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## Minimising display advertising avoidance on social media platforms – the role of exposure condition, personalisation, and personality traits

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**Abstract:** The paper examines the antecedent effect of ad personalisation and exposure condition on display advertising avoidance among social media users as well as the facilitating role of perceived novelty, ad skepticism and attitude toward online advertising in these relationships, within the framework of the stimulus organism response paradigm. Additionally, the study assesses the variations in these effects across personality traits. An online survey was conducted on Facebook, Twitter, and Instagram to collect data from 570 respondents, which was analysed using structural equation modelling. The results show mitigating effects of exposure condition and personalisation on ad avoidance and these effects were moderated by extraversion and neuroticism. Perceived novelty emerged as a partial mediator, and ATOA as a full mediator of these relationships. No mediating effects were found for ad skepticism. Findings proffer pertinent pointers for optimising effective display advertising execution to elicit favourable consumer responses in social media.

**Keywords:** social media advertising; ad avoidance; perceived novelty; exposure condition; personality traits; attitude toward online advertising; ATOA.

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## 1 Introduction

The online advertising landscape is currently dominated by online display advertising (ODA) which accounts for nearly a half of the market and is estimated to reach \$222.3 billion by the year 2022 (eMarketer, 2018). ODA is a form of online advertising in which advertisers pay relevant publishers or third parties (e.g., news sites, social networking sites, commercial websites, and Google web properties, etc.) to place graphic ads of diverse formats on their web pages. Although display ads can be placed on any type of website, they are more frequently seen on social media sites (Auschaitrakul and Mucherjee, 2017). This has been attributed in part to the increasing popularity of social media as essential marketing platforms, and Facebook, Twitter, LinkedIn, and Instagram are ranked as the top four with an ever-growing usership (Kellogg, 2020). As such, the integration of social media into the advertising activities of firms and brands has seen remarkable growth over the past few years, the evidence of which is seen in Facebook's accrual of \$17.4 billion of advertising revenue as at the third quarter of 2019 (Statista, 2019a). Although it makes good marketing sense for businesses to consider these media as suitable avenues for advertising in order to keep their brands in front of a wide customer base, the increasing clutter caused by copious display ads on social media platforms (SMPs), has made users more active in their avoidance strategies.

As a major impediment to advertising goals, ad avoidance – actions taken by consumers to evade exposure to advertising – has been a key focus for marketing and advertising researchers as well as practitioners (Cho and Cheon, 2004; Kelly et al., 2010), who have resorted to tailoring display ads and executing them with varying degrees of forced and voluntary exposure to break through the clutter and attenuate unfavourable consumer responses to ads on SMPs. For this reason, a growing but substantive stream of

research has addressed ad avoidance on social networking sites (e.g., Kelly et al., 2010; Youn and Kim, 2019; Dodo and Wen, 2020) and others have pointed to consumer-related (Walsh, 2010; Baek and Morimoto, 2012), ad-related (Kim et al., 2013; Bang et al., 2018), and media-related (Speck and Elliot, 1997; Chinchanachokchai and de Gregorio, 2020) variables as determinants of ad avoidance.

The basic nature of SMPs as avenues of self-disclosure and the rich personal information accessible on these platforms (Sethna et al., 2021) allow for the design of highly personalised ads relative to other online environments. Also, display ads on SMPs vary by format, and exposure condition is a key feature that differentiates ODA formats because while some give users control over the ad viewing process, and do not intrude on user content, others are imposed and do not provide control mechanisms (Choi and Kim, 2021; Odoom et al., 2022). However, little consideration has been given to personalisation as a predictor of ad avoidance in the context of social media, although studies (e.g., Bleier and Eisenbeiss, 2015; Tran, 2017) have pointed out its role in display advertising effectiveness, and research examining the possible influence of exposure condition in lessening ad avoidance on SMPs is even more sparse.

Prior studies have also pointed to personality traits as antecedents to social media usage (Correa et al., 2010) and same have been established as essential drivers of user perceptions and avoidance behaviours towards ads on social networking sites (Dodo and Wen, 2019, 2020). What remains to be seen however, is how user personality traits act as boundary condition that strengthens or weakens the effect of ad execution on ad avoidance. If advertisers are to appreciate how to deploy display ads more seamlessly on SMPs, then their understanding of the bearing of personality traits on the ad execution-ad avoidance nexus, seems worthy of attention. SMPs are fast becoming relevant information sources for users' consumption decision (Valentine, 2018) and they account for a substantial amount of ODA spending (Auschairakul and Mucherjee, 2017) – trends that are projected to increase in the future unabated (Choi et al., 2020). As such, it seems opportune to provide further insights into consumers' ad responses in this environment.

