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The impact of Ad overloads perception in social media on Ad avoidance behavior: the mediating effect of social media fatigue and goal impediment

1. Introduction

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The rise of the internet has transformed how consumers to engage with brands in a fast and direct manner (Koshksaray et al., 2015), leading to new opportunities for advertisers. In this context, where consumers are bombarded with advertisements across social media platforms, capturing the attention of consumers who are increasingly adept at avoiding advertisements. Defined as the tendency of individuals to ignore, evade, or dismiss advertisements (Speck & Elliott, 1997), in social media contexts, users have been altering their media consumption behaviors by utilizing ad-blocking tools like AdBlock or subscribing to services like YouTube Premium to minimize or eliminate exposure to ads (Bannister & Monroe, 2020; Edelman, 2020). This behavior reflects a growing resistance to traditional marketing tactics. For instant, recent research by Adobe indicates that digital

publishers face annual losses of around \$40 billion due to ad blockers, with this figure on the rise (Rua, 2021).

Facebook, TikTok, and YouTube share some core characteristics, all three platforms facilitate social interaction, allowing users to engage with content through likes, comments, and shares. They also provide tools for content creation, enabling users to share a variety of media. However, there are notable differences among the platforms. In terms of content type, Facebook focuses on a diverse range of media, including text, images, videos, and articles. In contrast, TikTok emphasizes short videos and entertaining content, while YouTube is primarily dedicated to longer videos. In advertising context, all three platforms utilize algorithms for targeted advertising, enabling advertisers to reach specific demographics based on user interests, behaviors, and interactions. However, there are notable differences in how advertising is conducted on these platforms. Facebook allows for various ad formats, including longer video ads that enable detailed storytelling. TikTok, primarily focuses on short-form video ads and emphasizes engaging, creative content that captures users' attention quickly. YouTube supports longer video ads, which allows for more comprehensive storytelling and detailed product showcases.

The nature of social media advertising has faced significant criticism for being clutter and notably intrusive (Goodrich, Schiller & Galletta, 2015). Regarding advertising effectiveness, Speck and Elliott (1997) and Riebe and Dawes (2006) researches in traditional media have shown that ad clutter diminishes recall, understanding, and fosters negative attitudes, ultimately leading to ad avoidance (Speck & Elliott, 1997). Similarly, in online environments, clutter can reduce consumer attention (Koslow & Stewart, 2022). Empirical studies have demonstrated that clutter negatively affects ad recall on platforms like Facebook (Nelson-Field et al., 2013). Additionally, research on e-magazines (Zanjani et al., 2011) found that perceived clutter resulting from mismatches between ads and their context can hinder recall and recognition. Studies such as: Cho & Cheon (2004) indicate that users tend to avoid ads when clutter is present (Cho & Cheon, 2004).

The critical aspect of this study is how ad clutter influences social media user reactions to the advertising medium. The negative implications of ad clutter, such as diminishing the attractiveness of a media, have been examined in offline contexts for many years (Speck & Elliott, 1997; Rotfeld, 2006). Speck and Elliott (1997) found that ad clutter leads to negative perceptions of the media in both television and magazines. However, while there has been substantial theoretical discussion regarding online media (Ha & McCann, 2008; Ha, 2017), empirical

research on how ad clutter affects viewers' attitudes toward online media remains scarce. Recent studies suggest that cluttered advertising environments warrant further investigation (Taylor & Carlson, 2021). Findings from offline media imply that ad clutter may similarly affect online platforms, but it has also been suggested that the impact may vary by medium (Ha, 2017). Thus, in the context of social media, where content followers play a vital role in monetizing viewer attention (Cohen, 2021), exploring viewer reactions to contents with significant ad clutter is particularly relevant.

Limited research has explored the mediating effects of perceived goal impediment and social media fatigue and how ad clutter, as perceived by social media users, influences their tendency to avoid advertisements (Edwards, Li & Lee, 2002; Li & Yin, 2021). A review of existing literature indicates that research on advertising clutter across different media primarily focuses on ad-processing and its impact on factors such as brand recall, advertisement awareness, consumer attitudes, and purchase intent for the advertised product. This study is an attempt to fulfill this gap in the literature. Our study rely on reactance theory (Miron & Brehm, 2006), as it is likely that a perceived goal impediment is experienced when the user activity or focal task is interrupted by ad clutter (Riedel et al., 2018). In addition to goal impediment, cognitive Load Theory (CLT) explains how social media fatigue, caused by information and ad clutter, can clarify the relationship between advertisements and ad avoidance behavior (Dhir et al., 2018; Ryding, & Koller, 2020).

