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Perceived overload in social networking sites affect the users' passive usage intention: A cognition-affect-conation approach

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A B S T R A C T

Social Networking Sites (SNS) play an important role in human psychological well-being. This research explores the effects of perceived overload on the passive usage intention of SNS among Malaysian users through SNS fatigue and anxiety by employing a Cognition-Affect-Conation (C-A-C) model. Cross-sectional survey research was carried out and the research acquired responses from 383 SNS users. Data was analyzed through PLS-SEM. The outcomes noted that perceived cognitive overload, perceived information overload, SNS fatigue, and anxiety are positive antecedents of SNS passive usage intention. The research brings valuable insights into the formation of passive usage intention of SNS and provides implications for service providers and users.

1. Introduction

Social Networking Site (SNS) is a double-edged sword. When SNS is actively used, it can bring positive effects to individuals, groups, and organizations, improving their subjective well-being by facilitating interpersonal interaction, entertainment, and information-seeking (Ostic et al., 2021). However, some users are demotivated to use SNS, showing decreasing enthusiasm due to the emergence of negative SNS effects (Dai et al., 2020). For instance, increasing numbers of SNS users have started showing negative symptoms in the process of using SNS, such as anxiety, stress and fatigue (Chen et al., 2024; Pang et al., 2023; Zhou & Xie, 2023). Additionally, the redundant information, complicated relations, and redundant system features, which are known as the compositions of perceived overload, appear to be obstacles to users' continuance use of SNS (Dai et al., 2020; Li et al., 2022). As validated by researchers (da Silva Cezar & Maçada, 2023; Bouattour Fakhfakh & Bouaziz, 2023), perceived overload is a key determinant that leads to the discontinuance and avoidance intention of SNS. Such withdrawal is deemed as a form of passive usage behavior (Li et al., 2022). Prior literature has presented interest in analyzing how passive usage of social media, as a form of social media activity, can shape users' subjective well-being (Lin et al., 2021; Valkenburg et al., 2022; Yue et al., 2022). For instance, Valkenburg et al. (2022) found that passive use of social media would negatively influence the well-being of adults as those with passive social media engagements reported a high level of loneliness, anxiety, and lower self-esteem (Hunt et al., 2021; Fan et al., 2021). Nevertheless, how the circumstance is formed has received less attention. Apart from that, perceived overload is identified as a predictor that directly anticipates passive use of technology among users. Yet, the underlying mechanisms between perceived overload and passive use are unclear. According

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to Huang et al. (2022) and Huang et al. (2023), perceived overload is often associated with a variety of negative emotional symptoms, including fatigue and anxiety. With existing research generally focusing on passive usage behavior but relatively fewer studies on usage intention based on the Cognition-Affect-Conation (CAC) model, this research, from a cognitive psychology perspective, carries out hypotheses by employing the C-A-C model as theoretical ground, seeking to narrow the theoretical gaps and determining how perceived overload can affect the passive usage intention of SNS through SNS fatigue and anxiety. Therefore, we put forward our research objective to examine the antecedents of the passive usage intention of SNS.

This research presents some notable contributions. Firstly, our study deepens the insights into the passive usage intention of SNS by highlighting the role of cognitive and affect antecedents. It brings extensions to the literature on Information and Communication Technology (ICT) and cognitive psychology. Secondly, by proposing logical hypothesized relationships to discuss the formation of SNS passive usage, this research contributes to the C-A-C framework, which is an effective theoretical principle for exploring the phenomenon of SNS passive usage intention. Lastly, from an innovative perspective, the current study incorporates SNS fatigue and anxiety into the C-A-C model and illustrates their mediation roles. The present study brings novelty to the relevant literature, emphasizing the emergence of emotional outcomes before users' behavior.

2. Literature Review

2.1 Cognition-Affect-Conation model

In the current research, the C-A-C model is employed as our essential framework, supporting the light on the antecedents of SNS passive usage intention and its underlying mechanisms. The C-A-C model comprised three primary components: cognition, affect, and conation, suggesting that individuals' subjective perceptions of external environments can impact their emotional states, subsequently shaping their behavior (Huang et al., 2023). Cognition denotes the understanding and comprehension that are acquired from the external environment. Affect is considered as the interpretation of perception, denoting a person's emotion or feelings. Lastly, Conation is perceived as the behavioral inclination or motivation (Qaisar & Nawaz Kiani, 2024; Zeng et al., 2023). The effectiveness of the C-A-C framework has been validated by a significant body of researchers in different fields, including social media (Qaisar & Nawaz Kiani, 2024; Xu, 2023), mobile applications (Zhou et al., 2023), and consumer behavior (Lu et al., 2022). Of these, the sequential relationships among cognitive, affective, and behavioral factors have been evidenced. Besides, this model brings a theoretical insight into the integration of technology-related characteristics and personal-related emotions. Considering the C-A-C model corresponds with our research goals, we deem it reasonable as the theoretical research framework.

