

THE MEDIATING EFFECT OF FEAR OF MISSING OUT ON CONSUMER BEHAVIOR IN THE POST COVID-19 ERA

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Abstract

The Covid-19 global pandemic has impacted consumers' purchasing behaviour in the aspect of panic buying. The panic buying behaviour has been sustained even during the post-pandemic time in most countries. The purpose of this conceptual paper is to examine for imminent research whether fear of missing out (FoMO) mediates the relationship between the factors of perceived scarcity, perceived severity and social media engagement, and consumers' buying behaviour after post COVID-19 pandemic. This study will develop a research model for subsequent empirical testing. The proposed research model assists retailers and marketers to understand the mediating effect of FoMO between the factors of perceived scarcity, perceived severity and social media engagement, and consumers' buying behaviour.

Keywords: *Perceived Scarcity, Social Media Engagement, Perceived Severity, Fear of Missing Out, Buying Behaviour.*

1.0 Introduction

In 2020, COVID-19 has been spreading all over the world and caused a pandemic. The severity of the Coronavirus (COVID-19) has been widely concerned and it affected the behaviour of consumers in purchasing post-pandemic. Consumers experienced panic buying even after the pandemic situation. Pandemic panic buying is a kind of behaviour found in consumers' perception which makes it harder to identify different determinants in different individuals. Factors that point to the cause of panic buying behaviour have involved social influence, fear of complete lockdown, peer buying, perceived scarcity and lack of self-control. A study found that negative news on social media has a powerful and positive impact on the cause of panic buying behaviour (South China Morning Post, 2020). Technology becomes the only way to make consumers stay connected. Rumours such as essential items are out of stock, supply chain disruptions and movement control continuously cause panic buying to continue to happen (NST, 2020). Therefore, consumers are impulsive in terms of buying essential items that were considered a necessity to support psychological support their perceived security and scarcity (Omar, 2020).

The aftermath of the Covid-19 pandemic remains a recent issue and it undoubtedly has an impact on business activities and consumer buying behaviours (Teresiene et al., 2021). Previous research on behavioural studies during a pandemic has demonstrated that an epidemic or pandemic outbreak can create significant disruptions in production, investment, and consumer consumption (Jung et al., 2016). The COVID-19 epidemic caused significant behavioural changes and psychological pressures on people (Van Bavel et al., 2020). Several studies identified that fear of missing out (FoMO) and uncertainty avoidance have impacted consumer buying behaviour (Kamaljeet et al. 2020; Yuen et al., 2021). Most studies relate FoMO to social media engagement, however, there is limited study on the association of FoMO to perceived scarcity and perceived severity after post Covid-19 pandemic. This research aims to examine imminent research on the mediating role of FoMO in between factors of perceived scarcity, perceived severity and social media engagement, and consumers' buying behaviour after post COVID-19 pandemic. Hence, the research questions and research objectives of this study are described below:

1.1 Research Questions

- a. How do perceive scarcity, perceived severity and social media engagement impact consumers' buying behaviour after post COVID-19 pandemic?
- b. How does FoMO mediates the relationship between perceived scarcity, perceived severity, social media engagement and consumers' buying behaviour after the COVID-19 pandemic?

1.2 Research Objectives

- a. To determine perceived scarcity, perceived severity and social media engagement on consumers' buying behaviour after the COVID-19 pandemic.
- b. To explore the mediating effect of FoMO impact on consumers' buying behaviour after the post COVID-19 pandemic.

2.0 Literature Review

2.1 Buying Behaviour

The aftermath of the COVID-19 pandemic has changed consumer behaviour in purchasing. Consumers continue to engage in buying products not knowing or predicting what will happen even after a crisis. No matter if it is foreseeable or not, this results in consumers buying more than what is necessary. Mass purchasing leads to products shortage and price increases (Campbell et al., 2020). Such behaviour can be driven by fear and anxiety of consumers behaviour even though the government has taken calculated measures to consumers from hoarding and purchasing more goods and items (Chen et al., 2022).