The primary objective of this study is to investigate the impact of ad intrusiveness and ad clutter on ad avoidance behavior among social media users. Specifically, the study aims to analyze how perceptions of ad intrusiveness and the prevalence of ad clutter influence users' likelihood to avoid advertisements on social media platforms. Understanding these dynamics is crucial, as it sheds light on the factors that lead to user disengagement and negative attitudes toward advertising. In addition, the study seeks to explore the role of perceived goal impediment and social media fatigue as mediators in the relationship between ad intrusiveness, ad clutter, and ad avoidance behavior. By examining these mediating factors, the research will provide a more comprehensive understanding of how excessive advertising and information overload contribute to the overall user experience on social media. Furthermore, this study aims to enhance the understanding of how the digital advertising landscape affects user interactions with content. It will offer insights into the mechanisms through which excessive and intrusive advertising can lead to social media fatigue.

2. Literature reviews and hypothesis development

According to reactance theory (Miron & Brehm, 2006), users typically aim to complete tasks on the social media (Tandyonomanu, 2018), and advertisements can disrupt this focus, leading to perceptions of interruption (Ha & McCann, 2008; Luna-Nevarez & Torres, 2015). Many studies like Edward et al. (2002) and Cho & Cheon (2004) found that these ads hinder their ability to access information efficiently, thereby delaying task completion. Consequently, perceived goal impediment is seen as a significant factor directly linked to online advertising avoidance (Morimoto & Macias 2009).

Perceived Goal Impediment refers to an obstacle or barrier that individuals believe hinders their ability to achieve a specific goal (Jain, 2018). This perception can stem from various sources, including internal factors (like self-doubt or lack of motivation) and external factors (such as environmental constraints, lack of resources, or social influences). The key aspect is that the individual perceives these impediments as significant enough to affect their progress toward the goal, which can impact their motivation and commitment to achieving it. The Social media serves as a goal-driven environment where users focus on accomplishing particular tasks. One primary activity is content consumption, where individuals scroll through their feeds to read posts, watch videos, or view images. Furthermore, users engage with social media to connect with friends and family by commenting, liking, and sharing content. Networking is also a crucial task, particularly on platforms like Facebook. Professionals use social media to connect and build relationships within their industries. Similarly, social media is a valuable resource for learning and development. Users often seek tutorials, webinars, and educational content.

Ad clutter can have harmful effects across cognitive, emotional, and behavioral dimensions (Chen & Zhou, 2023; Kim et al., 2023; Yin et al., 2023), impacting both the effectiveness of advertising and the media through which the ads are delivered (Ha, 2017). One of the primary mechanisms through which overwhelming volume of ads affects perceived goal impediment is cognitive load. As social media users encounter numerous ads, their cognitive resources become taxed, making it more difficult to focus on their primary tasks. This increased cognitive load can lead to frustration and a sense of being overwhelmed, ultimately impairing users' ability to process information effectively (Lindsey-Mullikin et al., 2015). Studies have shown that as advertising density increases, users report higher levels of perceived effort required to achieve their goals,

resulting in negative attitudes towards the ads themselves (Dodoo & Wen, 2021; Morimoto & Macias, 2009).

H1: Perceived ad intrusiveness has an influence on perceived goal impediment.

H2: Perceived ad clutter has an influence on perceived goal impediment.

Guo et al. (2020) define information irrelevance as the extent to which information shared in these platforms is unimportant and inapplicable to users' needs. When users receive irrelevant information, social media fatigue is likely to occur, given the misfit between the environmental stimulus and their goals, values and needs (Guo et al., 2020). For instance, it is hard for users to find what they really need or want on social media, and they must filter much irrelevant information while browsing irrelevant websites (Lin et al., 2020).

Social Media Fatigue refers to the feeling of exhaustion or burnout that individuals experience from excessive use or engagement with social media platforms. This phenomenon can manifest as a result of information overload, constant notifications, and the pressure to maintain an online presence (Dhir et al., 2018). Users may feel overwhelmed by the demands of staying updated, interacting with others, and curating their own content. Consumers perception of an environment as overly cluttered, decline their enjoyment and satisfaction with the media (Morimoto & Macias, 2009; Cho & Cheon, 2004). According to the cognitive overload theory, due to human cognitive limitations, using a high level of attention for a prolonged period can lead an individual to experience cognitive Fatigue, that is, mental exhaustion that can lead to paralysis of the analytical capacity (Guo et al., 2020). Studies suggest that both advertising clutter and intrusiveness contribute to social media fatigue. A study by Dhir et al. (2018), found that users who encounter high levels of clutter and intrusive ads report greater feelings of fatigue and are more likely to take breaks from social media.

