ORIGINAL ARTICLE



Is the Global Pandemic Driving Me Crazy? The Relationship Between Personality Traits, Fear of Missing Out, and Social Media Fatigue During the COVID-19 Pandemic in Nigeria

Jola-ade Ashiru¹ Dokun Oluwajana · Oghenerume Shabeth Biabor ·

Accepted: 25 November 2021

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021

Abstract

Individ uals' psychological behaviors and fear of missing out are affected by the global pandemic. This study investigates how individual "Big Five" personality traits influence fear of missing out leading to social media fatigue, the impact of social media fatigue on social media fatigue behavior during the COVID-19 lockdown. As a result, this study proposes and develops a model using the structural equation modelling for data obtained from young adults in the South-Western region of Nigeria. Results show the impact of openness, conscientiousness, and extraversion emotional instability was positively significant towards fear of missing out over the use of social media during COVID-19, whereas the effect of agreeableness and emotional stability were insignificant towards fear of missing out over the use of social media during COVID-19. In addition, the impact of the fear of missing out on social media fatigue influences social media fatigue behavior. Theoretical and managerial implications for "Big Five" personality traits, fear of missing out, social media fatigue, and social media behaviors are provided.

Keywords Fear of missing out · Social media fatigue · Social media fatigue behavior · Psychological behaviors · Cognitive load theory · Self-determination theory

Coronavirus disease 2019 (COVID-19) is an infectious respiratory tract disease resulting from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection, which has dispersed around the world, making it a main public health crisis across health systems (Tasnim et al., 2020). It was principally diagnosed in December 2019 in Wuhan, China, and has therefore become an austere worldwide threat (Gössling et al., 2020). This disease escalated among 213 countries/territories globally with over 78 million established cases and over 1.7 million deaths as at the time of writing (Countries where Coronavirus has spread - Worldometer, n.d.). There are some classic COVID-19 symptoms (e.g., fever, fatigue, dry cough, myalgia, and dyspnea), certain amount of people when sick with COVID-19 may exhibit symptoms similar to influenza (Wang, Hu, et al., 2020; Wang, Pan,

Published online: 15 January 2022



Cyprus International University, Haspolat, Lefkosa, North Cyprus, Cyprus

et al., 2020; Wong et al., 2020). This could lead to a loophole in COVID-19 infection control system.

Since the COVID-19 epidemic, massive changes on professional, psychological, and social schedules have occurred due to the present situation leading to self-isolation, anxiety, stress, unemployment, and mental health crises (Bradbury-Jones & Isham, 2020; Danziger, 2020; Lufkin, 2020). As reported, the protective measures endorsed against COVID-19, which are social distancing, self-isolation, and home quarantine (stay at home order), have led to some adverse effects on the mental health of individuals, such effects include panic disorder, anxiety, and depression (Qiu et al., 2020). According to WHO, the emphasis on the important concerns surfacing from a lot of misrepresentation and fake news flowing about COVID-19 is called infodemic (Laato et al., 2020). Some measures were established to control the extent of misinformation so as to provide meaningful information about COVID-19 to the public (Zarocostas, 2020). Social networking sites have now become a major part of public life. Individuals want to make their friends and loved ones aware of their activities while also getting to know what their friends and loved ones are doing (Błachnio & Przepiórka, 2018). Accordingly, social media has impacted the speed of information propagation concerning COVID-19 especially on spend time, interact with friends, and keep up-to-date, while the ability to communicate and exchange information with others has positive impact on well-being during disruptions (Laato et al., 2020). That is, the use of social media permits individuals to constantly explore and share significant news on social media applications in anticipation of relevant information on how to curb the spread on the COVID-19 pandemic. In the rise of infodemics especially with the era of social media, the psychological behavior of individuals has been affected by various negative impacts (Ellis, 2016). This makes health and psychological behaviors at risk while using social media as a medium to share information to the public domain during COVID-19 (Zarocostas, 2020). This demonstrates that the use of social media tends to permit individuals to overrate the positive behavioral experiences while downplaying their negative behavioral experiences).

More so, the "Big Five" personality model has been established to represent the typical personality behavior measure and it has been empirically validated to measure various personality traits (Wehrli, 2008). Psychological well-being has been established to have a relationship with Big 5 personality traits (Stead & Bibby, 2017). These personality traits include extraversion, emotional instability (neuroticism), conscientiousness, agreeableness, and openness (intellect) for each individual (McCrae & Costa Jr, 1992). Thus, previous studies have validated the relationship between personality traits and numerous types of behaviors (Abdelrahman, 2020) including health (e.g., anxiety, depression) and social/ personality behavior (e.g., fear of missing out, social media behaviors). With the spread of COVID-19, individuals are overwhelmed and anxious by the lack of control over the amount of COVID-19 information, and this builds up to a feeling of apprehension that one might miss out on important information or events especially with the persistent use of social media (Przybylski et al., 2013). Individuals who experience FOMO (fear of missing out) often persistently use social media; this persistent use leads to social media fatigue. Social media fatigue could lead to individuals exhibiting social media fatigue behaviors such as physical and psychological exhaustion (Choi & Lim, 2016; Han, 2016). Therefore, this study is grounded on validating the conceptual study, which firstly hypothesized that during the COVID-19 pandemic, personality traits would positively predict the FOMO among young adults in the South-Western part of Nigeria This area of the country was chosen for this study because young adults who reside in these parts are more active and visible on social media platforms than every other part of the country. We expect that



personality would positively predict FOMO among young adults. Secondly, FOMO predicts social media fatigue and lastly, social media fatigue impacts social media fatigue behavior (Dhir et al., 2018; Zhang et al., 2020). This study progresses as follows: literature background, methodology, discussions, theoretical implications, practical implications, limitations and future research.