2.2 Fear of Missing Out (FoMO)

FoMO is the pervasive fear that others are experiencing pleasurable experiences while one is missing out. It is characterised by the need to be continually engaged with what others are doing (Przybylski *et al.*, 2013). Due to FoMO, consumers exhibit an increased willingness and tendency to make their behaviour conform to the group or imitate the behaviour of others in the group, which shows the desire not to be different from others and to integrate into the group (Kang, Cui & Son, 2019). FoMO relates to the fear feeling of missing out on purchasing Covid-19 essentials such as face masks, sanitisers, and face shields. Existing research has empirically verified the relationship between FoMO and misbehaviour, due to the desire to be constantly informed of others' experiences and the temptation to follow them (Riordan *et al.*, 2019; Fuster, Chamarro & Oberst, 2017).

A study conducted by Kamaljeet *et al.* (2020) reported that FoMO has a significant impact on customers' purchasing intentions during the Covid-19 pandemic. However, the findings contradicted prior studies on the behavioural intention during animal disease outbreaks, which demonstrated a negative relation between fear and behavioural intention (Hutjens, 2014). Research suggested that FoMO may encourage purchasing by exerting pressure on consumers' decisions, which may result in compulsive or impulsive behaviour (Hodkinson, 2016). FoMO is caused by a lack of psychological demand fulfilment (Przybylski *et al.*, 2013). For instance, the lack of resources during or after the pandemic. According to Luo *et al.* (2019), FoMO will aggravate panic buying and serve as a method to deal with ongoing pandemic uncertainty.

When consumers browsed news about supply stockpiling and hoarding on social media, they were continually reminded of things they may have missed out on. Therefore, FoMO is said to trigger impulsive buying behaviour. Consumers will tend to perceive the products or items are scarce when spotted empty shelves in a store. When consumers perceived scarcity, they may experience FoMO and hence influence their behaviour thus leading to impulsive purchases (Aydın, 2018 as cited in Argan & Argan, 2019). This is due to even post-pandemic, some essential items with high demand might cause short supply and consumers who feared missing out on the opportunity to replenish them most likely would lead buying excessively (Mertens *et al.*, 2020). This result is further supported by Zhang *et al.* (2020), who discovered that FoMO mediates the influence of perceived scarcity on consumers' choices. Additionally, consumers perceived a high level of risk when they experienced a high level of fear (Hutjens, 2014). Thus, consumers' perceived severity may cause them to engage in protective behaviours such as purchasing essential products to reduce their risk of infection (Sheu & Kuo, 2020).

2.3 Perceived Scarcity

Perceived scarcity is a psychological state of consumer behaviour which may trigger impulsive buying behaviour (Arafat *et al.*, 2021). This can cause irrationality in consumers' immediate response to perceived scarcity to protect their mental state of survival (Gupta., 2019). According to the Health Belief Model, the factors that affect consumers' perception of scarcity of goods and services are consumers' understanding of resource availability when making shopping choices (Hochbaum, Rosenstock & Kegels, 1952). In addition, perceived scarcity can be defined as the concept of limited availability of products or services by individuals (Gupta and Gentry, 2019). The increased urgency or perceived value of commodities will prompt consumers to increase the number of purchases (Teubner, 2020).

In a study conducted by Zhang *et al.* (2021) on medical protective products, they identified that FoMO derived from the perception and bandwagon dominate the scarcity effect on consumers' impulsive purchasing. In the context of psychological effects, perceived scarcity has a positive effect on consumers' buying behaviour (Gupta, 2013). Current research shows that perceived scarcity is

usually affected by loss of control of the surrounding environment, feelings of insecurity and instability, and supply chain shortages. Additionally, perceptual scarcity can predominantly affect the judgments and decisions for survival (Dodgson, 2021). Thus, uncertainty and anxiety caused consumers to perceive scarcity by engaging in impulsive buying. Furthermore, perceived scarcity has different effects on the situation faced by consumers. If consumers perceive an escalating contracting of the COVID-19 pandemic, they will perceive scarcity to a greater extent. However, if the risk of the virus spreading is greater, it will lead to a series of insufficient production capacities, thus, leading to an increase in the possibility of product shortages and causing a more serious sense of scarcity. Therefore, consumer anxiety can gradually increase and worsen. Based on the discussion, the following hypothesized relationships were put forward:

H1a: Perceived scarcity has a positive effect on consumers' buying behaviour in the post COVID-19 pandemic.