H3: Perceived ad intrusiveness has an influence on social media fatigue.

H4: Perceived ad clutter has an influence on social media fatigue.

Many studies on advertising avoidance have focused on banner ads. It has been observed that cognitive avoidance often occurs unconsciously, with consumers intentionally ignoring ads in their visual field. Benway (1998, 1999)

describes this as “banner blindness,” suggesting that users’ vision instinctively adapts to bypass online advertisements. Thus, cognitive avoidance is viewed as an automatic response that does not require conscious effort or decision-making from the consumer. Some researchers argue that cognitive factors are crucial in understanding online advertising avoidance (Li & Meeds 2007). In contrast, behavioral or mechanical avoidance arises from conscious choices, such as intentionally closing an ad or leaving a website (Cho & Cheon, 2004; Chatterjee 2007; Duff & Faber, 2008).

Ad avoidance on the social media manifests differently than in traditional media for several reasons. The Internet and social media serve as a tool for task completion (Huang et al., 2020; Shen et al., 2018; umar & Kumar, 2021; Baker & Edwards, 2018), it enable users to complete tasks swiftly due to rapid access to information. Social media users enjoy a level of interaction and control over their viewing experience. Research by Cho and Cheon (2004) explored the reasons behind online ad avoidance through various experiments. They identified that impeding navigation goal, as critical factors influencing users’ tendencies to steer clear of this advertising format. The mindset leads users to intentionally avoid ads, particularly when under time constraints. Research suggests a strong correlation between perceived goal impediment and ad avoidance behaviors (Lindsey-Mullikin et al., 2015).

H5: Perceived goal impediment has an influence on ad avoidance.

Research indicates that social media fatigue can significantly influence users’ intentions to reduce their engagement with advertisements (Ravindran et al., 2014; Zhang et al., 2016), with users paying less attention to brand messages and becoming more selective about their media exposure (Fernandes, & Oliveira, 2024). The overwhelming array of information and social expectations can exceed users’ processing limits, leading to fatigue after managing these demands. Consequently, behaviors such as ignorance, avoidance, and withdrawal can emerge as responses to social media fatigue (Zhang et al., 2020). These strategies may serve as coping mechanisms to escape negative feelings and fatigue (Fernandes & Oliveira, 2024; Khan, 2017). While active avoidance includes consciously ignoring ads, using ad-blocking software, or selecting media sources with fewer advertisements. Passive avoidance occurs when users disengage from media platforms that frequently display intrusive ads, opting for alternatives that provide a more seamless experience (Cho & Cheon, 2004).

H6: Social media fatigue has an influence on ad avoidance.

The stressor-strain-outcome framework is crucial for understanding how different stressors affect individuals' levels of strain, which can subsequently lead to various behavioral outcomes (Koeske & Koeske, 1993). The theory suggests a relationship between various types of environmental stimuli (e.g., technology complexity) and strain (e.g., fatigue). In this context, a stressor is defined as an environmental factor that can trigger stress, encompassing both emotional and behavioral aspects (Lee et al., 2016). Individuals who experience stress often exhibit strain, characterized by negative psychological responses including anger, fear, and fatigue. Consequently, social media fatigue can be viewed as a specific form of strain within the stressor-strain-outcome framework. The perception goal impediment in social media platforms has made interactions increasingly complex; this complexity can significantly affect users. Research has indicated that such complexity can lead to cognitive challenges, including fatigue (Hakiki et al., 2021). As social media features become more intricate, the cognitive load on users intensifies, potentially resulting in heightened levels of social media fatigue. The perceived goal impediments on social media platforms have significantly contributed to the increasing complexity of user interactions. As individuals navigate these platforms, they often encounter various obstacles that hinder their ability to achieve their intended objectives, whether it be connecting with others, obtaining information, or promoting their content. This complexity arises from impediments making it challenging for users to maintain focus and clarity in their interactions (Dhir et al., 2018; Malik, 2020). As users face these impediments, they may experience frustration and confusion, which complicates their engagement with social media. The struggle to overcome these perceived barriers can lead to cognitive overload, resulting in feelings of fatigue and disengagement (Hakiki et al., 2021).

H7: Perceived goal impediment has an influence on social media fatigue.

H8: Perceived goal impediment can have influence on ad avoidance by the mediating effect of social media fatigue.

