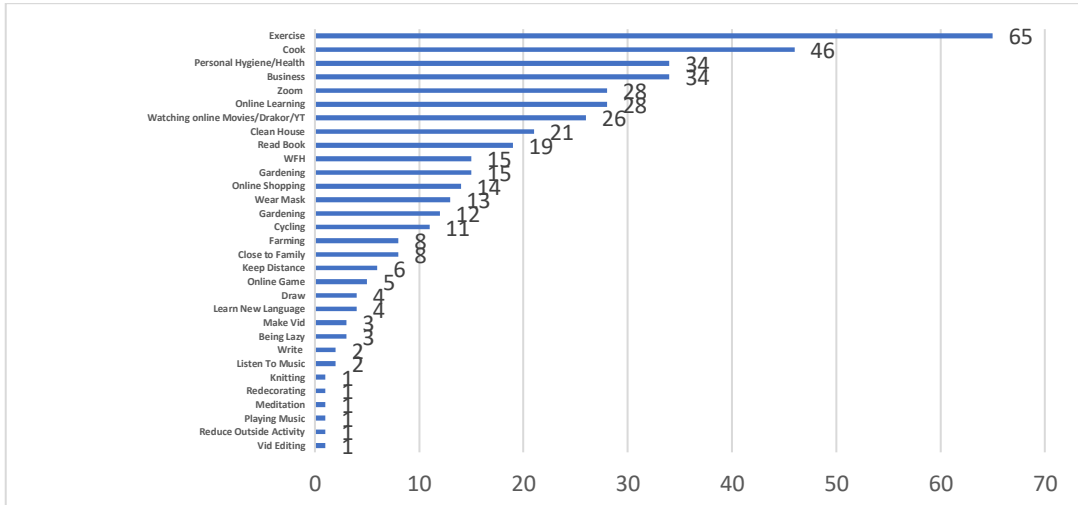
The response of respondents of question “What new activities do you embrace during COVID-19 pandemic?” was depicted in figure 3.



N=248

Figure 3. New Activities respondents embraced during COVID-19 pandemic

More than 30% of respondents embraced in-house exercise as new activity during this pandemic. It was followed closely by cooking (67 respondents or 27%) and Online course/study (64 respondents or 26%). Socialization or hang out online and gardening were also new activities that was embraced by 54 (22%) and 55 (22%) respondents respectively. From overall new activities, there were several online activities raised by respondents such as online course or study, online socialization, online entertainment (game, movies), online business, and online shopping.

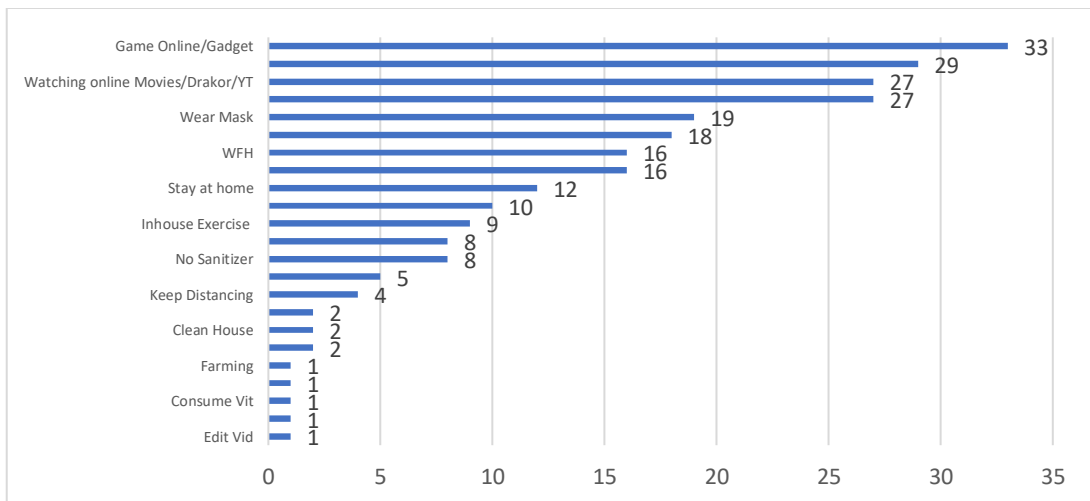


N=217

Figure 4. New Activities respondents would continue during COVID-19 pandemic

As depicted in figure 4, thirty percent of respondents (65) stated that they would continue exercising if pandemic was over. Twenty one percent of 46 respondents claimed they would continue cooking. Respondents also claimed that they will continue several online activities such as online business, zoom, online learning, WFH and online shopping.