H1b: Perceived scarcity has a positive effect on FoMO.

H1c: FoMO mediates the relationship between perceived scarcity and consumers' buying behaviour in the post COVID-19 pandemic.

2.4 Social Media Engagement

Social media is an internet-based virtual platform which allows users to share information, thoughts and news (Aayam, 2021). In Malaysia, the most used social media platforms were Facebook, Instagram and Facebook messenger. Active social media users occupied Malaysia's 86% of the total population (Statista, 2021). Meanwhile, there are more than 4.48 billion people in the world who are using social media consists of approximately 56.8% of the worldwide population (Dean, 2021). Post COVID-19 pandemic has engaged people with more time on social media. Social media users are now reading more news and information on social media. However, they cannot judge whether the news or information on social media is real or fake (Cellan-Jones, 2020).

In this situation, the news and information spread on social media has low reliability and are not trustworthy. When COVID-19 started spreading over the world, social media might create fear and change consumer behaviours in the way of buying (Neal Rothschild, 2021). Hashtags are one of the tools which spread fear and triggered excessive buying on social media. The same disaster also happened in Japan, Hong Kong and Singapore (Mao, 2020). The demand for products, for example, sanitiser boosts and many markets faced shortages (Taylor et al., 2020). High consumption after the post-pandemic has led to consumers buying more products (Kumar, Luthra & Kumar, 2020). The news on social media about the disruptions in the supply chain might cause products shortage soon. The speed of sharing this information is faster than the speed of transmission of COVID-19 disease (ABC News, 2020).

Furthermore, images on social media contributed to the fear of missing out on buying. Users shared images on Facebook or Instagram that the shelves are empty (CBC, 2020). Consumers panicking about buying due to a sense of scarcity and FoMO. If users see others start stocking carts, they feel more anxiety and worry (Manning-Schaffel, 2020). Research shows that 86% of people reported that fewer occupy shelves images make them buy (University of Southampton, 2020). Thus, the following hypotheses are developed:

H2a: Social media engagement has a positive impact on consumers' buying behaviour in the post COVID-19 pandemic.

H2b: Social media engagement has a positive impact on FoMO.

H2c: FoMO mediates the relationship between social media engagement and consumers' buying behaviour in the post COVID-19 pandemic.

2.5 Perceived Severity

The perceived harshness effects on individuals in the event of a pandemic crisis can be defined as perceived severity. When an individual has confronted with stress from the environment, it may be prompt to apply different ways to control their stress and retain their well-being and psychological health. According to the latest post on 'The Economists', COVID-19 has led to a sharp increase in consumers' depression, anxiety, fear, pressure, loneliness and uncertainty in spending decisions. Consumers' faith in the pandemic's eventual recovery eventually may lead to an increase in perceived severity (Çelik & Köse, 2021).

In the aspect of consumer behaviour, researchers have investigated the FoMO might give raised a higher level of personal purchasing decisions to get rid of negative emotions such as feelings of uncertainty, pressure, and a sense of escape from the fear of missing out and stress (University of Southampton, 2020). To generate the aforesaid effects, COVID-19 has disastrously brought effect on consumers' mental health of fear of missing out (Çelik & Köse, 2021). Due to the perceived severity that leads to FoMO, it will put pressure on consumers' decision-making on purchases in compulsive or impulsive behaviour (Kang et al., 2019). Hence, the following hypotheses are developed:

H3a: Perceived severity has a positive effect on consumers' buying behaviour in the post COVID-19 pandemic.