The present study, therefore, examines from the viewpoint of the stimulus organism response (SOR) paradigm.

- a how personalisation and exposure condition as two notable features influence consumers avoidance of display ads
- b how perceived novelty, ad skepticism and attitude toward online advertising (ATOA) as affective internal responses, intervene in the relationship between the ad characteristics and ad avoidance
- c how these effects vary for users with different personality traits – key areas, that have received limited attention in the ad avoidance literature.

In so doing, the study extends the theoretical understanding of the drivers of ad avoidance, contributes to the discourse on the importance of recognising the role of personality factors in online consumer behaviour, and provides pertinent pointers for optimising display advertising execution to elicit favourable responses in social media. The remainder of the paper is structured as follows. First, the literature and hypothesised model are discussed, followed by the methodological approach, and results from the analysis of data. The final section presents discussions from the study focusing on findings, theoretical and practical implications, conclusions, and future research avenues.

## 2 Literature review and hypotheses formulation

### 2.1 Ad avoidance in the context of social media

Speck and Elliot (1997, p.61) define ad avoidance as 'all actions by media users that differentially reduce their exposure to ad content'. Online ad avoidance is multidimensional comprising cognitive, affective, and behavioural components as espoused by Cho and Cheon (2004). The cognitive component refers to beliefs and evaluations consumers hold about ads, and the psychological defence mechanism that results in consumers deliberately ignoring ads they are exposed to on SMPs. The affective component is based on consumer's manifestation of negative emotional reaction toward display ads, and the behavioural component refers to the explicit and more effortful actions consumers take to evade display ads in the social media environment. Unlike, the cognitive and behavioural dimension that focus on explicit observable actions, the affective dimension addresses consumer dislike for or disapproval of ads (which we consider attitudinal) and so, like some prior studies (e.g., Youn and Kim, 2019; Van der Goot et al., 2018), the present study captures ad avoidance in the cognitive and behavioural dimensions only.

As pointed out earlier, social media have experienced remarkable growth as advertising platforms for brands, and so, users are barraged with streams of display ads that compete daily for their attention, causing them to pay selective attention to ads as well as avoid them. Generally, evolving technologies provide consumers with various means (e.g., installation of ad blockers or filters) of avoiding online ads and SMPs afford users an added latitude to control their experiences on such sites by defining the messages to which they are exposed and the contents they consume (Kelly et al., 2010). This is achieved through features that allow them to block/hide ads or certain contents from their timelines and newsfeeds as well as unfollow brands and unlike pages which demonstrates behavioural avoidance. During their social media activities, users have also learned to pay selective attention to content by skimming over their pages and timelines and reflexively ignoring (not looking at) ads in their newsfeed which amounts to cognitive avoidance. All of these make avoidance behaviours more pronounced in the social media environment. Online ad avoidance has long been indicated as a major obstacle for marketers and advertising practitioners (Baek and Morimoto, 2012; Fransen et al., 2015) – an assertion that still holds true – manifested by the increasing portions of marketing budgets allocated to personalised advertising and the divergent formats of display ads executed with varying levels of exposure conditions (Kim, 2018b; Odoom et al., 2022) in the bid to boost favourable consumer responses to ads.

For this reason and drawing on prior studies on online ad avoidance (e.g., Baek and Morimoto, 2012; Rejón-Guardia and Martínez-López, 2014; Dodox and Wen, 2020), this study proposes personalisation (as perceived by social media users) and exposure condition (which has received scant scholarly attention) as ad-related antecedents of ODA avoidance on SMPs and suggests perceived novelty, ad skepticism, and ATOA as internal consumer mechanisms that facilitate the effects of the determinants. The study as well introduces two personality traits (extraversion and neuroticism) as individual contingency variables that may strengthen or weaken the linkages between the anteceding factors and ad avoidance. These interrelationships are captured in Figure 1. By focusing on both ad-related and consumer-related factors, the study provides insights crucial to the

discourse on online consumer behaviour and to the proffering of vital strategies for effective display advertising design and execution in the context of social media.