The response of respondents of question “What new activities will you reduce after COVID-19 pandemic?” was depicted in figure 5.



N=159

Figure 5. New Activities respondents would stop or reduce after COVID-19 pandemic

Only 159 of 266 respondents (60%) answered the fifth question (figure 5). The top 5 activities that they claimed they would reduce were game online, virtual socialization, watching online/streaming movies or YouTube, being lazy and wearing mask.

Respondent claimed that they gave up hangout, traveling, being outdoor, dine out or basically being outdoor and being in the crowd. In the normal situation, being in the long-term confinement is almost impossible. In this pandemic, how people behave will depend on their assessment of the risk (Hasan et al., 2021). People assessed their risk in order to decide whether to follow the government recommendation to stay home or not. During pandemic, people assessment to risk perception is high, due to the health risk impact. People see that being infected by COVID-19 has significant risk to their life. To reduce their risk of infection, people have adopted preventive health behaviors. Such as adhere to mobility restriction and refrain from hangout, traveling, being outdoor and dine out. It seemed that people considered the perceived risk of COVID-19 is high therefore they are able to do which is almost impossible to ask during the normal condition.

Since the perceived risk is assessed as high, people need to adjust to the new condition. Human being are known to be able to adjust to the new conditions. People now are getting used to the new normal condition where they are required to implement social distancing. Since their outdoor activities were limited, people made some adjustment to create indoor activities. Many respondent claimed that they do indoor exercise. This is align with (Mehta et al., 2020) which stated that people will adjust to the new condition. This finding also align with the statement from (Mehta et al., 2020) during crisis people develop more investment behavior including investment to their health.

This study findings also align with previous studies from (Soroya et al., 2021), (Mehta et al., 2020) and (Oksanen et al., 2021) which claimed that the prolong of staying at home has made the increase of screening time. Playing game online, watching YouTube, streaming movies, online shopping, studying and working. As per eMarketer, in early 2021, the average US adult spends 3 hours and 43 minutes on their mobile devices (Zalani, 2021). During COVID-19 the screening time is increasing based on the Global reports has estimated the growth of total traffic of Internet traffic grew by 40 to 60% during global lockdown period (Colley et al., 2020). However, (Colley et al., 2020) stated their concerned about the increase of screening time, especially if it related to online gaming and entertainment activities. He raised that this increase of screening time might lead to addiction which will be very difficult the handle later. In this study, the result of new activities related to screening time was quite alarming since around 20% people said they spent a lot of time watching online entertainment and 3% spent a lot of time on online game.

However, not all new activities were negatives. Just like stated by (Bodosca et al., 2014), in the crisis people tend to learn new skills. Positives new skills have been reported in this study such

as learning to build online business, cooking, gardening, learning new language, and taking online course. This finding aligns with how people try to adjust with the new situation. (Kim et al., 2020) stated that to overcome the restriction of normal leisure activities during COVID-19 pandemic, people will emerge with other indoor leisure activities. Since human-being are basically a social creature, even for socialization, people tried to keep socialization with friends and family with the best alternative available which is virtual socialization.

Will the behaviors people practiced during COVID-19 pandemic stay or not? Will the old behavior comeback? The new habits will stay or not and the old habits will comeback or not, will depend on several factor such as the assessment of perceived risk, how this new behavior provides comfort and enjoyment, and perceived risk of scarification that people do. If people perceived their activities will reduce the perceived risk they will continue. If the perceived risk is low, people will go back to the old behavior. However, (Wang et al., 2020) and (Kirk & Rifkin, 2020) added that the new behavior will stay if they provide more comforts compared to the old behaviors. Such as, people might prefer work from home or flexible working place rather than 100% going to office. People will still embrace shopping online, however, they will go back to shop in the mall since shopping in the mall over other enjoyment. Only few said that they will keep indoor exercise. This is because people think that being outdoor is more fun than being confined.