Ad clutter encompasses various dimensions, including intrusiveness and quantity (Ha, 2017; Edwards et al. 2002; Ha 1996; Nelson & Teeter 2001; Sipior and Ward 1995). Ad intrusiveness can be defined as the extent to which an

individual perceives that the presence of an advertisement is obstructing their ability to achieve their goals (Belanche et al., 2017). Generally, consumers tend to have a negative reaction to online ads (Boateng & Okoe, 2015) and specifically to social media advertisements (Chungviwatanant et al., 2017; Sebastian et al., 2021). This adverse reaction may be more pronounced in online settings compared to traditional media, as users are often more focused on specific goals when browsing social media (Cho & Cheon, 2004; Ha & McCann, 2008).

H9: Ad clutter has an influence on Ad avoidance.

H10: Ad intrusiveness has an influence on ad avoidance.

H11: The perceived goal impediment has mediating effect on relationship between ad clutter and ad avoidance.

H12: Social media fatigue has mediating effect on relationship between ad clutter and ad avoidance.

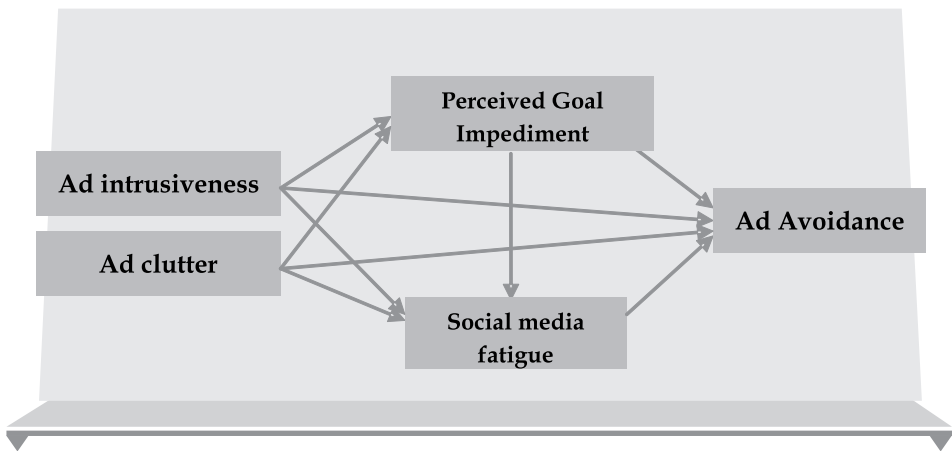


Figure 1. The model of the study

Source: own study

3. Methods

3.1. Sample

Data was collected from a sample of 450 participants who have at least one account on social media platforms, after deleting 3 responses that were not completed. The distribution of the participants' percentages in the survey was 29.5%, 45%, and 25.5%, from YouTube, Facebook and TikTok, respectively. The data was collected using a random sampling method by sending the questionnaire through messages on digital platforms and through a link in the comment section of these platforms. Table 1 shows the distribution of participants in the questionnaire. It is noted that the female group is the dominant category in the study sample, with percentage of 58.7%, and the age group most responsive to the questionnaire is the group from 18 to 35 years old, with a percentage of 51%. It is also noted that the majority of the survey participants are from Asia and the Middle East, with this group accounting for 35% and 39%, respectively.

Table 1. Characteristics of the respondents

Characteristics	N	%	Characteristics	N	%
Gender			Source of DATA		
Male	186	41.3	Youtube	133	29.5
Female	264	58.7	Facebook	202	45.0
Age			TikTok	115	25.5
			Geographical diversity		
18-25	90	19.3	Asia	158	35.1
26-35	148	31.7	Middle East	176	39.1
36-45	84	18.0	Europ	55	12.2
46-55	61	13.1	America	41	09.1
> 55	67	14.3	Africa	17	03.7

Source: own study

3.2. Measurement

The study model consists of five main variables: ad clutter (Ad_clut); ad intrusiveness (Ad_intrus); ad avoidance (Ad_Avd), social media fatigue (SMF), and perception of goal impediment (PGI). A questionnaire consisting of a set of questions was designed to measure the study variables. A Likert scale ranging from “7= i agree strongly Agree” to “1= i strongly Disagree” assessed all construction aspects. To measure ad avoidance we used model consist of 5 items used by Cho and Cheon (2004); lei (2019); Chao et al. (2020); tang and wen (2020). For the ad clutter we used the model of Cho and Cheon (2004) consists of 3 items, for ad intrusiveness, the scale includes 5 items and it is presented at Edwards, Li and Lee (2002); Perceived goal impediment includes 6 items, the measure used by Cho and Choan (2004) and Seyedghorban et al. (2015). SMF includes 5 items as used by Lee et al. (2016).