## *2.2 The stimulus role of personalisation and exposure condition*

The SOR paradigm addresses how cues in an environmental setting arouse the cognition and emotions of individuals resulting in approach or avoidance behavioural outcomes (Jacoby, 2002). The model espouses the interrelationship among three components, the first, the 'stimulus', represent qualities of any stimulus object which can generate some internal response. In the context of display advertising, design or executional features function as stimuli generating some cognitive or affective consumer response (Tang et al., 2014). This current study considers two executional features that typify display ad on SMPs – personalisation and exposure condition – as the stimuli for social media users.

### *2.2.1 Personalisation*

Personalisation describes message contents tailored for consumers, based on their uniquely expressed or implied preferences, personal information (Baek and Morimoto, 2012), as well as demographics, browsing and location-based information (Bang et al., 2019). As a key feature that sets online advertising apart from its offline counterparts, personalisation is increasingly used by practitioners in their display ads as it is assumed to offer benefits to both advertisers and consumers (De Keyzer et al., 2015). Particularly, personalisation, as perceived by social media users plays a significant role in determining advertising effectiveness on such platforms (Tran, 2017). However, findings regarding consumer responses to personalised ads are ambivalent. On the one hand, some studies suggest that personalised advertisements are more engaging because they correspond with consumers' preferences and interests (Walrave et al., 2018; Odoom, 2022). It has also been argued that personalisation grants consumers the opportunity to acquire relevant advertising information without facing random, obtrusive, and irrelevant advertisements (Goldfarb and Tucker, 2011), and for this reason, personalised ads are found to be more effective, appealing, and memorable than non-personalised advertisements (Tucker, 2014).

On the other hand, tracking of online activities and collection of personal/behavioural data, are at odds with consumers' privacy concerns causing them to perceive personalised ads as threats to the freedom to exercise control over their private information (Baek and Morimoto, 2012). And so, there is a growing stream of studies to indicate that perceptions of intrusiveness are heightened for consumers when personalised advertisements reflect to a great extent their precise preferences (Van Doorn and Hoekstra, 2013; Bleier and Eisenbeiss, 2015). Personalised ads on SMPs have a high degree of fit between consumer needs and brand benefits and are typified by high relevance and personal identification (Tran et al., 2020). Because social media usage is largely driven by the need to while away time, to seek entertainment and to sustain relationships, with a few users gradually using these platforms for their consumption decisions (Valentine, 2018; Dodoo and Wu, 2019), personalised ads are likely to create considerable preference matches leading to attention allocation, heightened ad elaboration and positive responses relative to their generic counterparts. In essence, it is expected that display ads that social media users perceive as personalised may evoke favourable perceptions and mitigate the tendency to engage in avoidance behaviours:

H1 Personalisation is negatively related to ad avoidance.

### 2.2.2 *Exposure condition*

Advertising exposure refers to the presentation of an ad to target audiences or viewers and exposure condition in this study concerns the voluntary or forceful exposure to display ads. According to Li and Leckenby (2004), in conventional media, television commercials depict instances of forced exposure because they disrupt the viewing process of audiences during or in-between programs whereas newspaper ads exemplify voluntary exposure since readers may choose to view them or not when reading. The internet, however, has the ability to display advertisements in both voluntary and forced exposure modes. Given the ability of social media users to control their online experience and their growing tendency to use ad filters to prevent and/or hide the display of ads on their timelines and newsfeed (Kelly et al., 2010; Dodoo and Wen, 2020), advertisers and publishers have found means through evolving media technologies to generate varying levels of exposures. These varying levels are explained by the extent to which consumers feel compelled to watch an ad. Exposure is thus forced, when it takes away viewers' freedom to choose what they are exposed to and when they are exposed to it (Fransen et al., 2015).

Exposure condition is one criterion that distinguishes ODA formats because some formats allow viewers to close or skip an ad window as well as choose to view an ad, whereas others are imposed and do not provide these features. A pop-up ad for instance, is illustrative of forced exposure, since the ad is run exclusive of any user action and disappears mechanically after a given time passes. More recent control mechanisms include provision of 'ad skip' option in in-stream video ads that allows viewers to watch the full-length ad or skip after some time elapses (mostly five seconds), and 'ad time display' option that shows the time left (in seconds) for the ad to end. The former depicts behavioural control and the latter, cognitive control which allows users to assess, decipher and understand information in an exposure situation in order to project what is likely to subsequently occur (Choi and Kim, 2021). Social media newsfeed ads exemplify lesser degree of forced exposure because, although such ads appear as part of the organic content, users have the option to view or scroll past them as such they provide consumers, decisional control.