3. Hypotheses development

3.1 Perceived cognitive overload

Perceived cognitive overload, as referred to by Collins (2020) from a clinician perspective, is the amount of information held by an individual within the cognitive system that has exceeded the processing capability and capacity. As defined by da Silva Cezar and Maçada (2023), cognitive overload is the discrepancies between the amount of information a person holds and processes within the cognitive system and an individual's finite processing capacity. In our research, we deem perceived cognitive overload as the mismatch between the SNS information of a person and his/her limited cognitive processing capability. Existing research has noted the significant relationship between perceived cognitive overload and fatigue in various fields. According to the argument of Jiang (2022) and Sheng et al. (2023), individuals are more prone to experience cognitive overload as the excessive information they face has reached their threshold of processing ability, thus feeling tired. Drawing on the viewpoint of Zhou and Xie (2023), users may produce negative emotions such as fatigue as they receive a massive amount of information using social media. Moving to the role of perceived cognitive overload in affecting users' anxiety in the context of SNS, Huang et al., (2022) indicated that cognitive overload is often related to negative psychological states such as anxiety. Similarly, according to the findings of da Silva Cezar and Maçada (2023), users' overload perception can promote their anxiety. This research is supported by Xu and Yan (2023), in which the researcher addressed that excessive information may result in negative emotional reactions and anxiety. Based on the findings of the existing literature, we expect perceived cognitive overload, as a dimension of perceived overload, can trigger psychological reactions in the environment of SNS, including SNS fatigue and anxiety. Hence, the following hypotheses are put forward:

H_1: *Perceived cognitive fatigue positively influences SNS fatigue.*

H_2: *Perceived cognitive fatigue positively influences anxiety.*

3.2 Perceived information overload

Perceived information overload appears when the amount of information has surpassed the information process capacity of an individual (Wang et al., 2023). As conceptualized by Dai et al. (2020), information overload is the tremendous information encountered by individuals on social media. In this research, we consider perceived information overload that SNS users' limited cognitive resources are not able to support them in processing excessive SNS information. An extensive body of

research has evidenced the effect of information on a variety of emotional reactions of individuals, such as fatigue, anxiety, and frustration (Dai et al., 2020; Huang et al., 2022; Huang et al., 2023). According to Islam et al. (2021), information overload can bring emotional consequences such as fatigue when the human brain is not able to afford excessive cognitive loads. This discussion is evidenced by the recent research of Li et al. (2024), in which scholars asserted that users' constant processing of updating information on social media makes them invest a large amount of time and energy. As a consequence, social media users would experience fatigue. Related research on health communication has pointed out that individuals may experience a worse psychological state due to the growing degree of information overload. Specifically, increasing SNS health information during COVID-19 is a challenge to the ability of consumers to process, thus contributing to negative symptoms, such as anxiety and depression (Cao et al., 2021). Coincidentally, similar research by Soroya et al. (2021) stressed that information overload is often associated with a low level of human well-being, this is because information overload stimulates negative cognitive states (i.e. stress, anxiety, and confusion). In conclusion, information overload, as an outcome of information-seeking behavior, can exert negative effects on the psychological state of individuals, shaping their emotional reactions. Therefore, we expect:

H_3: *Perceived information overload has a positive effect on SNS fatigue.*

H_4: *Perceived information overload has a positive influence on anxiety.*

3.3 SNS fatigue

As deemed by Zhu and Bao (2018), SNS fatigue is a feeling of discomfort experienced by individuals derived from the use of SNS. In our research, SNS fatigue is defined as a sense of lassitude acquired by users due to the inadequate usage of SNS. Passive intention, as conceptualized by Zhang and Ghorbani (2020) in the social media context, denotes the behavioral inclination of users to passively use social media services. In validating the association between fatigue and avoidance, Dai et al. (2020) evidenced fatigue as a predictive factor of avoidance intention of WeChat users. Subsequently, da Silva Cezar and Maçada (2023) evaluated the relationship in the field of big data, concluding that individuals' avoidance behavior might appear with intensive fatigue, as their focus, motivation, and enthusiasm are diminished thereby triggering avoidance behavior as a strategy to reduce fatigue. In a consistent vein, literature by Baj-Rogowska (2023) also proved that social media users tend to discontinue using social media when they suffer fatigue as they are likely to encounter unpleasant and uncomfortable experiences emerging from social media. This research proposes SNS fatigue as an antecedent and assumes that it can predict SNS passive usage intention. The following hypothesis is being postulated:

H_5: *SNS fatigue has a positive linkage with passive usage intention.*

3.4 Anxiety

Anxiety, as a form of health illness, is perceived as human-generated fear in the process of using computer technology. In the context of SNS and cognitive psychology, we consider anxiety as the subjective uncomfortable feelings of SNS users toward threats in the future. Some researchers have analyzed how anxiety can affect passive usage intention. For instance, Soroya et al. (2021) studied the relationship between anxiety and passive usage and revealed that anxious adults have a low level of health information-seeking behavior, arguing that adults who are anxious in terms of excessively updating health information indicate a tendency to avoid the information they confront. This literature is evidenced by Kokubun et al. (2022), in which the researcher investigated employees' job turnover intention, suggesting that anxiety would lead to the reduction of psychological overall resources and subsequent increasing willingness to leave the present job. In this research, we expect anxiety, as one of the emotional states of SNS users, can influence their passive intention to use SNS. Therefore, the hypothesized association is proposed below:

H_6: *Anxiety has a positive effect on the passive usage intention of SNS.*

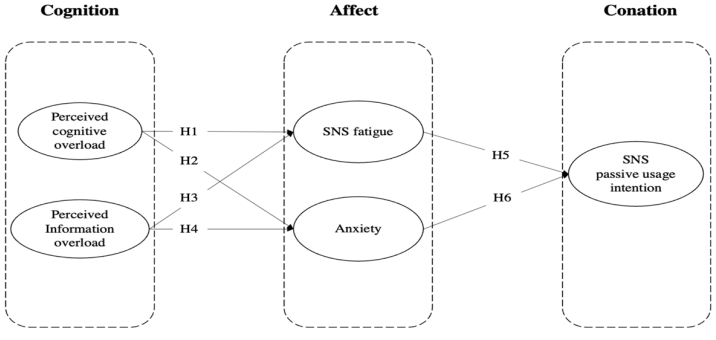

Fig. 1. Conceptual framework

4. Methodology

4.1 Samples and procedures

The present study is conducted based on a quantitative research design and a cross-sectional survey method. Specifically, we adopted an online survey through Google Forms, gathering responses among Malaysian citizens who are SNS users. The span for data collection was from December 2023 to February 2024. By employing several social media platforms including YouTube, Instagram, WeChat, and WhatsApp, the Google form links were distributed. This is because the efficiency of delivering online surveys can be enhanced. The researcher has obtained permission from the participants to voluntarily participate in the survey research via invitation messages. The samples consist of SNS users in Malaysia with experience in using SNS within the past three months. To ensure the participants have experience with SNS usage, we applied purposive sampling as the sampling method, identifying SNS users. Based on Tongco (2007), purposive sampling is a non-probability sampling technique that relies on the criteria set by the researchers. Considering the likelihood of respondents using SNS, those aged 18 to 35 years old were deemed qualified as they are more likely to use SNS. A pre-test was carried out by recruiting 50 participants before data collection, assessing the internal consistency of the research instruments. An outcome of the pre-test showed a good internal consistency, thus indicating that the survey instruments are eligible to use for the real data collection. To determine the sample size, G-power was applied as the criterion. As reported by G-power, 146 samples are recommended, with Predictors of 6, an effect size of 0.15, a significance value of 0.05, and a power level of 0.95. According to the data collection, a total of 411 feedback was collected back with 450 links sent out. After screening and removing 28 invalid and value-missing responses, 383 responses were usable.