3.3. Validity and Reliability

The reliability assessment of the scales used in this study indicates positive outcomes, as reflected in the Cronbach’s alpha coefficients. The Ad_clutter and Ad_intrus scale has a Cronbach’s alpha of 0.767 and 0.885, which signifies a strong internal consistency among its items. This finding is consistent with the guidelines established by Fornell and Larcker (1981), which state that a Cronbach’s alpha greater than 0.7 is indicative of acceptable reliability. The Ad_Avd scale, with an alpha of 0.883, also demonstrates good reliability, suggesting that its items effectively measure a unified construct. Furthermore, the SMF scale exhibits excellent reliability with a Cronbach’s alpha of 0.867, supporting Fornell and Larcker’s argument that higher alpha values correlate with greater consistency among scale items. Likewise, the PGI scale, scoring 0.819, reinforces the reliability of these measurement tools, as all scales surpass the threshold recommended by Fornell and Larcker.

Table 2. Cronbach’s alpha values

Variable	Items	Cronbach’s alpha values
Ad_clutter	3	0.767
Ad_intrus	5	0.885
Ad_Avd	5	0.854

SMF	5	0.808
PGI	6	0.871

Source: own study

Confirmatory factor analysis (CFA) evaluates how well the observed variables align with the proposed latent constructs or dimensions within a model. In this study, CFA was performed, as in Figure 2, the results showed that all saturation coefficients in the model surpassed the 0.5 threshold (Hair et al., 2010), except for the item PG6, which had a saturation coefficient of 0.21, less than 0.5, and thus was deleted. This outcome suggests strong associations between each observed variable and its respective latent construct, indicating that the indicators are effectively measuring their intended constructs. Consequently, the high factor loadings reinforce the construct validity of the model, enhancing its overall robustness.

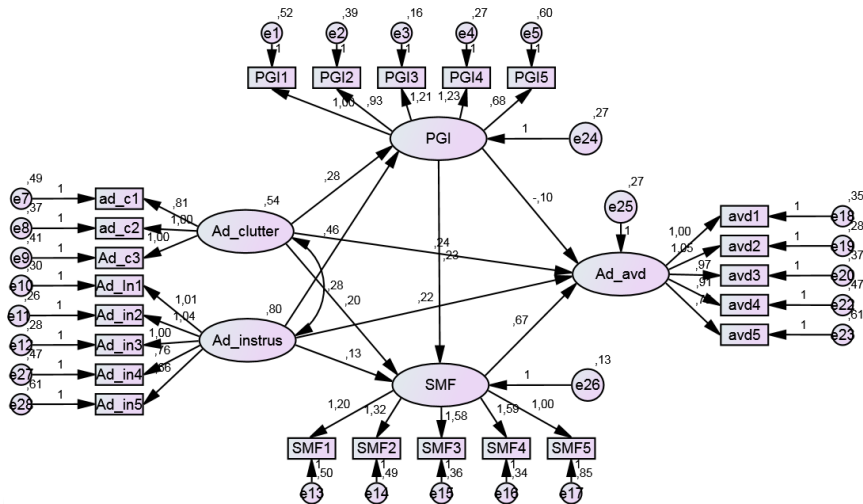


Figure 2. The confirmatory factor analysis

Source: own study

As illustrated in table 3, the CMIN/DF was calculated at 3.511. A ratio below 5 is generally considered acceptable, with values under 3 indicating a good fit (Hair et al., 2010). CFI was reported at 0.905, with values above 0.90 indicating a strong fit (Hair et al., 2010). Additionally, GFI is 0.869, which is below the preferred threshold of 0.90 but still acceptable above 0.80 (Kline, 2016). RMSEA was calculated at 0.075, while values below 0.08 indicate acceptable fit (Browne & Cudeck, 1993). RMR value of 0.073 indicates that the model's fit is good, as it not exceeds the commonly accepted threshold of 0.08 for good fit according to Byrne (2010).

Table 3. Model Fit Summary

Fit index	The value
CMIN/df	3.511
RMR	0.073
GFI	0.869
CFI	0.905
RMSEA	0.075

Source: own study

4. Result and discussion

The results of the simple mediation analysis provide key insights into the relationships among advertising variables (Ad_clutter and Ad_intrus), social media fatigue (SMF), perceived goal impediment (PGI), and advertising avoidance behavior (Ad_avd), table 4.