Literature Background

The "Big 5" Personality Traits

Personality is expressed as the "psychological characteristics that contribute to a person's long-term and distinctive habits of feeling, thinking, and acting" (Cervone, 2013). A personality theorist suggested that experiences of younger people eventually shape their thoughts and behaviors when they are older, which becomes one's personality (Roberts & Woodman, 2017). A study by Mondak (2011) has shown that personality traits are measurable but the most prevalent and accepted method is the "Big Five" model (Quintelier, 2014). This theoretical framework of the "Big Five" approach comprises openness, conscientiousness, extraversion, agreeableness, and Neuroticism (emotional instability).

Openness describes individuals who hold flexible views and rarely expect a lot from others. Individuals with these traits are curious about their surroundings and have great concern for their environment. Agreeableness includes "traits such as altruism, tendermindedness, trust and modesty" (John & Srivastava, 1999). Individuals with these traits tend to be sympathetic, warm, and very mindful of how they treat others. They are also concerned about their environment. Conscientiousness embraces "traits such as task and goal-directed behavior, following rules and regulations, making plans and organizing tasks" (John & Srivastava, 1999). They are generally individuals that are consistent and efficient in their undertakings. These individuals are also concerned about their environment and exhibit healthy behaviors (Bogg & Roberts, 2004). Extraversion describes individuals who are more concerned about materialism, sociability, and activities (John & Srivastava, 1999). These individuals are dominating, outgoing, and usually have a large social cycle. They also try to avoid contagious diseases (Mortensen et al., 2010). Neuroticism (emotional instability) is sometimes referred to as the opposite of emotional stability. It simply describes individuals that are anxious and moody. Individuals with this personality are often worried about their health and well-being (Van Dijk et al., 2016). Hamutoglu et al. (2020) discovered no correlation between neuroticism and FOMO.

These personalities, equipped with social media, can be correlated to FOMO. For example, Stead & Bibby, 2017proposed that personality traits have become dynamic since the development of social media. The study revealed that openness and extroversion have a significant impact on the use with social media use, and neuroticism had insignificant impact on the use of social media (Correa et al., 2010). It was found that three personality traits such as neuroticism, extroversion, and openness have a significant impact on the use of social media (Bibby, 2008; Ross et al., 2009). Also, a study by Alt (2015) suggested that FOMO predicts the use of social media (Alt, 2015; Vaidya et al., 2016) and personality traits predict FOMO (Przybylski et al., 2013; Stead & Bibby, 2017); we therefore hypothesize that in the time of the COVID-19 pandemic equipped with the use of social media, personality traits are positive correlates with FOMO.



H1a: Agreeableness positively correlates with FOMO during the COVID-19 pandemic.

H1b: Openness positively correlates with FOMO during the COVID-19 pandemic.

H1c: Conscientiousness positively correlates with FOMO during the COVID-19 pandemic.

H1d: Extraversion positively correlates with FOMO during the COVID-19 pandemic.

H1e: Neuroticism positively correlates with FOMO during the COVID-19 pandemic.

FOMO (Fear of Missing Out) and Social Media Fatigue

FOMO is a known psychological trait individuals experience, whereby they worry that their friends or family are enjoying rewarding experiences in their absence (Long et al., 2019; Przybylski et al., 2013). FOMO is an individual's feeling of dismay that other people are having a more rewarding and fulfilling experience that they are unavailable for (Przybylski et al., 2013). Self-determination theory (SDT) best frames FOMO. SDT suggests that successful self-regulation and psychological well-being are dependent on resourcefulness, competence, and connectedness (Przybylski et al., 2013; Yu et al., 2020). Through this lens, the concept "FOMO" refers to the well-being of individuals, which is dependent on the satisfaction of their psychological desires. It is also defined as a human motivation that involves a longing for interpersonal connections (Błachnio & Przepiórka, 2018).

Social media functions as a means of involving individuals who experience FOMO. With social media, infodemic on the COVID-19 pandemic is spreading anxiety. The persistent use of social media is triggering the FOMO (Yu et al., 2020). Individuals who exhibit FOMO tend to excessively use social media (Wolniewicz et al., 2018). A study by Zhang et al. (2020) presented an insignificant correlation between FOMO and social media fatigue intention. Consistent use of social media leads to social media fatigue. Therefore, we hypothesize that:

H2: FOMO positively correlates with social media fatigue during the COVID-19 pandemic.