Studies conducted into exposure condition, though limited, suggest that forced exposure situations result in negative attitude and ad avoidance but when consumers perceive control of the ad viewing process, negative advertising outcomes are diminished (Li et al., 2002). It is pointed out in an earlier study by McCoy et al. (2008) that when consumers have control and the option to remove an ad that obscures the content they are accessing, perceived intrusiveness is lessened. Although, Hegner et al. (2015) found no effect of skipping control, Choi and Kim (2021) as well as Aslam et al. (2021) studied ads with skippable and ad time display features and established the importance of their controllable mechanisms in enhancing positive consumer attitude, as well as reducing ad irritation and intrusiveness. Pashkevich et al. (2012) also found that skippable ads drive consumer engagement with the ad, relative to generic non-skippable ads. These outcomes have been explained from the viewpoint of psychological reactance which suggests that people are motivated to re-establish their freedom in a state of perceived loss of control (Brehm, 1966). Such instances are said to result in a heightened attractiveness of the

threatened activity (e.g., social media use), which makes the imposed alternative (e.g., display ad) less appealing.

In the social media environment, users are permitted a high level of control which determines the specifics of information consumption and message exposure, and similar expectation may be held of the display ads they are exposed to while on these platforms. Accordingly, unforced exposure conditions may facilitate favourable perceptions about online ads, causing users to devote their attention to the advertising message and as well lessen their inclination to avoid the ad. As such, the study posits that:

H2 Exposure condition is negatively related to ad avoidance.

### *2.3 Internal responses to social media display ads*

The ‘organism’ component of the SOR paradigm signifies consumers’ affective and cognitive states, which intervene in the relationship between the stimulus and consumers’ responsive behaviour following exposure (Kamboj et al., 2018). In this study, perceived novelty, ad skepticism, and ATOA are considered the organism elements, founded on prior positions that these are internal processes that direct consumer external responses to display advertising messages (Bleier and Eisenbeiss, 2015) in the online environment and as such, may facilitate the effects of the ODA characteristics on the avoidance responses of social media users.

#### *2.3.1 Perceived novelty*

Perceived novelty describes the extent to which consumers see an ad as new and/or exciting (Eisend, 2007). Novelty is reflected in the perception that a stimulus object (e.g., an ad or an aspect of it) is noticeably different from previously encountered ones (Tokunaga, 2013). Although it is a less studied concept in the ad avoidance literature, novelty perception is suggested as one of the underlying mechanisms that explains favourable consumer responses to advertisements (Dodox and Wu, 2019), and is produced by various stimulus-relevant components including distinctiveness of the stimulus attributes, placement, and presentation (Grigorovici and Constantin, 2004). Applying this viewpoint to display ads on SMPs, brings some considerations to bear on the discourse on personalisation and exposure condition.

First, the various SMPs have different personalisation options. Facebook, Instagram, and Twitter largely use demographic, geographic and interest-based data to personalise ad messages, and LinkedIn focuses on job titles and industry-specific data for ad personalisation. Also, there is more depth to personalisation on Facebook while Instagram’s is more streamlined, and Twitter uses unique keywords and hashtags whereas the others use topics. This difference in personalisation approaches could be relatively new depending on whether a consumer has had an initial exposure. Besides, there is constant evolution to the digital architecture of the various platforms allowing for new types of personalised ad designs and targeting. For example, most businesses are using geofencing to expose consumers to customised ads based on proximity (Key Media Solutions, 2016) and this is integrated into most of the social media sites. Although social media are replete with personalised ads, because personalisation requires more financial resource and time commitments relative to generic ads, it is still less common to see a

large volume of personalised ads (Dodoo and Wu, 2020), therefore, ads perceived by consumers' as matching their interest and preferences could be seen as innovative.

What is more, social media like most media are saturated by advertising messages, resulting in consistent emergence of new display ad formats on these platforms, deployed with varying levels of controllable options to break through the clutter and capture consumer attention. As mentioned early on, some display ads on SMPs provide controllable interfaces and others provide 'countdown timers' to show viewers how much time is left for an ad to end. The inclusion of these unique ad features by advertisers is still in the nascent stages on social media platforms and could be seen by consumers as innovative. Novelty is perceived when a stimulus object diverges from expectation (Sheinin et al., 2011) in this way, by providing varied means for consumers to exert control over their ad exposure whether behaviourally, cognitively or 'decisionally' (Choi and Kim, 2021), breaks from the monotony of generic ads, and imbues a certain level of inventiveness into such ads causing consumers to perceive them as novel.