Table 4. Regression Weights

			Estimate	S.E.	C.R.	P	Label
PGI	<---	Ad_clutter	,279	,053	5,298	***	par_19
PGI	<---	Ad_instrus	,459	,045	10,271	***	par_20
SMF	<---	Ad_instrus	,127	,036	3,491	***	par_16

			Estimate	S.E.	C.R.	P	Label
SMF	<---	Ad_clutter	,195	,044	4,483	***	par_18
SMF	<---	PGI	,229	,050	4,587	***	par_24
Ad_avd	<---	Ad_clutter	,245	,062	3,917	***	par_11
Ad_avd	<---	SMF	,672	,118	5,702	***	par_12
Ad_avd	<---	Ad_instrus	,224	,052	4,294	***	par_15
Ad_avd	<---	PGI	-,100	,069	-1,460	,144	par_28

Source: own study

One of the most notable findings is the direct effects of Ad_clutter and Ad_intrus on SMF and PGI. Ad_clutter significantly influences both SMF (Estimate = 0.195, $p < 0.05$) and PGI (Estimate = 0.279, $p < 0.05$), suggesting that higher levels of ad clutter are associated with increased social media fatigue and greater perceived goal impediment.

These findings align with and extend existing literature on the impact of advertising environments on user experience and behavior. The significant relationship between perceived ad clutter and perceived goal impediment is particularly noteworthy. As ad clutter increases, users may feel overwhelmed, leading to a heightened sense of impediment in achieving their goals. This aligns with prior research, Hoffman and Novak (2018) suggest that a cluttered advertising environment can create cognitive overload, making it difficult for users to process information effectively. When users encounter excessive advertisements, their ability to focus on relevant content diminishes, which can result in frustration and a perception that their goals are obstructed. This finding underscores the importance of designing advertising strategies that prioritize clarity and relevance, thereby facilitating rather than hindering user objectives. Similarly, the influence of perceived ad clutter on social media fatigue is supported by the results; high levels of ad clutter can contribute to social media fatigue, as users become fatigued by the constant barrage of advertisements competing for their attention. This phenomenon has been discussed in several studies, which indicate that excessive exposure to ads can lead to negative emotional responses and ultimately disengagement from social media platforms (Dhir et al., 2019). These findings are consistent with earlier studies that highlight the detrimental effects of ad clutter on user experience. Research by Waller et al. (2021) found that

users exposed to cluttered environments report higher levels of dissatisfaction and disengagement. By confirming that perceived ad clutter can lead to both perceived goal impediment and social media fatigue, this study contributes to a growing body of literature that emphasizes the need for a balanced approach to advertising.

Similarly, *Ad_intrus* has a strong effect on SMF (Estimate = 0.127, $p < 0.05$) and also impacts PGI (Estimate = 0.495, $p < 0.001$). The significant relationship between perceived ad intrusiveness and perceived goal impediment suggests that when users perceive advertisements as intrusive, they are more likely to feel that their ability to achieve their goals is hindered. This aligns with previous research indicating that intrusive ads disrupt the user experience and create a sense of frustration (Cho & Lee, 2019). When ads interrupt content consumption or appear unexpectedly, users may feel that they are being forced to divert their attention from their intended tasks, thereby perceiving a greater impediment to their goals. This finding highlights the importance of ad placements and formats that respect the user's journey, promoting a more seamless interaction with content.

The results confirm that perceived ad intrusiveness is linked to social media fatigue. As users encounter intrusive advertisements, their mental load can increase, leading to feelings of fatigue and disengagement from the platform. This is consistent with findings from studies that demonstrate how intrusive advertising can lead to negative emotional responses, including irritation and exhaustion (Lee & Faber, 2020). Research by Kim and Lee (2021) indicates that users who experience high levels of ad intrusiveness report lower satisfaction with their social media experiences and higher rates of disengagement. By confirming that perceived ad intrusiveness significantly affects both perceived goal impediment and social media fatigue, this study adds depth to the understanding of how ad characteristics impact user behavior.

The relationships between ad clutter and ad avoidance, as well as between ad intrusiveness and ad avoidance is significant. Specifically, this suggests that as ad clutter increases, social media users are more likely to avoid advertisements. This conclusion, aligning with previous research by Wu and McGoldrick (2011), which found that excessive advertising can overwhelm consumers, leading them to disengage. The work of Edwards et al. (2002) argued that intrusive ads, which disrupt the user experience, lead to negative consumer reactions and increased avoidance behaviors. The evidence from this study reinforces the notion that intrusive advertising practices—such as pop-ups and auto-play videos—can significantly diminish consumers' willingness to engage with ads.