Conclusion

The purpose of this research paper is to examine the impact of Covid-19 pandemic on people behavior and understand whether the change will only be temporary or permanent. The findings of the study showed that when the perceived risk is high, people can do things which is almost impossible during the normal condition. People focus most of their activities indoor. To adjust to the new situations, people are able to stop what they like to do such as being outside, being with friends and family. To make the most of the new situations people find best alternative to continue their old activities such as online learning, work from home, online shopping and online socialization. In crisis people also emerge with positive new habits such as exercising indoor, cooking, gardening, building new business, and learning new language. Whether old habits will come back and new habits will stay will depend on people assessment on perceived risk, or comfort over by old or new habits.

Due to the limitation of literature on people behavior during crisis, the study result will give insight to business to understand the new behaviors and predict whether it will be temporary or permanent to adjust business products offering or delivering. This study has several limitations. First, there was no deep discussion to explore more insight about how people behaved. Further qualitative study with deep interview to understand more why people behave such way during crisis can be considered. Second, this study only conducted in Jakarta and its surrounding cities.

Therefore, study conducted to more urban area to understand how urban people behaved during challenged situation is recommended.

References

- Batez, M. (2021). ICT skills of university students from the faculty of sport and physical education during the COVID-19 pandemic. *Sustainability (Switzerland)*, 13(4), 1–13. <https://doi.org/10.3390/su13041711>
- Bodosca, Ş., Gheorghe, G., & Nistoreanu, P. (2014). Tourist Consumption Behaviour before and after the Crisis from 2008. *Procedia Economics and Finance*, 16(May), 77–87. [https://doi.org/10.1016/s2212-5671\(14\)00777-1](https://doi.org/10.1016/s2212-5671(14)00777-1)
- Cappelen, A. W., Falch, R., Sørensen, E., & Tungodden, B. (2021). Solidarity and fairness in times of crisis. *Journal of Economic Behavior and Organization*, 186, 1–11. <https://doi.org/10.1016/j.jebo.2021.03.017>
- Chiguluri, B. (2015). Disruption vs. Innovation. *Rise*, 8–10. <http://ifyrise.com/disruption-vs-innovation/>
- Colley, R. C., Bushnik, T., & Langlois, K. (2020). Exercise and screen time during the COVID-19 pandemic. *Health Reports*, 31(6), 1–11. <https://doi.org/10.25318/82-003-x202000600001-eng>
- Dominski, F. H., & Brandt, R. (2020). Do the benefits of exercise in indoor and outdoor environments during the COVID-19 pandemic outweigh the risks of infection? *Sport Sciences for Health*, 16(3), 583–588. <https://doi.org/10.1007/s11332-020-00673-z>
- Dwidienawati, D., Abdinagoro, S. B., Tjahjana, D., Gandasari, D., & Munawaroh. (2020). Forced shifting to e-learning during the covid-19 outbreak: Information quality, system quality, service quality, and goal orientation influence to e-learning satisfaction and perceived performance. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(2), 1518–1525. <https://doi.org/10.30534/ijatcse/2020/93922020>
- Fisher, D., & Wilder-Smith, A. (2020). The global community needs to swiftly ramp up the response to contain COVID-19. *The Lancet*, 395(10230), 1109–1110. [https://doi.org/10.1016/S0140-6736\(20\)30679-6](https://doi.org/10.1016/S0140-6736(20)30679-6)
- Gabriela, Ş. (2010). Changes in Consumer Behaviour During an Economic Crisis. *Ovidius University Annals, Economic Sciences Series*, X(2), 784–787.
- Hasan, S., Islam, M. A., & Bodrud-Doza, M. (2021). Crisis perception and consumption pattern during COVID-19: do demographic factors make differences? *Heliyon*, 7(5). <https://doi.org/10.1016/j.heliyon.2021.e07141>
- Howard, C. (2013). *Disruption Vs. Innovation: What's The Difference?* - *Forbes*. <http://www.forbes.com/sites/carolinehoward/2013/03/27/you-say-innovator-i-say-disruptor-whats-the-difference/>
- Huang, R. H., Liu, D. J., Tlili, A., Yang, J. F., & Wang, H. H. (2020). Handbook on Facilitating Flexible Learning During Educational Disruption : The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak Please cite the work as follows : *Smart Learning Institute of Beijing Normal University, March*.
- Kar, S. K., Arafat, S. M. Y., Sharma, P., Dixit, A., Marthoenis, M., & Kabir, R. (2020). COVID-19 pandemic and addiction: Current problems and future concerns. *Asian Journal of Psychiatry*, 51(March), 19–21. <https://doi.org/10.1016/j.ajp.2020.102064>
- Kaufman, J. (2020). *The Personal MBA* (10th ed., Vol. 00). Pinguin.
- Kim, Y. J., Cho, J. H., & Park, Y. J. (2020). Leisure Sports Participants' Engagement in Preventive Health