H3b: Perceived severity has a positive effect on FoMO.

H3c: FoMO mediates the relationship between perceived severity and consumers' buying behaviour in the post COVID-19 pandemic.

3.0 Theoretical Framework

The proposed research model for this conceptual paper is shown in Figure 1. The model presents FoMO as a mediator to the factors of perceived scarcity, perceived severity and social media engagement, and consumers' buying behaviour.

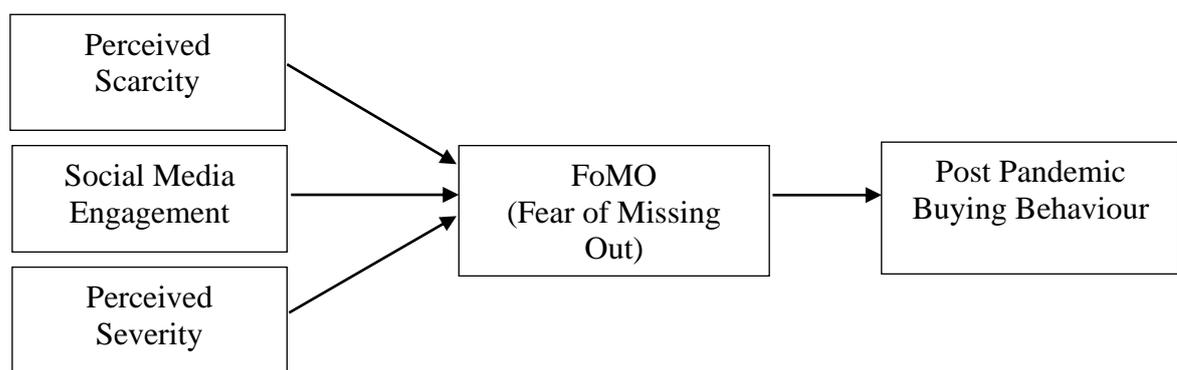


Figure 1. Research model

References

- Aayam, 2021. *Social Media: One of the Greatest Invention of 21st Century*. Available at: <<https://arjungelal.wordpress.com/greatest-invention-of-21st-century/>> [Accessed 8 July 2022].
- ABC News, 2020. *Coronavirus pandemic goes viral in the age of social media, sparking anxiety*. Available at: <<https://abcnews.go.com/Politics/coronavirus-pandemic-viral-age-social-media-sparking-anxiety/story?id=69580796>> [Accessed 9 August 2022].
- Arafat, S., Yuen, K., Menon, V., Shoib, S. & Ahmad, A., 2021. Panic Buying in Bangladesh: An Exploration of Media Reports. *Frontier Psychiatry*, 11, 1-9.
- Argan, M. & Argan, M.T., 2019. Toward a New Understanding of Fomo: 'Fomsumerism'. *Journal of Theory and Practice in Marketing*, 5(2), 277-302.
- Campbell, M. C., Inman, J. J., Kirmani, A. & Price, L.L., 2020. In times of trouble: A framework for understanding consumers' responses to threats. *Journal of Consumer Research*, 47(3), 311-326.
- CBC, 2020. *'Herd effect': Social media images of empty shelves fuelling panic buying over coronavirus*. Available at: <<https://www.cbc.ca/radio/thecurrent/the-current-for-march-3-2020-1.5483657/herd-effect-social-media-images-of-empty-shelves-fuelling-panic-buying-over-coronavirus-says-prof-1.5483674>> [Accessed 9 September 2022].
- Çelik, S. & Köse, G. G., 2021. Mediating effect of intolerance of uncertainty in the relationship between coping styles with stress during pandemic (COVID-19) process and compulsive buying behavior. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 110, 1-9.
- Cellan-Jones, R., 2020. *Tech Tent: Is social media spreading the virus?*. Available at: <<https://www.bbc.com/news/technology-51510196>> [Accessed 17 March 2022].
- Chen, T., Jin, Y., Yang, J. & Cong, G., 2022. Identifying emergence process of group panic buying behavior under the COVID-19 pandemic. *Journal of Retailing and Consumer Services*, 67, 102970.
- Dean, B., 2021. *How Many People Use SocialMedia in 2021?*. Available at: <<https://backlinko.com/social-media-users>> [Accessed 8 April 2022].
- Dodgson, L. A., 2021. *Human Behavior Expert Explains 4 Psychological Reasons Why People Are Panic Buying Items in Bulk during the Coronavirus Pandemic*. Available at: <<https://www.yahoo.com/news/human-behavior-expert-explains-4123500438.html?nhp=1>> [Accessed 17 August 2022].
- Fuster, H., Chamarro, A. & Oberst, U., 2017. Fear of Missing Out, online social networking and mobile phone addiction: A latent profile approach. *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport*, 35(1), 22-30.