Research broadly suggests that novelty in advertising attracts attention and induces favourable attitudinal and behavioural effects (e.g., Yim et al., 2012). This argument partly derives from the perspective of limited cognitive capacity in human information processing which maintains that, to process information perceived as novel, more cognitive resources are required (Hwang and Jeong, 2021). This results in reduced cognitive resources available for critical elaboration of ads and the subdual of persuasion knowledge which can assuage negative advertising responses (Wen et al., 2020). Given that unanticipated stimuli constitute novelty, a personalised ad on social media that uses an identification strategy, (i.e., an individual's name) causes consumers to fixate and view the ad longer – enhanced visual attention – which reduces attitudinal persuasion knowledge (Pfiffelmann et al., 2020). Similarly, early studies on display ads such as Brown (2002) established that ad clicking was higher among consumers who perceived online banner ads with pulldown menus as new relative to those who did not. The study therefore proposes the following hypotheses in relation to the linkages between personalisation, exposure condition, perceived novelty, and ad avoidance.

H3a Personalisation is positively related to perceived novelty.

H3b Exposure condition is positively related to perceived novelty.

H4 Perceived novelty is negatively related to ad avoidance.

H9 Perceived novelty mediates the relationship between

a personalisation

b exposure condition and ad avoidance.

### 2.3.2 *Ad skepticism*

Consumers are skeptical about an ad when they are suspicious or inclined to disbelieve the claims or messages the ad communicates (Obermiller and Spangenberg, 1998). Per the persuasion knowledge model (PKM), ad skepticism results from beliefs consumers develop about the tactics marketers employ in an attempt to persuade them (Friestad and Wright, 1994). It is, therefore, considered a coping strategy activated by a consumer's persuasion knowledge. Skepticism is conceptualised into two categories namely, pre-dispositional and situational. The former is an innate trait that is enduring and varies

among consumers with some exhibiting low levels of skepticism and others, high levels of skepticism, whereas situational skepticism is a transient state fashioned by motive in a particular environment (Obermiller and Spangenberg, 2000). Considering that the present study addresses skepticism as an outcome of display ad features in the context of social media, it focused on skepticism as a situational effect and it is evident from the literature that ad skepticism can be induced by several factors besides advertising claim, which include motives of the advertiser, product category, audience-specific factors and ad format (Baek and Morimoto, 2012; Zarouali et al., 2017).

It is argued that users see ads tailored based on their preferences as an attempt at manipulation, as such ads tend to generate privacy concerns (Jung, 2017) which make consumers skeptical (Kelly et al., 2010). This perspective is consistent with research on psychological reactance that espouses an affective dimension of reactance, explained as consumers' predisposition to dislike persuasive messages – usually expressed as a feeling of distrust – targeted toward them (Dillard and Shen, 2005). Nonetheless, previous studies suggest an opposing perspective that emphasised the upshots of personalised ads to consumers. In line with the concept of self-referencing, consumers are inclined to see personalised ads as relevant because they directly address their personal needs and preferences and provide useful information to guide consumption behaviour (De Keyzer et al., 2015). Even more so, Baek and Morimoto (2012) and Tran (2017) find in their studies that personalisation mitigates ad skepticism. Aligning with Youn and Shin (2020) that, personalised ads generate positive ad-related outcomes when consumers perceive more benefits than risks, it is expected that perceptions of ad personalisation will reduce social media users skepticism toward display ads.

Forced ad exposure is one of the key factors that affect users' unfavourable perceptions toward online ads (McCoy et al., 2008; Rejón-Guardia and Martínez-López, 2014) driven by the level of ad intrusiveness and users' inability to exert control over the ad and/or its contents. Earlier research on ad exposure conditions suggest that higher levels of forced exposure reduce favourable attitudes toward ads owing to reactance (Li et al., 2002) and control over selection of advertising content has been found in recent studies to elicit positive consumer attitude toward ads (Choi and Kim, 2021) even in repeated exposure situations. Since all ads have persuasion as their intent and consumers' recognition of this motive suggests that virtually all ads elicit a certain level of skepticism, it can be reasoned that if users perceive a certain level of control over their ad exposure, they could evaluate the ad more favourably which could induce feelings of trust and lessen their skeptical perceptions toward the ad.