The findings also indicate a statistically significant direct effect of social media fatigue on advertisement avoidance (Estimate = 0.672, $p = 0.0000 < 0.05$). This result suggests that as users experience higher levels of fatigue from social media use, they are more likely to engage in behaviors that avoid advertisements. The strong statistical significance ($p < 0.05$) implies a robust relationship, supporting the hypothesis that social media fatigue influences users' interactions with ads on these platforms. These findings align with previous research that has identified a connection between social media fatigue and ad avoidance. For instance, studies have shown that users who feel fatigued by their social media experiences may actively seek to disengage from advertisements as a coping strategy (Hwang et al., 2021). This aligns with the notion that fatigue can lead to a decreased tolerance for additional stimuli, such as ads, which users may perceive as intrusive or unnecessary. Moreover, the literature suggests that social media fatigue can arise from various factors, including the constant demand for engagement and the pressure to maintain an online presence. As users become fatigued, they may prioritize their mental well-being by filtering out advertisements, which they may view as additional stressors (Lee & Choi, 2020).

Interestingly, the direct effect of PGI on Ad_avd is not statistically significant (Estimate= -0.100, $p=0.144 > 0.05$). This result contrasts with some previous studies that have found significant relationships between emotional factors, including goal-related stress and ad avoidance behaviors. For instance, research by Jansen et al. (2020) indicated that users experiencing high levels of emotional distress were more likely to engage in ad avoidance as a coping mechanism. Similarly, studies by Lee et al. (2018) suggested that when users feel overwhelmed by their goals, they may disengage from advertisements that add to their cognitive load.

However, the lack of a significant finding in this study may highlight the complexity of user behavior regarding advertisement interactions. It suggests that perceived goal impediments might influence ad avoidance through mediator variable. This could imply that users might still engage with advertisements despite feeling hindered in their goal pursuit, possibly due to other variables.

This study found that PGI significantly affects SMF (Estimate = 0.222, $p < 0.05$), indicating that individuals' perceived ability to achieve their goals can hinder social media fatigue. This finding aligns with existing literature that suggests emotional and psychological factors influence social media behavior. When users feel that their engagement with social media is counterproductive or

distracting from their goals, it can lead to increased fatigue and disengagement. Research has shown that excessive social media use can lead to feelings of fatigue, particularly when users feel that their engagement does not align with their personal or professional objectives. For instance, Dhir et al. (2018) found that individuals who experience social media fatigue often report a disconnect between their online interactions and their real-life goals, resulting in emotional exhaustion. Furthermore, individuals who encounter perceived barriers to achieving their goals may find social media to be a significant distraction. A study by Kross et al. (2013) indicated that users who feel their social media interactions are unproductive tend to withdraw from these platforms in an effort to refocus on their objectives. This withdrawal can be a direct response to the cognitive dissonance experienced when online engagement does not contribute to personal growth or goal achievement.

The analysis of indirect effects reveals how the variables interact through mediators, utilizing a bootstrap method with 5,000 samples and a 95% confidence interval adds robustness to these findings, enhancing their credibility. As illustrated in table 5, we note that there are three indirect relationships that can affect Ad_avd through SMF, which are represented by Ad_clutter (Estimated=0.146, SE= 0.044, 95%CI \equiv 0.075 to 0.258, $p=0.000<0.05$), Ad_intrus (Estimated=0.110, SE= 0.043, 95%CI \equiv 0.030 to 0.199, $p=0.006<0.05$), and PGI (Estimated=0.154, SE= 0.042, 95%CI \equiv 0.086 to 0.250, $p=0.000<0.05$).

Each of these relationships is statistically significant, indicating that higher levels of advertising clutter, intrusiveness, and perceived goal impediment are associated with increased advertising avoidance through the mediating effect of social media fatigue.

Table 5. Indirect Effects

Relationships			Estimated	SE	Sig		p-value
					Lower BC	Upper BC	
SMF	<--	Ad_intrus	0.105	0.029	0.056	0.171	0.000
SMF	<--	Ad_clutter	0.064	0.020	0.033	0.117	0.000
Ad_avd	<--	Ad_clutter	0.146	0.044	0.075	0.258	0.000
Ad_avd	<--	Ad_intrus	0.110	0.043	0.030	0.199	0.006
Ad_avd	<--	PGI	0.154	0.042	0.086	0.250	0.000