4.2 Measurements

The instruments for the constructs of the current research were adapted from past literature with slight revisions. The survey comprised 6 sections: Section A: demographic information, Section B: perceived cognitive overload, Section C: perceived information overload, Section D: SNS fatigue, Section E: Anxiety, and Section F: passive usage intention. Each section is evaluated through a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). Perceived cognitive overload is assessed employing the 3 items from da Silva Cezar and Maçada (2023), including SNS makes me feel overwhelmed in the accomplishment of tasks", "SNS makes me feel lost in the accomplishment of tasks", and "SNS makes it more difficult for me the accomplishment of tasks". The construct, perceived information overload, is assessed by 3 items, which were revised from Fu et al. (2020). The items contain, "I am often distracted by the excessive amount of information available to me on SNS", "I find that I am overwhelmed by the amount of information I have to process daily on SNS", and "I find that only a small part of the information on SNS is relevant to my needs". 3 items of SNS fatigue were adapted from da Silva Cezar and Maçada (2023) with slight modifications, which include "SNS makes me feel mentally tired as it requires a high level of attention," "SNS makes me feel mentally exhausted, as it requires intense cognitive effort," and "SNS makes me feel mentally drained, to the point of affecting my performance". Moving to the construct, anxiety. It was evaluated by 3 items, which were adapted from Dhir et al. (2018). Its measurements are "I worry about what others say about me", "I worry that others don't like me", and "I'm afraid that others will not like me." Lastly, we adapted scales from (Cho & Cheon, 2004; Nonnecke et al., 2004; Rusbult et al., 1988; Rusbult et al., 1988), assessing passive usage intention. The items contain "I will accept information selectively on mobile social media," "I will refuse to accept some information on mobile social media", and "I intend to avoid information from some online friends on mobile social media."

4.3 Statistical technique

Partial Least Square Structural Equation Modelling (PLS-SEM) is considered the analytical approach for this study. By using SmartPLS, the researcher carried out Confirmatory Factor Analysis (CFA) to estimate the reliability and validity of variables. Subsequently, the structural model and mediation effects of SNS fatigue and anxiety were examined through the bootstrapping analysis where 5000 resamples were applied, as suggested by Hair et al., (2012).

5. Results

5.1 Descriptive analysis

The researcher carried out a descriptive analysis, reporting the outcome of respondents' demographic background in Table 1. As reported, there are a total of 383 participants, with the majority of them being females (n=278, 72.6%). About their age, it was shown that the respondents are represented by the young adult group, which is aged from 18 to 24 years old (n=125, 32.6%). The result of descriptive analysis also indicated that more than half of respondents spent more than 3 hours using SNS (n=260, 67.9%) and achieved a diploma/ foundation educational level (n=285, 74.4%).

5.2 Measurement model evaluation

A Confirmatory Factor Analysis (CFA) is carried out to evaluate the reliability and validity of the constructs and measurement model. The reliability was assessed through the criterion of Cronbach's Alpha and factor loading while convergent validity and discriminant validity are deemed as criteria for determining validity. As shown in Table 2, the result of CFA revealed

acceptable reliability, with the value of Cronbach Alpha and factor loading exceeding 0.7 and 0.5, which corresponds with the criteria of Hair et al. (2011), thus indicating great internal consistency. Regarding the convergent validity, it was analyzed by drawing on the criterion of Composite Reliability (CR) and Average Variance Extracted (AVE). According to the recommendation of Hair et al. (2017), the value of CR and AVE should be higher than 0.7 and 0.5. The outcome acquired from the PLS algorithm indicates that the CR and AVE of all variables have surpassed the thresholds. The criterion applied in this research for estimating the discriminant validity is Heterotrait-Monotrait Ratio. As suggested by Henseler et al. (2014), the HTMT value between constructs should not exceed 0.90. Based on the result (Table 3), it shows that all HTMT values are lower than the threshold. Thus, the result of convergent validity and discriminant validity is deemed acceptable.