- Behaviors and Their Experience of Constraints on Performing Leisure Activities During the COVID-19 Pandemic. *Frontiers in Psychology*, 11, 1–15. <https://doi.org/10.3389/fpsyg.2020.589708>
- Kirk, C. P., & Rifkin, L. S. (2020). I'll Trade You Diamonds for Toilet Paper: Consumer Reacting, Coping and Adapting Behaviors in the COVID-19 Pandemic. *Journal of Business Research*. <http://www.elsevier.com/locate/scp>
- Kumari, A., Ranjan, P., Vikram, N. K., Kaur, D., Sahu, A., Nand, S., Baitha, U., & Goel, A. (2020). Diabetes & Metabolic Syndrome : Clinical Research & Reviews A short questionnaire to assess changes in lifestyle-related behaviour during COVID 19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(6), 1697–1701. <https://doi.org/10.1016/j.dsx.2020.08.020>
- Mansoor, D., & Jalal, A. (2010). The Global Business Crisis and Consumer Behavior: Kingdom of Bahrain as a Case Study. *International Journal of Business and Management*, 6(1). <https://doi.org/10.5539/ijbm.v6n1p104>
- Mehta, S., Saxena, T., & Purohit, N. (2020). The New Consumer Behaviour Paradigm amid COVID-19: Permanent or Transient? *Journal of Health Management*, 22(2), 291–301. <https://doi.org/10.1177/0972063420940834>
- Oksanen, A., Oksa, R., Savela, N., Mantere, E., Savolainen, I., & Kaakinen, M. (2021). COVID-19 crisis and digital stressors at work: A longitudinal study on the Finnish working population. *Computers in Human Behavior*, 122(October 2020). <https://doi.org/10.1016/j.chb.2021.106853>
- Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 117, 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>
- Slovic, P. (2010). Perception of risk. *Science*, 236, 220–231. <https://doi.org/10.1097/00043764-198811000-00005>
- Soroya, S. H., Farooq, A., Mahmood, K., Isoaho, J., & Zara, S. e. (2021). From information seeking to information avoidance: Understanding the health information behavior during a global health crisis. *Information Processing and Management*, 58(2). <https://doi.org/10.1016/j.ipm.2020.102440>
- Tjahjana, D., Dwidienawati, D., Manurung, A., Pradipto, Y. D., & Gandasari, D. (2020). Does people's wellbeing get impacted by COVID-19 pandemic measure in Indonesia? David. *6th Asia International Conference*.
- Uggioni, P. L., Elpo, C. M. F., Geraldo, A. P. G., Fernandes, A. C., Mazzonetto, A. C., & Berbarido, G. L. (2020). Cooking skills during the Covid-19 pandemic TT - Habilidades culinárias em tempos de pandemia pela Covid-19. *Rev. Nutr. (Online)*, 33, e200172–e200172. http://www.scielo.br/scielo.php?script=sci_arttext&camp%0Apid=S1415-52732020000100206
- Voinea, L., & Filip, A. (2011). Analyzing the Main Changes in New Consumer Buying Behavior during Economic Crisis. *International Journal of Economic Practices and Theories*, 1(1), 14–19.
- Wang, Y., Hong, A., Li, X., & Gao, J. (2020). Marketing innovations during a global crisis: A study of China firms' response to COVID-19. *Journal of Business Research*, 116, 214–220. <https://doi.org/10.1016/j.jbusres.2020.05.029>
- Zalani, R. (2021). *Screen Time Statistics 2021 : Your Smartphone Is Hurting You How Much Time Does The Average Person Spend On Their Phone ?* Elitecontentmarketer.Com.
- Zhang, S. X., Wang, Y., Rauch, A., & Wei, F. (2020). Health , distress and life satisfaction of people in China one month into the COVID-19 outbreak *. In *The Lancet Health*,.