Social Media Fatigue and Social Media Fatigue Behaviors

Social media fatigue is described as a self-regulated and a particular feeling of exhaustion individuals experience from using social media platforms (Lee et al., 2016). The cognitive load theory (CLT) best conceptualizes social media fatigue. CLT proposes that the human memory has a restricted capability and can be congested with excessive information (Sweller, 2011). Individuals experiencing the infodemic lack the mental ability to validate the vast information they receive from the communication and information (Islam et al., 2020). The overload of information from social media on the COVID-19 pandemic can trigger anxiety and depression. FOMO in social media is connected to the instinctive eagerness to unite and participate in activities with others (Malik et al., 2020). Talwar et al. (2019) proposed that social media fatigue behavior causes users to change their attitude towards social media (Zhang et al., 2016). Some individuals avoid social media as long as possible to avoid a breakdown. The study carried out by Islam et al. (2020) indicates that



social media fatigue behavior can be predicted by social media fatigue intention. In light of this research context, we hypothesize that:

H3: Social media fatigue positively correlates to social media fatigue behaviors.

Methodology

The conceptual model of this study is shown in Fig. 1. Accordingly, this study critically uses factors of "Big 5" personality traits with FOMO, social media fatigue, and social media fatigue behaviors to measure personality behaviors during the COVID-19 lockdown among young adults. Based on the previous studies, Fig. 1 shows the relationship between the constructs

Study Context

This study focuses on social media users—Facebook, Twitter, WhatsApp, and YouTube, during the COVID-19 pandemic among social media users in Nigeria. Nigeria is a country in Africa located in Sub-Saharan region of West Africa, with a population of about 200 million people. We targeted the South-Western part of Nigeria (Lagos-Nigeria) because majority of the people have access to the internet and are frequent users of social media platforms such as Facebook, Twitter, WhatsApp, and YouTube. The COVID-19 pandemic was confirmed in Nigeria on 27 February 2020, during the arrival of foreign citizens into Nigeria. This caused the government to immediately provide standard and critical care facilities such as modern equipped laboratories, resilient ICUs, and hospital facilities including beds and ventilators, human resources training, and enforcing quarantine on arrival. Furthermore, all institutions, both public and private, were ordered to shut down

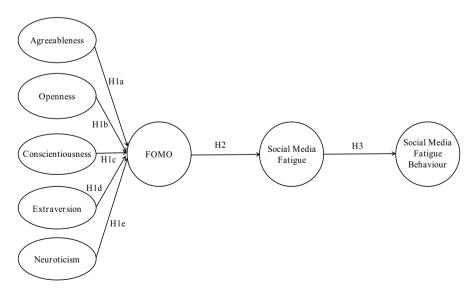


Fig. 1 Research model. Source: Own

and all citizens were asked to follow the WHO guidelines on the COVID-19 pandemic such as stay at home, social distancing, maintenance of good hygiene, and following health measures. Therefore, during the COVID-19 pandemic stay at home measure, there were challenges of personality traits over FOMO during this period that tends towards social media fatigue.

Data Collection

The data was collected from multiple social media users—young adults during the government shutdown between March and June 2020 via a drafted e-survey called Typeform. This study adopted validated scales from previous studies for all constructs used for the survey. The researchers involved drafted the initial questionnaire, and sent to professionals in the field to carefully proofread the survey in the context of the current study. Accordingly, we received suggestions to help improve the comprehensibility and novelty of the items. All suggestions were corrected and the final survey items are listed in Appendix 1. The first part of the questionnaire: the respondents were asked to complete a questionnaire based on their demographic information and verify information about knowledge on the use of social media. Furthermore, the instruments were measured on a 5-point Likert scale on Personality traits, which was adopted from Moore and Craciun (2020), FOMO from Good and Hyman (2020a, b), Social media fatigue from Islam et al. (2020), and Social media fatigue behavior from Zhang et al. (2020). We posted the survey link to different social media groups during this period, with minimum of 500 members each. The online survey had 400 responses. We removed twenty-five responses due to incomplete responses. Therefore, 375 completed data were used to test the proposed model. A purposive sampling method was used for this current study. Out of the respondents, 51% were male, and 49% were female. The preferred social media platforms among the respondents were Instagram (32%), Twitter (22%), Facebook (20%) followed by WhatsApp, YouTube (15%), TikTok (7%), and LinkedIn (4%). Most respondents were between 17 and 25 (67.5%), followed by 26 and 35 (23.7%), 36 and 50(7.4%), and >51 (2.3%). Fifty-five percent of the respondents were married, 34% were single, while 11% of the respondents were divorced. Most of the respondents had a university degree at 62%, 15% had a master's degree and above, and 23% were high schoolers.

Data Analysis

The data analysis for this study was based on a two-staged approach by Anderson and Gerbing (1988). First, we employed the use of PLS-SEM technique approach to examine the measurement model; measurement model measures the reliability and validity. Second is the structural model; structural model measures the model fit and the casual relationships among constructs. PLS-SEM is an analysis technique for evaluating relations between various independent and dependent variables and is commonly used for understanding relationships between constructs in cross-sectional data. PLS-SEM measures exploratory, confirmatory analysis and path coefficient using ADANCO 2.1.1 analytical software. ADANCO 2.1.1 measures composites and consistent PLS estimates of any model and achieves better results when measuring complex models (Dijkstra & Henseler, 2015). Based on the study's empirical studies and PLS-SEM guidelines (Hair et al., 2011), we measured the measurement model and structural model. In summary, PLS-SEM was used to evaluate both measurement model and structural model.