Table 1
Respondents Demographic Profile (n=383)

Variables	Category	Frequency	Percentage
Gender	Male	105	27.4
	Female	278	72.6
Age	18 and below	84	21.9
	18-24	125	32.6
	25-29	122	31.9
	30-35	49	12.8
	35 and above	3	0.8
Time spent on SNS per day	less than 1 hour	14	3.7
	1-2 hours	45	11.7
	2-3 hours	64	16.7
	More than 3 hours	260	67.9
Educational level	High school	38	9.9
	Diploma/ Foundation	285	74.4
	Bachelor's degree	51	13.3
	Master's degree	2	0.5
	Ph.D	4	1.0
	Others	3	0.8

Table 2
Convergent validity

Construct	Items	Item (deleted)	Loadings	Cronbach's Alpha	CR	AVE
Perceived cognitive overload (PCO)	PCO1		0.796	0.730	0.846	0.647
	PCO2		0.787			
	PCO3		0.829			
Perceived information overload (PIO)	PIO1		0.856	0.867	0.919	0.790
	PIO2		0.890			
	PIO3		0.919			
SNS fatigue (FAT)						
	FAT1		0.845	0.805	0.884	0.718
	FAT2		0.867			
	FAT3		0.830			
Anxiety (ANX)						
	ANX1	ANX3	0.938	0.862	0.935	0.879
	ANX2		0.937			
Passive usage intention (PUI)	PUI1	PUI2	0.736	0.954	0.960	0.666
	PUI3		0.758			
	PUI4		0.825			
	PUI5		0.845			
	PUI6		0.857			
	PUI7		0.832			
	PUI8		0.792			
	PUI9		0.814			
	PUI10		0.846			
	PUI11		0.829			
	PUI12		0.838			
	PUI13		0.812			

Table 3
Heterotrait-Monotrait Ratio

	ANX	FAT	PCO	PIO	PUI
ANX					
FAT	0.851				
PCO	0.598	0.549			
PIO	0.784	0.767	0.541		
PUI	0.776	0.840	0.621	0.892	

5.3 Structural model assessment

The structural model is estimated by carrying out a bootstrapping analysis. 5000 bootstraps are applied in PLS-Bootstrapping analysis and the findings are depicted in Table 4. In line with our assumption, perceived cognitive overload has a significant association with SNS fatigue (Beta=0.174, t=3.321, p<0.05). Our findings support H1. As for the relationship between perceived cognitive overload and anxiety, it is validated by the results (Beta=0.224, t=4.396, p<0.05), thus evidencing H2. As hypothesized, the result revealed a significant linkage between perceived information overload and SNS fatigue (Beta=0.575, t=13.069, p<0.05). In that, H3 is supported. As interpreted by the findings, perceived information overload positively impacts anxiety (Beta=0.579, t=12.486, p<0.05), which validates H4. Furthermore, SNS fatigue is proven as a positive predictor that affects SNS passive usage intention (Beta=0.487, t=7.983, p<0.05). Accordingly, H5 is supported. Lastly, with validating H6, the association between anxiety and passive usage intention of SNS is shown to be significant (Beta=0.362, t=13.069, p<0.05).

Table 4
Pathway analysis (1-tailed test)

Hypotheses	Std. Beta	Std. errors	T values	P values	LLCI (0.5%)	ULCL (0.95%)	Decision	VIF	R^2	$f2$
H1: PCO→FAT	0.174	0.052	3.321	0.000	0.085	0.259	Support	1.244	0.449	0.044
H2: PCO→ANX	0.224	0.051	4.396	0.000	0.137	0.303	Support	1.244	0.500	0.080
H3: PIO→ FAT	0.575	0.044	13.069	0.000	0.500	0.643	Support	1.244		0.482
H4: PIO→ ANX	0.579	0.046	12.486	0.000	0.499	0.652	Support	1.244		0.538
H5: FAT→ PUI	0.487	0.061	7.983	0.000	0.387	0.587	Support	2.035	0.620	0.306
H6: ANX→PUI	0.362	0.044	13.069	0.000	0.251	0.465	Support	2.035		0.170