According to Obermiller and Spangenberg (2000), the extent of consumer skepticism is a determinant of their advertising responses. Prior studies have established that consumers who are less skeptical about an ad are more likely to respond favourably toward the ad (Callister and Stern, 2007) because when consumers are skeptical, their interest in and reliance on the ad is lessened, which increases their inclination to avoid the ad (Speck and Elliott, 1997). In essence, consumers' distrust of advertising derived from skepticism, results in higher levels of resistance. Following the key premise of the SOR model, we envisage ad skepticism to function as an intermediate response, transmitting the effects of personalisation and exposure condition on social media users' avoidance of display ads. The study hypothesises that:

H5a Personalisation is negatively related to ad skepticism.

H5b Exposure condition is negatively related to ad skepticism.

- H6 Ad skepticism is positively related to ad avoidance.
- H10 Ad skepticism mediates the relationship between
  - a personalisation
  - b exposure condition and ad avoidance.

### 2.3.3 Attitude toward online advertising

Attitude toward advertising describes the learned predisposition to react in a constantly positive or negative manner to advertising (Lutz et al., 1983). The literature shows that such positive or negative inclinations are shaped by consumers' belief regarding certain attributes of advertising and may differ depending on the advertising medium (Sung and Cho, 2012). Although attitude toward advertising in general has long been regarded a vital factor in determining consumer responses to advertising, ATOA is only as old as the practice of online advertising. ATOA is a learned tendency that people cultivate as they perceive the benefits and drawbacks that online advertising provides them as well as others (Fransen et al., 2015). It, therefore, describes a general predisposition to like or dislike advertising messages delivered online. Considered as one of the major determinants of advertising effectiveness, ATOA is receiving growing focus in the online advertising literature as prior studies (Soiden et al., 2017) establish its role in impacting consumer responses to online ads driven by ad-related characteristics – personalisation, informativeness, exposure condition, interactivity – among others (Wang and Sun, 2010a; Odoom et al., 2022). It has been argued by studies such as Goodrich et al. (2015) that when individuals hold more positive attitudes toward online advertising, then the likelihood that such individuals would have favourable responses toward online ads is also higher. These arguments find support in the early pre-millennial work of Li et al. (2002) who point out that consumers' avoidance behaviour toward online ads are driven by their general negative attitudes toward online advertising. Since the favourable ATOA of consumers has been associated with several positive outcomes such as ad clicking and purchase intention (Goodrich et al., 2015) among others, it is plausible that user's ATOA in general will negatively affect their avoidance of the display ads to which they are exposed on SMPs.

Prior research has found that the effect of online advertising attributes on the behavioural responses of consumers is mediated by their ATOA (Wang et al., 2009). Also, a series of studies conducted by Wang and Sun (2010a, 2010b) across several cultural settings (e.g., USA, China, Romania) found ATOA as a mediator of the relationship between consumers' beliefs about online advertising in general and their behavioural responses of ad clicking. However, the mediating effect of ATOA in the ad characteristics – ad avoidance relationship in the context of display ads on SMPs is yet to be sturdily established. More importantly, since avoidance may be lessened if consumers find ads controllable and tailored to their personal preferences; and consumers are more likely to avoid ads if their ATOA is negative (Rejón-Guardia and Martínez-López, 2014), the study hypothesises that:

- H7a Personalisation is positively related to ATOA.
- H7b Exposure condition is positively related to ATOA.
- H8 ATOA is negatively related to ad avoidance.

H11 ATOA mediates the relationship between

- personalisation
- exposure condition and ad avoidance.

## 2.4 *The moderating role of personality traits*

The role of personality traits in the online ad avoidance literature has been under-researched in spite of prior studies that have established a link between them and consumer attitude and responses to advertising (Clark and Çalli, 2014; Souiden et al., 2017). The Big Five model – extraversion, conscientiousness, openness, neuroticism, and agreeableness – is the dominant personality framework considered to capture the entire makeup of an individual's personality (McCrae and Costa, 2007) but has been criticised by some researchers who mostly ignore some of the dimensions in their enquiries. Others also consider Eysenck's (1991) three-factor model – extraversion, neuroticism, and psychotism – as a more suitable representation of individual traits. While scholarly viewpoints concerning personality traits remain equivocal, extraversion and neuroticism emerge in some form in almost every espoused categorisation of traits (Mooradian, 1996). Considering this and the significant antecedent role these two traits were found to play in the avoidance literature (Dodoo and Wen, 2020), the present study addresses their effect in regulating the influence of exposure condition and personalisation on ad avoidance.