Empirical Analysis and Results

Measurement Models

We measured the reliability, convergent validity, and discriminant validity as recommended by Hair et al. (2011). Thus, factor loadings satisfy the recommended value by Bagozzi (1981) and the composite reliability and Cronbach's alpha values satisfy the threshold value of 0.7 recommended by Fornell and Larcker (1981), Nunnally (1978), and Hair et al. (2011) as listed in Table 1, where all factor loadings are > 0.5, and the composite

Table 1 Convergent validity

Construct	Factor loading and Item (s)	Average variance extracted (AVE)	Composite reliability	Cronbach's alpha (α)
AGREE	0.652 I am trustworthy.	0.558	0.833	0.740
	0.706 I am straightforward.			
	0.867 I am modest.			
	0.748 I am tender-minded.			
OPEN	0.713 I am adventurous	0.616	0.864	0.791
	0.840 I am a liberal.			
	0.852 I am imaginative.			
	0.723 I am emotional.			
CONS	0.847 I am competent.	0.644	0.878	0.815
	0.817 I am orderly.			
	0.803 I have self-discipline.			
	0.740 I am achievement striving.			
EXTR	0.798 I am friendly.	0.605	0.860	0.784
	0.761 I seek excitement.			
	0.779 I am active.			
	0.774 I have positive emotions.			



Table 1 (continued)	Construct	Factor loading and Item (s)	Average variance extracted (AVE)	Composite reliability	Cron- bach's alpha (α)
	NEUR	0.746 I have anxiety. 0.804 I am vulnerable 0.859 I am depressed 0.840 I am sad	0.662	0.886	0.831
	FOMO	0.786 I will worry about what I'm miss- ing.	0.610	0.862	0.787
		0.825 I will worry my friends are doing morere- warding things than me.			
		0.799 I will feel anxious about not being withmy friends			
		0.709 I will feel			
	SMF	left out. 0.724 I find it difficult to relax after continually using social media. 0.834 After a session of using social	0.627	0.834	0.703
		media, I feel really fatigued. - Due to using social media, I feel rather mentally exhausted.			
		0.814 After using social media, it takes effort to concentrate in my spare time			



Table 1 (continued)	Construct	Factor loading and Item (s)	Average variance extracted (AVE)	Composite reliability	Cron- bach's alpha (α)
	SMFB	0.842 I block some group messages and set up DND (do not disturb) 0.894 Sometimes, I discontinue the use of social media for a short period and then continue to use it 0.889 I seldom post messages on social	0.760	0.927	0.895
		media now 0.861 I simply			

browse through social media and seldom click Like or make comments.

Where Agree - Ope - Cons- Extr - Neur - Fomo - Smf - Smfb

wreliability and Cronbach's alpha values are also > 0.7. Also, we tested for common method bias as suggested by Ringle and da Silva (2015) that the (variance inflation factors) VIF values must be > 5.0 to determine multi-collinearity among the variables, and this result ranges between 1.249 and 2.850 which means that there is no multi-collinearity among the variables. Therefore, the results of measures show that factor loadings, convergent validity, and scale reliability satisfied the recommended values.

Table 2 indicates that the square root of the AVE for each variable is greater than the inter-correlation value of each variable. Thus, Fornell and Larcker's criterion was met and the discriminant validity of measurement model is acceptable.

Hypothesis Testing and Path Coefficient

The results of the PLS-SEM analysis are listed in Table 3. The results are as follows: agreeableness ($\beta = 0.132$, t = 1.837) had an insignificant impact on FOMO over the use of social media during COVID-19; therefore, H1a is not empirically supported. On a contrary, the result shows that openness ($\beta = 0.181$; t = 2.512; $\rho < 0.001$) had a positive impact on



Table 2 Discriminant validity

Construct	Agr	Ope	Cons	Extr	Neur	Fomo	Smf	Smfb
AGREE	0.558							
OPEN	0.334	0.616						
CONS	0.408	0.505	0.644					
EXTR	0.261	0.308	0.265	0.605				
NEUR	0.216	0.216	0.358	0.259	0.662			
FOMO	0.235	0.279	0.291	0.239	0.171	0.610		
SMF	0.190	0.153	0.259	0.253	0.223	0.101	0.627	
SMFB	0.308	0.443	0.465	0.297	0.243	0.252	0.297	0.760

Table 3 Hypothesis testing and path coefficient

Effect	Original	Standard bootstrap results				
	coefficient	Mean value	t-value	<i>p</i> -value	Sig	
Agr -> Fomo	0.132	0.138	1.837	0.067		
Ope -> Fomo	0.181	0.187	2.512	0.012	*	
Cons -> Fomo	0.195	0.192	2.117	0.034	*	
Extr -> Fomo	0.194	0.188	2.897	0.004	*	
Em-in -> Fomo	0.052	0.054	0.790	0.430	-	
Fomo -> Smf	0.318	0.318	4.959	0.000	*	
Smf -> Smfb	0.545	0.549	12.337	0.000	*	