- Gupta, S. 2013. The Psychological Effects of Perceived Scarcity on Consumers' Buying Behavior [Doctoral thesis, The University of Nebraska]. University of Nebraska – Lincoln. Available at: <https://digitalcommons.unl.edu/businessdiss/41> [Accessed 19 August 2022].
- Gupta, S. & Gentry, J. W., 2019. 'Should I Buy, Hoard, or Hide?'-Consumers' responses to perceived scarcity. *The International Review of Retail, Distribution and Consumer Research*, 29(2), 178-197.
- Hochbaum, G., Rosenstock, I. & Kegels, S., 1952. *Health Belief Model*. Available at: <http://www.infosihat.gov.my/infosihat/artikelHP/bahanrujukan> [Accessed 17 February 2022].
- Hodkinson, C., 2016. 'Fear of Missing Out' (FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications*, 25(1), 65-88.
- Hutjens, M., 2014. The influence of fear on the buying behaviour of consumers in case of an animal disease outbreak. *Wageningen University: Wageningen, The Netherlands*.
- Jung, H., Park, M., Hong, K. & Hyun, E., 2016. The impact of an epidemic outbreak on consumer expenditures: An empirical assessment for MERS Korea. *Sustainability*, 8(5), 454.
- Kamaljeet, K., Mageswari, K., Jaspal, S. J. S., Selvi, S. & Sukjeet, K. S., 2020. Impact of the first phase of movement control order during the COVID-19 pandemic in Malaysia on purchasing behavior of Malaysian consumers. *Journal of Humanities and Social Sciences Research*, 2(5), 131-144.
- Kang, I., Cui, H. & Son, J., 2019. Conformity Consumption Behavior and FoMO. *Sustainability*, 11(17), 4734.
- Kumar, A., Luthra, S. & Kumar, S., 2020. *COVID-19 impact on sustainable production and operations management*. Available at: <https://www-sciencedirect-com.ezproxy.taylors.edu.my/science/article/pii/S2666412720300015> [Accessed 9 March 2022].
- Luo, X., Lu, X. & Li, J., 2019. When and how to leverage e-commerce cart targeting: the relative and moderated effects of scarcity and price incentives with a two-stage field experiment and causal forest optimization. *Information Systems Research*, 30(4), 1203-1227.
- Manning-Schaffel, V., 2020. Coronavirus fears have emptied supermarket shelves. Are you panic-buying?. Available at: <https://www.nbcnews.com/better/lifestyle/coronavirus-fears-have-emptied-supermarket-shelves-are-you-panic-buying-ncna148536> [Accessed 9 September 2022].
- Mao, F., 2020. Coronavirus panic: Why are people stockpiling toilet paper?. Available at: <https://www.bbc.com/news/world-australia-51731422> [Accessed 9 January 2022].
- Mertens, G., Gerritsen, L., Duijndam, S., Saleminck, E. & Engelhard, I.M., 2020. Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020. *Journal of Anxiety Disorders*, 74, 1-8.
- Neal Rothschild, S., 2021. Coronavirus panic sells as alarmist information flies on social media. *Axios*. Available at: <https://www.axios.com/coronavirus-social-media-b56326b6-ab16-4c8a-bc86-e29b06e5ab2b.html> [Accessed 8 October 2022].