### 2.4.1 *Extraversion*

Extraversion is regarded as an essential facet of personality in the literature on online consumer behaviour particularly in social media usage situations (Winter et al., 2021). Extraversion is a trait that is characterised by sociability and a tendency to experience positive emotions (Hirsh et al., 2012). Previous research has demonstrated that extraverts have a higher likelihood to be frequent social media users, are very familiar with social media and its progression, and have a higher level of engagement with social media particularly, Facebook (Gosling et al., 2011; Ryan and Xenos, 2011). Extraverts are assertive, risk-taking, and excitement-seeking and have been reported to engage in higher levels of self-disclosure on social media (Bibby, 2008). Since the essence of personalisation is to tailor ads to individual preferences and communicative behaviours, extraverts may perceive relevance in personalised ads, and their familiarity with the social media setting may cause them to gauge such ads as an expected part of social media usage (Dodoo and Wen, 2019). More so, given their inclination to being the centre of attention, extraverts may be more responsive to self-relevant information, as such, a personalised ad on an SMP that is integrated with for instance, their individual name (i.e., an identification strategy), or promises a customised offer (i.e., an expectation strategy) may be perceived more favourably and so, could reduce their inclination to avoid the ad.

Extraverted individuals also have a general need for excitement which makes them receptive to novelty or new experiences (Rocca et al., 2002), and these characteristics are consistent with needs for cognition/information which are essential in consumers' assessment of advertising (Schweizer, 2006). For this reason, in situations of forced ad exposure, extraverted social media users may be less likely to perceive such ads as intrusive and may be less likely to attempt to re-establish control over their primary

activity, because the ad may serve as a thrilling refreshing cue that offers variety to the content and activities on their newsfeed. This may cause them to be more receptive toward forced exposure ads. The study thus, hypothesises that:

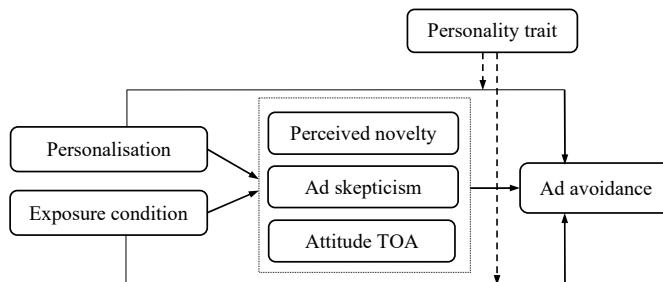
H12a The negative effect of personalisation on ad avoidance will be stronger among highly extraverted users.

H12b The negative effect of exposure condition on ad avoidance will be weaker among highly extraverted users.

#### 2.4.2 Neuroticism

Neuroticism is exemplified by a tendency to experience emotional instability, and is associated with feelings of boredom, insecurity, anxiety, and self-consciousness (Butt and Philip, 2008). Individuals high in neuroticism use the internet as an escape from loneliness (Ryan and Xenos, 2011) and because neurotics are more inclined to negative and unpleasant emotions; they use social platforms as a safe space for venting and self-expression (Ul Islam et al., 2017). Neuroticism has been associated with frequent but passive use of social media to engage in asynchronous communication which allows them the degree of freedom to control the timing, pace and content of their social interactions (Ryan and Xenos, 2011). Although neurotic consumers are not prone to posting true personal information on social networking sites, they are more likely to do so in anonymous situations (Wilson et al., 2010).

**Figure 1** Conceptual model



Neurotics have negative feelings toward advertising in general (Mooradian, 1996). Coupled with their goal-directed use of social media for escape and social support, it is likely that they may consider display ads on SMPs intrusive. More importantly, because neurotics are less likely to paint a true picture of themselves on these platforms (Seidman, 2013) owing to their anxious and insecure nature, they may not perceive 'personalised ads' as matching their interests and preferences. This could result in unfavourable responses toward such ads. What is more, individuals with high levels of neuroticism have a high susceptibility to psychological distress and are also prone to experiencing anger and frustration (Watts et al., 2019). For this reason, in forced exposure situations, where ads impinge on the freedom to control their general navigation on SMPs, highly neurotic users may undergo more pronounced levels of psychological reactance to regain control over their social experience culminating in avoidance responses. It is therefore, expected that:

- H13a The negative effect of personalisation on ad avoidance will be weaker among highly neurotic users.
- H13b The negative effect of exposure condition on ad avoidance will be stronger among highly neurotic users.