FOMO over the use of social media during COVID-19. Therefore, H1b is empirically supported. Also, conscientiousness ($\beta=0.195$; t=2.177; $\rho<0.001$) had a positive impact on FOMO over the use of social media during COVID-19. Therefore, H1c is empirically supported. Extraversion ($\beta=0.194$; t=2.897; $\rho<0.001$) had a positive impact on FOMO over the use of social media during COVID-19. Therefore, H1d is empirically supported. However, neuroticism ($\beta=0.052$; t=0.790) had an insignificant impact on FOMO over the use of social media during COVID-19. Therefore, H1e is not empirically supported. FOMO ($\beta=0.318$; t=4.959; $\rho<0.001$) had a positive impact on SMF over the use of social media during COVID-19. Therefore, H2 is empirically supported. Lastly, H3 was empirically supported; social media fatigue ($\beta=0.545$; t=12.337; $\rho<0.001$) had a significant impact on social media fatigue behaviors. In summary, five hypotheses were empirically supported, and two were not empirically supported in the proposed relationships.

Discussion

The aim of this study was to discover if the Big 5 personality traits such as openness, conscientiousness, extraversion, agreeableness, and emotional instability have a significant effect on the FOMO during the COVID-19 pandemic, if FOMO affects social media fatigue, and lastly, if social media fatigue could lead to social media fatigue behaviors.

Based on the hypothesized results, we were able to ascertain among the "Big 5" personality traits: openness, conscientiousness, extraversion, agreeableness, and emotional



instability. It was interesting to observe that the "Big 5" personality traits had influences on FOMO. This is in line with the results by Stead and Bibby (2017) that found that some personality traits predict FOMO. The impact of openness, conscientiousness, and extraversion were positively significant towards FOMO over the use of social media during the COVID-19 pandemic. This can be as a result of their personality traits. Agreeableness and emotional instability were insignificant towards FOMO over the use of social media during the COVID-19 pandemic. This could also be possible because of their personality traits and also the harsh conditions, anxiety, and moodiness during the lockdown and especially the "stay at home" measures during the COVID-19 pandemic.

Furthermore, the results of the findings show that FOMO had a positive effect on social media fatigue during the COVID-19 lockdown. This is similar with the findings from Bright and Logan (2018) and Dhir et al. (2018). This could be because users use social media excessively during this period, and with a lot of information via social media, huge number of messages to reply, and many sites to visit as a result, it causes a mental breakdown during the COVID-19 lockdown.

Hence, the social media fatigue comes with a lot of behaviors (neglect behavior, diving behavior, avoidance behavior, tolerance behavior, withdrawal behavior). In line with prior literature (e.g., Zhang et al., 2020), under the influence of FOMO, the impact of social media fatigue triggers emotional exhaustion, social media interest and concerns, and low sense of achievement and emotional anxiety lead to social media fatigue behaviors especially during the lockdown. Generally, the overall outcome of this study implies that young adults have different variations on the use of social media based on their personality traits and FOMO during the COVID-19 lockdown even the relationship between social media fatigue and social media fatigue behaviors.

Theoretical Implications

This paper contributes to the literature on "Big Five" personality traits, FOMO, and social media fatigue by identifying "Big Five" personality traits related to its effect on FOMO. This study contributes to the previous literature by identifying the positive effects of openness, conscientiousness, extraversion, agreeableness, and emotional instability on FOMO. We also explore FOMO effects on social media fatigue and the relationship between social media fatigue and social media fatigue behaviors during COVID-19. These findings contribute to the literature (e.g., John & Srivastava, 1999; Stead & Bibby, 2017; Przybylski et al., 2013; Yu et al., 2020; Zhang et al., 2020; Malik et al., 2020; Islam et al., 2020). First, the study observes that agreeableness and emotional instability have an insignificant influence on FOMO. This implies that these two constructs can be thought of as psychological qualities that contribute to an individual's challenges from FOMO during lockdown and especially the stay at home measures during COVID-19. To the best of our knowledge, agreeableness' relationship with other psychological factors has always been positive in prior literature. In this study, agreeableness has been linked with a sympathetic nature; the more agreeable participants, the more fear of missing out on social media during COVID-19. Also, neuroticism (emotional instability) has an indirect relationship with FOMO in line with the study of Balta et al. (2018). In this same sense, this study supports their findings that emotional instability does not lead to FOMO during the COVID-19 lockdown. The cognition of FOMO focuses on online missing out rather than a unitary phenomenon while emotional instability focuses on negative emotional states such as anxiety and worry.



This implies that online fear of missing out inference in this study shows no empirical evidence that led to negative state or increased tendency for somatization of psychological problems during COVID-19. More so, this study adds to this body of knowledge proving that the impact of openness, conscientiousness, and extraversion promotes FOMO over the use of social media during COVID-19. This comes as a result that openness, conscientiousness, and extraversion may enjoy the lockdown based on their large social networks, charismatic, interpersonal relationships and social skills, and feel less FOMO during COVID-19. In this regard, the study shows that openness, conscientiousness, and extraversion during COVID-19 have significant influence on FOMO due to their social awareness and knowledge of COVID-19 information on social media. Furthermore, this study contributes to social media fatigue and intention (Bright & Logan, 2018; Talwar et al., 2019). Therefore, this study identifies additional predictors of "Big Five" personality traits and FOMO as significant factors that contribute towards social media fatigue and social media intention (Talwar et al., 2019; Zhang & Mao, 2016). In addition, the results show that social media fatigue is a significant predictor for social media intention during lockdown which is consistent with Zhang et al. (2020) that social media fatigue can either be a positive or negative effect based on users' perceived information pressure and intend to use. This means that social media fatigue might help reduce or increase social media intention. From the result, social media fatigue has a positive impact on social media intention. This implies that knowledge acquired by stressors that causes social media fatigue tend to be useful in managing and reducing time spent on social media, the understanding of the risks involved in the use of social media and measures needed to reduce social media fatigue during COVID-19. In general, this study contributes towards multiple concepts of personality traits, FOMO, and its impact on the cause of social media fatigue and intention during the COVID-19 lockdown.