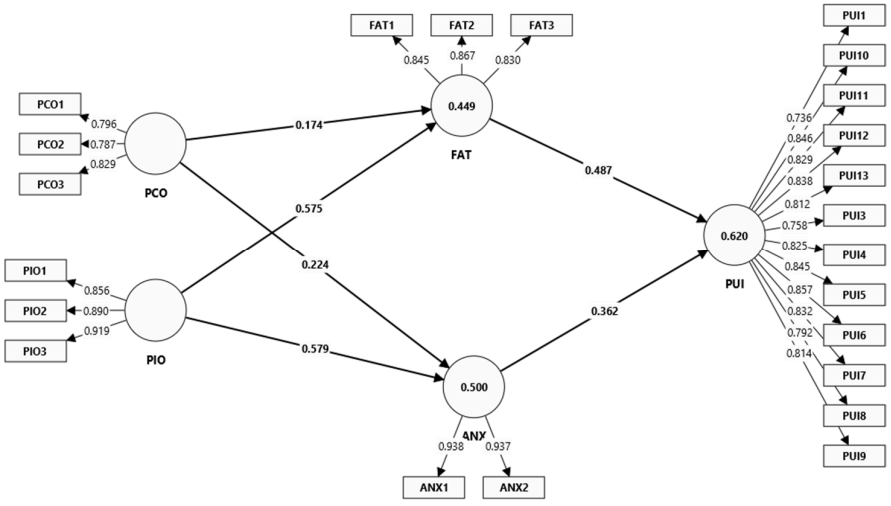

Fig. 2. Structural model assessment

Table 5
PLS Predict

	Q^2predict	PLS-SEM_RMSE	LM_RMSE	PLS-SEM – LM	Interpretation
ANX1	0.428	0.753	0.752	0.001	Medium
ANX2	0.434	0.775	0.785	-0.010	
FAT1	0.249	0.805	0.806	-0.001	Medium
FAT2	0.234	0.875	0.886	-0.011	
FAT3	0.433	0.726	0.704	0.022	
PUI1	0.323	0.855	0.851	0.004	Weak
PUI10	0.531	0.726	0.663	0.063	
PUI11	0.457	0.750	0.720	0.030	
PUI12	0.468	0.707	0.675	0.032	
PUI13	0.444	0.747	0.715	0.032	
PUI3	0.379	0.791	0.776	0.015	
PUI4	0.403	0.800	0.785	0.015	
PUI5	0.433	0.791	0.770	0.021	
PUI6	0.430	0.804	0.785	0.019	
PUI7	0.424	0.787	0.764	0.023	
PUI8	0.339	0.803	0.799	0.004	
PUI9	0.388	0.778	0.765	0.013	

The predictive power of the structural model was accessed using PLSpredict (Shmueli et al., 2019). PLSpredict was to verify the predictive relevance of the current research model (PLS-SEM_RMSE) as compared to the future model (LM_RMSE). Thus, the majority of the new values, and outcomes of (PLS-SEM_RMSE – LM_RMSE) are lesser for anxiety and SNS fatigue, which indicates that anxiety and SNS fatigue have a medium predictive power, however, passive usage intention has a weak predictive relevance as shown in Table 5.

6. Discussion And Conclusions

By adopting a C-A-C approach, this research examined the antecedents of passive usage intention. According to the findings, passive usage intention of SNS is significantly predicted by perceived cognitive overload, perceived information overload, SNS fatigue, and anxiety. The outcome of our study provides beneficial insights into the factors behind SNS passive usage intention and its development in the Malaysian context, motivating social groups to implement measures to avoid the negative sides of SNS such as information overload and cognitive overload. Thus, users' mental health and active usage behavior can be improved. Through a pathway analysis, perceived cognitive overload significantly impacts SNS fatigue. It coincided with the research by Jiang (2022) and Sheng et al. (2023), who investigated the association between them, noting that individuals' limited cognitive capability has been exceeded by the massive amount of information they encountered, thus producing negative feelings, such as fatigue. The results of this research suggest that SNS users in Malaysia are unable to process excessive and unwelcome information due to their finite capability, which leads to their stressful states. Consistent with the hypothesis, perceived cognitive overload has a significant relationship with anxiety. According to Huang et al. (2022) who pointed out that individuals would generate negative emotional reactions due to cognitive overload. As indicated by Xu and Yan (2023), the mismatch between information and individuals processing resources would result in negative emotions such as anxiety. The findings in this research imply that SNS users are facing a large amount of information, which makes them invest efforts to comprehend and process, thus depleting their cognitive energies.

Afterward, perceived information overload is found to be positively predicted by SNS fatigue. This finding is supported by Islam et al. (2021), in which the research analyzed their relationship and concluded that information overload makes people derive negative emotions, this is because the human brain is finite to afford cognitive load. It is also consistent with the result of Li et al. (2024) who revealed a positive effect of information overload on fatigue, suggesting that the constant updating of information in social media enables users to invest time and energy to digest. As a result, users would experience physical or emotional lassitude. This finding in our research implies that SNS users' fatigue, as a form of emotion, is triggered because of an extensive amount of information and their limited processing ability. Anxiety, another negative emotional reaction, is validated to be influenced by perceived information overload. It is empirically confirmed by the findings of Cao et al. (2021) which researchers summarized that consumers' negative emotional symptoms may occur when the amount of health information has surpassed their processing ability. In the current study, it suggests that a large amount of information acquired from SNS platforms makes them feel anxious.