- NST, 2020. *Empty shelves at Penang supermarkets amid Covid-19*. Available at: <<https://www.nst.com.my/news/nation/2020/03/573631/empty-shelves-penang-supermarkets-amid-covid-19>> [Accessed 30 September 2022].
- Omar, N., 2020. The panic buying behaviour of consumers during the COVID-19 pandemic: Examining the influences of uncertainty, perceptions of severity, perceptions of scarcity, and anxiety. Available at: <<https://www-sciencedirect-com.ezproxy.taylors.edu.my/science/article/pii/S0969698921001661>> [Accessed 30 March 2022].
- Przybylski, A., Murayama, K., DeHaan, C. & Gladwell, V., 2013. Motivational, emotional, and behavioural correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841-1848.
- Riordan, B., Flett, J., Cody, L., Conner, T. & Scarf, D., 2019. The Fear of Missing Out (FoMO) and event-specific drinking: The relationship between FoMO and alcohol use, harm, and breath alcohol concentration during orientation week. *Current Psychology*, 40(8), 3691-3701.
- Sheu, J. B. & Kuo, H. T., 2020. Dual speculative hoarding: A wholesaler-retailer channel behavioural phenomenon behind potential natural hazard threats. *International Journal of Disaster Risk Reduction*, 44, 1-10
- South China Morning Post, 2020. *Food shortages triggered by 'pandemic' leave UK shop shelves empty*. Available at: <<https://www.scmp.com/news/world/europe/article/3142136/coronavirus-food-shortages-triggered-pandemic-leave-britains>> [Accessed 3 May 2022].
- Statista, 2021. *Malaysia: social media penetration 2021*. Available at: <<https://www.statista.com/statistics/883712/malaysia-social-media-penetration/>> [Accessed 8 March 2022].
- Taylor, D., Pritchard, A., Duhan, D. & Mishra, S., 2020. *What's behind the empty grocery shelves? Panic buying, hoarding, supplier shortages and manufacturing capacity have all contributed to shortages at the grocery store*. Available at: https://www.scmr.com/article/whats_behind_the_empty_grocery_shelves [Accessed 8 February 2022].
- Teresiene, D., Keliuotyte-Staniuleniene, G., Liao, Y., Kanapickiene, R., Pu, R., Hu, S. & Yue, X.G., 2021. The Impact of the COVID-19 Pandemic on Consumer and Business Confidence Indicators. *Journal of Risk and Financial Management*, 14(4), 1-23.
- Teubner, T. and Graul, A., 2020. Only one room left! How scarcity cues affect booking intentions on hospitality platforms. *Electronic Commerce Research and Applications*, 39, 1-11.
- University of Southampton, 2020. Study shows photos of empty supermarket shelves instigate panic buying. *University of Southampton*. Available at: <<https://www.southampton.ac.uk/news/2020/03/angell-panic-buying-study.page>> [Accessed 9 May 2022].
- Van Bavel, J. J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M.J., Crum, A. J., Douglas, K. M., Druckman, J. N. & Drury, J., 2020. Using social and behavioural science to support COVID-19 pandemic response. *Nature human behaviour*, 4(5), 460-471. [Accessed 17 July 2022].

- Yuen, K. F., Wang, X., Ma, F. & Li, K. X., 2020. The psychological causes of panic buying following a health crisis. *International Journal of Environmental Research and Public Health*, 17(10), 1-14.
- Zhang, Z., Jiménez, F. R. & Cicala, J. E., 2020. Fear of missing out scale: A self-concept perspective. *Psychology & Marketing*, 37(11), 1619-1634.
- Zhang, J., Jiang, N., Turner, J. J. & Pahlevan S. S. 2021. The Impact of Scarcity of Medical Protective Products on Chinese Consumers' Impulsive Purchasing during the COVID-19 Epidemic in China. *Sustainability*, 13, 9749.