Practical Implications

The role of personality traits, FOMO, social media fatigue, and social media behaviors during this COVID-19 period tends to have impact on individual social activities which might have an effect on their mental state. Therefore, these findings highlight the importance of the situation, by providing an eye-opener to stakeholders, different institutions, infodemics, social media users, and policy-makers on the understanding of some adverse effects on the mental health of individuals during the lockdown. In this regard, based on the outcome, this study suggests two practical implications related to personality traits, FOMO, social media fatigue, and social media behaviors during this COVID-19 period:

- To promote the development of personality traits and fear of missing out and the additional gap in prior studies (Talwar et al., 2019; Yu et al., 2020) which tend to have influence on social media fatigue and its behaviors. Therefore, there is a need for health and educational institutes to focus on understanding the cause and effect of personality traits and fear of missing out on social media fatigue on larger scale.
- To promote the exploration of social media fatigue and social media behaviors. Especially, the experience of infodemics lacks the mental ability to validate the vast information received from the communication and information on social media. Therefore, there is a need for health and educational institutes to focus on understanding fatigue and social behaviors based on sharing information on social media.



Also, there is a need for health practitioners, social workers, educational institutes, and social media developers to ensure that social media activities are based on educative programs and also create awareness on personal effects, causes of social media fatigue and social media behaviors to avoid mental breakdown. Social media companies and marketers are well aware of the adverse effect social media has on the society especially in the times of the COVID-19 pandemic. Social media firms should pay greater attention to the addictive technology that pushes users to compete with one another, preventing them from switching to other sites and encouraging them to stay on the sites for extended periods of time (Peters & Bodkin, 2007). They can also mitigate the risks associated with the use of addictive technology on these platforms by either simplifying the information that users are thoughtlessly subjected to or providing internet customization agents (Tam & Ho, 2006) that enable information control. Social media firms should be deliberate in designing features and interfaces that cause users the least amount of tiredness. This could help to reduce the chances of encountering mentally torturous information on the COVID-19 epidemic.

Limitation and Future Research

There are limitations in this research. First, the research focuses on the impact of the "Big Five" personality traits on fear of missing out leading to the influence of social media fatigue on social media behavior during the COVID-19 lockdown. However, the research on the impact of "Big Five" personality traits on fear of missing out leading to the influence of social media fatigue on social media behavior for pre and post COVID-19 lockdown are still in the space for evidence research because some countries are experiencing different variation of the COVID-19 lockdown. In future studies, more comprehensive research and theoretical concepts of personality traits on fear of missing out with social media fatigue and behaviors considering different variations of the COVID-19 lockdown data should be considered. Second, the future research should focus on the antecedent and precedent of FOMO, such as antecedent—social participation, insightful and self-evaluation; precedent such as different dimensions of social media fatigue and behaviors—social media confidence, social media efficacy, and privacy concerns. Third, the research only focuses on South-Western part of Nigeria with limited social media platform (Facebook, WhatsApp, YouTube, Twitter, LinkedIn, Instagram) in Nigeria. Therefore, further studies should focus on generalbility of the research based on the geographical location. Also, the social media platforms should include open-ended questions or qualitative approach in the future research. Fourth, further studies could use specific age groups, gender, and also specific social media platform to test the results for a more rigorous analysis and interesting results. Lastly, future studies should investigate the mediating effect of FOMO on personality traits and social media fatigue as a new research development with theoretical and empirical studies on this area of research.

Acknowledgements The authors would like to thank the editors and the reviewers for their constructive criticisms.

Availability of Data and Material Necessary data is in the manuscript.

Code Availability Not applicable.



Declarations

Ethics Approval Not applicable.

Consent to Participate Not applicable.

Consent for Publication All authors have given consent for publication.

Conflict of Interest The authors declare no competing interests.