Subsequently, SNS anxiety is revealed to positively affect the passive usage intention of SNS, which is congruent with Dai et al. (2020) who stressed that social media users with fatigue tend to take a break from existing social media activities. Similarly, as highlighted by Baj-Rogowska (2023), users are inclined to discontinue using social media when they obtain undesired experiences from social media activities. In this research, the passive usage intention of SNS is validated to be driven by SNS users' unpleasant feelings such as fatigue derived from the SNS activities. This can be explained that avoidance or discontinuance of SNS content and information emerges as a strategy for users to reduce their level of such negative emotional symptoms. Lastly, anxiety is proven to positively predict SNS users' passive usage intention, which is in line with the perspective of Soroya et al. (2021) that anxious adults are not willing to seek health information. Consistently, Kokubun et al. (2022) illustrated that anxiety leads to the intention to withdraw from the current job due to the depletion of energy. In this research, our finding suggests that SNS users' anxiety may increase their intention to discontinue, avoid, or withdraw from SNS usage.

6.1 Theoretical implications

The findings bring several contributions. Firstly, the existing literature has primarily focused on the consequences of passive usage of social media (Valkenburg et al., 2022). However, what forms such circumstances have obtained less attention. In this research, the researcher provides a novel perspective by looking into the antecedents that result in the passive usage intention of SNS. This investigation expects to deepen the comprehension of prior researchers on the passive usage behavior of SNS. Also, this researcher highlights negative consequences derived from SNS usage such as cognitive overload and information overload, which can exert detrimental effects on users' psychological states. Therefore, we expect it can help SNS users understand how their negative emotions are formed in the process of using SNS.

Subsequently, this research is carried out by drawing on a C-A-C framework. Considering there is less empirical research applying this theoretical model in the context of SNS, our research confirms the C-A-C model in a different phenomenon. As assumed, the findings evidenced the significant effect of perceived overload (cognitive overload and information overload) on the users' emotional state (SNS fatigue, anxiety), which can affect their behavioral reactions (SNS passive usage intention). Based on the findings, we argue that the C-A-C model is a beneficial and robust theoretical model to understand how cognitive factors can predict behavioral reactions through affective factors in the field of SNS.

6.2 Practical implications

The findings benefit the service providers and SNS users. As for service providers, this research discussed the formation of the current circumstance and passive usage intention of SNS. The current study presents insights to service providers to understand what results in the discontinuance usage of SNS among its users. Hence, they are suggested to pay attention to decreasing information overload by creating information screening mechanisms and reducing redundant information and misinformation. In that, the user's experience can be improved. As for system functions, the undo function may increase the complexity level of users to acquire the precise information they need. Service providers are also recommended to simplify the functions and interfaces of SNS, ensuring the accuracy of information obtained by users.

Apart from that, the findings indicate that SNS fatigue and anxiety will discourage SNS users from continuing to use it in their daily lives. SNS users are suggested to be aware of the negative side of SNS and engage in the prevention of cognitive overload and information overload, avoiding the potential occurrence of negative emotions. Filtering information can be recommended as a strategy to reduce information overload. SNS users can delete irrelevant information and select the information they need. Prioritizing information that is important to them is conducive to avoiding processing excessive amounts of information that exceeds their cognitive capacity and depletes their energies.

6.3 Limitations and future research directions

We acknowledge some limitations in our research. Firstly, the research is carried out in the field of SNS, which might weaken the generalizability. Future research can investigate the phenomenon of passive usage intention in the context of specific SNS platforms, such as YouTube, Instagram, or TikTok. Secondly, perceived overload (cognitive overload and information overload) is studied as a cognitive factor that predicts affective factors and cognitive factors. However, the result may not be generalized as there are additional cognitive factors that should be taken into consideration. Future researchers can focus on other SNS-related factors such as perceived quality, perceived value, and complexity. Lastly, the samples recruited are SNS users in Malaysia. Future studies are recommended to examine whether the results are applicable if the respondents are from other regions and continents.

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