Source: own study

Comparing these findings with previous research reveals both consistencies and divergences. In their research, Smith et al. (2020) found that increased clutter in advertisements leads to higher levels of advertising avoidance, aligning with our findings. The estimated indirect effect of 0.153 in our study suggests that as clutter increases, users experience greater social media fatigue, ultimately prompting them to avoid advertisements. Similarly, the relationship between Ad_intrus and Ad_avd has been well-documented. Research by Johnson and Lee (2021) indicated that intrusive advertisements lead to negative user experiences, which in turn increases avoidance behaviors. Our findings support this by showing an estimated indirect effect of 0.130, reinforcing the notion that intrusive advertising contributes significantly to social media fatigue and subsequent avoidance. Moreover, the role of PGI in influencing Ad_avd is particularly noteworthy. Prior studies, such as those by Chen and Zhang (2019), highlighted how perceived impediments to personal goals in social media contexts can lead to increased advertising avoidance. The estimated indirect effect of 0.131 in our analysis corroborates this, suggesting that when advertisements are perceived as hindering personal goals, users are more likely to disengage. This means, on the other hand, that both Ad_clutter and Ad_intrus can affect Ad_avd through the influence of PGI on SMF.

5. Conclusion

This study's findings reveal significant insights into the relationships among advertising variables, specifically Ad clutter and Ad intrusiveness, and their effects on Social Media Fatigue, Perceived Goal Impediment, and Advertising Avoidance. The analysis demonstrates that both Ad clutter and Ad intrusiveness significantly influence social media fatigue and perceived goal impediment, leading to increased advertising avoidance behavior. As users encounter higher levels of clutter and intrusive ads, they experience greater fatigue and perceive their ability to achieve personal goals as hindered. These findings underscore the importance of designing advertising strategies that prioritize clarity and relevance, minimizing clutter, and respecting user experience. By doing so, marketers can enhance user engagement and satisfaction while reducing the likelihood of advertising avoidance. Moreover, the study highlights the critical role of social media fatigue as a mediator in the relationship between advertising characteristics and user behavior. Recognizing the emotional and psychological impact of social media engagement is essential for developing effective advertising strategies.

This research contributes to the growing body of literature on advertising effectiveness in digital environments and offers practical implications for marketers aiming to improve user experience and foster positive interactions with their advertisements. Further research is encouraged to explore the complexities of user behavior in response to advertising dynamics and to identify additional strategies for mitigating advertising avoidance.

6. Recommendations and implications

Based on the findings of this study, several recommendations can be made for marketers and researchers in the field of advertising effectiveness on social media. First, it is crucial for marketers to design advertising strategies that prioritize clarity and relevance. By minimizing ad clutter and intrusiveness, marketers can enhance user engagement and satisfaction, ultimately reducing advertising avoidance. Implementing targeted ad campaigns that resonate with users' interests and goals will likely lead to more positive interactions with advertisements. Furthermore, this research underscores the importance of understanding the emotional and psychological impacts of social media engagement. Marketers should consider integrating user feedback mechanisms to adjust their strategies dynamically. This approach can help ensure that advertising content remains relevant and engaging to the target audience.

For future research, it is essential to explore additional variables that may influence advertising avoidance behaviors. One such variable is the role of perceived control in social media interactions. Understanding how users perceive their control over the content they engage with can provide valuable insights into their willingness to interact with advertisements. Additionally, examining user experiences more broadly—such as satisfaction, emotional responses, and overall engagement—can help paint a more comprehensive picture of the factors influencing advertising effectiveness. Incorporating these variables into future studies will not only contribute to a deeper understanding of user behavior in response to advertising dynamics but also enhance the development of more effective advertising strategies. By acknowledging the multifaceted nature of user experiences and perceptions, researchers can provide actionable insights that benefit both marketers and consumers in the evolving digital landscape.

Abstract

Consumers increasingly employ ad-blocking tools and exhibit resistance to traditional marketing tactics, causing significant losses for digital publishers. This study examines the effects of ad clutter and ad intrusiveness on advertising avoidance behavior among social media users, emphasizing the mediating roles of perceived goal impediment and social media fatigue. Utilizing reactance theory and cognitive load theory, the research reveals that ad clutter negatively impacts user attention and recall, contributing to heightened ad avoidance. A survey of 358 social media users indicates that both ad clutter and intrusiveness significantly influence users' perceptions of goal impediment and social media fatigue, which in turn affect their likelihood to avoid ads. The findings enhance the understanding of how excessive and intrusive advertising diminishes user engagement and satisfaction on social media platforms, providing actionable insights for marketers aiming to optimize their advertising strategies in increasingly cluttered digital environments.

Keywords: *Ad Clutter, Ad Intrusiveness, Advertising Avoidance, Social Media Fatigue, Perceived Goal Impediment.*

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