References

- Abdelrahman, M. (2020). Personality traits, risk perception, and protective behaviors of Arab residents of Qatar during the COVID-19 pandemic. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-020-00352-7
- Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior*, 49, 111–119. https://doi.org/10.1016/j.chb.2015.02.057
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. https://doi.org/10.1037/0033-2909.103.3.411
- Bagozzi, R. P. (1981). Attitudes, intentions, and behavior: A test of some key hypotheses. *Journal of Personality and Social Psychology*, 41(4), 607–627. https://doi.org/10.1037/0022-3514.41.4.607
- Balta, S., Emirtekin, E., Kircaburun, K., & Griffiths, M. D. (2018). Neuroticism, trait fear of missing out, and phubbing: The mediating role of state fear of missing out and problematic Instagram use. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-018-9959-8
- Bibby, P. A. (2008). Dispositional factors in the use of social networking sites: Findings and implications for social computing. *Lecture Notes in Computer Science*, 5075, 392–400.
- Błachnio, A., & Przepiórka, A. (2018). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. *Psychiatry Research*, 259, 514–519. https://doi.org/10.1016/j.psychres. 2017.11.012
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, 130(6), 887–919. https://doi.org/ 10.1037/0033-2909.130.6.887
- Bradbury-Jones, C., & Isham, L. (2020). The pandemic paradox: The consequences of COVID-19 on domestic violence. *Journal of Clinical Nursing*, 29, 13–14. https://doi.org/10.1111/jocn.15296
- Bright, L. F., & Logan, K. (2018). Is my fear of missing out (FOMO) causing fatigue? Advertising, social media fatigue, and the implications for consumers and brands. *Internet Research*, 28(5), 1213–1227. https://doi.org/10.1108/intr-03-2017-0112
- Cervone, D. (2013). Personality: Theory and research (12th ed.). John Wiley & Sons.
- Choi, S. B., & Lim, M. S. (2016). Effects of social and technology overload on psychological well-being in young South Korean adults: The mediatory role of social network service addiction. *Computers in Human Behavior*, 61, 245–254.
- Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247–253. https://doi.org/10.1016/j.chb.2009.09.003
- Countries where Coronavirus has spread Worldometer. (n.d.). Www.worldometers.info. Retrieved December 24, 2020, from http://www.worldometers.info/coronavirus/countries-where-coron avirus-has-spread/
- Danziger, P. (2020). "After panic buying subsides, will coronavirus make lasting changes to consumer psychology?", available at: www.forbes.com/sites/pamdanziger//03/08/first-comes-panic-buyingbut-afterwards-will-the-coronavirus-leave-lasting-changes-to-consumer-psychology/#6c56d00a 77e8
- Dhir, A., Yossatorn, Y., Kaur, P., & Chen, S. (2018). Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, 141–152. https://doi.org/10.1016/j.ijinfomgt.2018.01.012



- van Dijk, S. D. M., Hanssen, D., Naarding, P., Lucassen, P., Comijs, H., & Oude Voshaar, R. (2016). Big Five personality traits and medically unexplained symptoms in later life. *European Psychiatry*, 38, 23–30. https://doi.org/10.1016/j.eurpsy.2016.05.002
- Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. MIS Quarterly, 39(2), 297–316. https://doi.org/10.25300/misq/2015/39.2.02
- Ellis, M. (2016). Social media use and depression linked in large study. Medicalnewstoday http://www.medicalnewstoday.com/articles/308273.php
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382. https://doi.org/10.2307/3150980
- Good, M. C., & Hyman, M. R. (2020a). "Fear of missing out": Antecedents and influence on purchase likelihood. *Journal of Marketing Theory and Practice*, 1–12. https://doi.org/10.1080/10696679.2020. 1766359
- Good, M. C., & Hyman, M. R. (2020b). Direct and indirect effects of fear-of-missing-out appeals on purchase likelihood. *Journal of Consumer Behaviour*. https://doi.org/10.1002/cb.1885
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. Tandfonline. https://doi.org/10.1080/09669 582.2020.1758708
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. https://doi.org/10.2753/mtp1069-6679190202
- Han, B. (2016). Social media burnout: Definition, measurement instrument, and why we care. *Journal of Computer Information Systems*, 58(2), 122–130. https://doi.org/10.1080/08874417.2016.1208064
- Hamutoglu, N. B., Topal, M., & Gezgin, D. M. (2020). Investigating Direct and Indirect Effects of Social Media Addiction, Social Media Usage and Personality Traits on FOMO. *International Journal of Progressive Education*, 16(2), 248–261. https://doi.org/10.29329/ijpe.2020.241.17
- Islam, A. K. M. N., Laato, S., Talukder, S., & Sutinen, E. (2020). Misinformation sharing and social media fatigue during COVID-19: An affordance and cognitive load perspective. *Technological Forecasting* and Social Change, 159, 120201. https://doi.org/10.1016/j.techfore.2020.120201
- John, O. P., & Srivastara, S. (1999). Handbook of personality: theory and research, The big five taxonomy traits. Guilford Press
- Laato, S., Islam, A. K. M. N., Islam, M. N., & Whelan, E. (2020). What drives unverified information sharing and cyberchondria during the COVID-19 pandemic? *European Journal of Information Systems*, 1–18. https://doi.org/10.1080/0960085x.2020.1770632
- Lee, A. R., Son, S. M., & Kim, K. K. (2016). Information and communication technology overload and social networking service fatigue: a stress perspective. *Computers in Human Behavior*, 55, 51–61.
- Long, J., Wang, P., Liu, S., & Lei, L. (2019). Materialism and adolescent problematic smartphone use: The mediating role of fear of missing out and the moderating role of narcissism. *Current Psychology*. https://doi.org/10.1007/s12144-019-00526-0
- Lufkin, B.. (2020), "Coronavirus: the psychology of panic buying", available at: www.bbc.com/worklife/ article/20200304-coronavirus-COVID-19-update-why-people-are-stockpiling (accessed 4 March 2020). (n.d.).
- Malik, A., Dhir, A., Kaur, P., & Johri, A. (2020). Correlates of social media fatigue and academic performance decrement. *Information Technology & People*, ahead-of-print(ahead-of-print). https://doi.org/10.1108/itp-06-2019-0289
- McCrae, R. R., & Costa Jr., P. T. (1992). A five-factor theory of personality. *Handbook of Personality: Theory and Research*, 2(1999), 139–153.
- Mondak, J. J. (2011). Personality and the foundations of political behavior. Cambridge University Press.
- Moore, K., & Craciun, G. (2020). Fear of missing out and personality as predictors of social betworking sites usage: The Instagram case. *Psychological Reports*, 003329412093618. https://doi.org/10.1177/ 0033294120936184
- Mortensen, C. R., Becker, D. V., Ackerman, J. M., Neuberg, S. L., & Kenrick, D. T. (2010). Infection breeds reticence. *Psychological Science*, 21(3), 440–447. https://doi.org/10.1177/0956797610361706
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). Mcgraw hill.
- Peters, C., & Bodkin, C. D. (2007). An exploratory investigation of problematic online auction behaviors: Experiences of eBay users. *Journal of Retailing and Consumer Services*, 14(1), 1–16.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations. General Psychiatry, 33(2), e100213. https://doi.org/10.1136/gpsych-2020-100213



- Quintelier, E. (2014). The influence of the Big 5 personality traits on young people's political consumer behavior. *Young Consumers*, 15(4), 342–352. https://doi.org/10.1108/yc-09-2013-00395
- Ringle, C., & da Silva, D. (2015). Structural equation modeling with the SmartPLS. Brazillian Journal of Marketing, 13(2).
- Roberts, R., & Woodman, T. (2017). Personality and performance: Moving beyond the Big 5. Current Opinion in Psychology, 16, 104–108. https://doi.org/10.1016/j.copsyc.2017.03.033
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578–586. https://doi. org/10.1016/j.chb.2008.12.024
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534–540. https://doi.org/10. 1016/j.chb.2017.08.016
- Sweller, J. (2011). Cognitive load theory. In *Psychology of learning and motivation* (55th ed., pp. 37–76). *Academic Press*.
- Talwar, S., Dhir, A., Kaur, P., Zafar, N., & Alrasheedy, M. (2019). Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior. *Journal of Retailing and Consumer Services*, 51, 72–82. https://doi.org/10.1016/j.jretconser.2019.05.026
- Tam, K. Y., & Ho, S. Y. (2006). Understanding the impact of web personalization on user information processing and decision outcomes. *MIS Quarterly*, 30(4), 865–890. https://doi.org/10.2307/25148757
- Tasnim, S., Hossain, M. M., & Mazumder, H. (2020). Impact of rumors or misinformation on coronavirus disease (COVID-19) in social media. *Journal of Preventive Medicine and Public Health*, 53(3), 171–174. https://doi.org/10.3961/jpmph.20.094
- Vaidya, N., Jaiganesh, S., & Krishnan, J. (2016). Prevalence of Internet addiction and its impact on the physiological balance of mental health. *National Journal of Physiology, Pharmacy and Pharmacol*ogy, 6(1), 97. https://doi.org/10.5455/njppp.2015.5.0511201588
- Wang, D., Hu, B., Hu, C., Zhu, F., Liu, X., Zhang, J., Wang, B., Xiang, H., Cheng, Z., Xiong, Y., Zhao, Y., Li, Y., Wang, X., & Peng, Z. (2020). Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA*, 323(11), 1061–1069. https://doi.org/10.1001/jama.2020.1585
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research* and Public Health, 17(5), 1729. https://doi.org/10.3390/ijerph17051729
- Wehrli, S. (2008). Personality on social network sites: An application of the five factor model. ETH Sociology.
- Wolniewicz, C. A., Tiamiyu, M. F., Weeks, J. W., & Elhai, J. D. (2018). Problematic smartphone use and relations with negative affect, fear of missing out, and fear of negative and positive evaluation. *Psychiatry Research*, 262, 618–623. https://doi.org/10.1016/j.psychres.2017.09.058
- Wong, J. E. L., Leo, Y. S., & Tan, C. C. (2020). COVID-19 in Singapore—Current experience: Critical global issues that require attention and action. *JAMA*. https://doi.org/10.1001/jama.2020.2467
- Yu, S.-C., Chen, H.-R., Liu, A.-C., & Lee, H.-Y. (2020). Toward COVID-19 information: Infodemic or fear of missing out? *Healthcare*, 8(4), 550. https://doi.org/10.3390/healthcare8040550
- Zarocostas, J. (2020). How to fight an infodemic. *The Lancet*, 395(10225), 676. https://doi.org/10.1016/S0140-6736(20)30461-X
- Zhang, Y., He, W., & Peng, L. (2020). How perceived pressure affects users' social media fatigue behavior: A case on WeChat. *Journal of Computer Information Systems*, 1–12. https://doi.org/10.1080/08874 417.2020.1824596
- Zhang, J., & Mao, E. (2016). From online motivations to ad clicks and to behavioral intentions: An empirical study of consumer response to social media advertising. *Psychology & Marketing*, 33(3), 155–164. https://doi.org/10.1002/mar.20862

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