### **3 Methodology**

#### *3.1 Sample and data collection*

An online survey was conducted on the three social media platforms (Facebook, Twitter, and Instagram) of interest. To ensure that respondents were actual and regular users of these platforms, the link to the survey was posted on online community pages and sent to various accounts and handles who were also asked to forward it to their friends, and followers or others within their networks on these platforms. Also, to guarantee that responses were based on ODA, at the introductory part of the survey, display ads were explained to mean ‘graphic ads of different formats (images, text, animations, flash video, audio, etc.) shown on social media sites meant to deliver general brand advertising messages to users’, and respondents were asked to provide responses based on their knowledge, perceptions and experiences. Following this, any participant who responded ‘never’ to the qualifying question ‘how often are you exposed to online display ads while on social media?’ was not allowed to proceed with the survey. One attention check question was also placed in the instrument to guarantee that the study data is valid. The study data was collected in Ghana and the process lasted for eight weeks spanning December 2020 to February 2021.

Demographically, the respondents were fairly young (55.8% up to 30 years old), female (53.2%), workers (approximately 79%), and educated (undergraduate degree: 44.5%, postgraduate degree: 44.5%). Most reported Facebook as their primary SMP (65%), use their primary SMP daily (75.4%), reported high familiarity with online advertising (approximately 78%), and very frequent exposure to ODA (approximately 90%) on these SMPs.

#### *3.2 Measurement scales*

The items measuring the constructs were adapted from existing measures except exposure condition which was drawn from the literature with adjustments to fit the study context. All measurement items were anchored on a seven-point Likert ‘strongly disagree – strongly agree’ scale. Three variables – age, gender, and familiarity with online advertising – that were not of direct theoretical interest but could affect the relationship among the study variables were controlled for. The exact phrasings of the key items and sources are presented in Table 1.

#### *3.3 Common method variance (CMV)*

As the study data is based on self-reports, in order to ensure the sufficiency of the scale reliability and convergent validity as well as instil confidence in the study findings, preventive measures – procedural and statistical – were taken to lessen possible method

variance. To do this, during data collection, the scale items were randomly mixed in the survey. Also, we checked for the presence of CMV during the data analyses. A Harman's single-factor test was first conducted by entering all the key variables into an exploratory factor analysis (EFA), and the result showed that no single factor emerged (Podsakoff et al., 2003). Moreover, the 'forced' single factor solution accounted for 35.16% of variance which is lower than the recommended 50% threshold (Podsakoff et al., 2012). Subsequently, at the confirmatory stage, we included a common latent factor, and there were no significant differences in the model fit without (e.g.,  $\chi^2/df = 2.95$ ) and with ( $\chi^2/df = 2.97$ ) the common latent factor. These results show that CMV was not a major concern in this study.

## 4 Data analysis and results

### 4.1 Measurement model assessment

Structural equation modelling (SEM) was used for data analysis through IBM AMOS software package (version 22). As an initial step, a confirmatory factor analysis (CFA) was conducted by specifying the hypothesised measurement model using maximum likelihood estimation. The initial results did not show a good model fit and so, some modifications were done. As suggested by Bagozzi and Yi (2012), 11 items with factor loadings below 0.5 were systematically deleted (see Table 1). Then the modification indices (MI) were checked and the error covariances of three pairs of items with high MI values were correlated. These modifications improved the model fit to values well above and below the acceptable limits suggested by Kline (2015) such that normed Chi-square ( $\chi^2/df = 2.15$ ), goodness of fit index, GFI = 0.91, normed fit index, NFI = 0.92, Tucker-Lewis index, TLI = 0.93, comparative fit index, CFI = 0.95, and root mean square error of approximation, RMSEA = 0.051. All the measurement items were found to be internally consistent and reliable with the composite reliability values exceeding 0.70, and the Cronbach's alpha coefficients of the latent constructs ranging from 0.78 to 0.94 (Fornell and Larcker, 1981). To ascertain construct validity, first, the AVE values were checked to ensure they were above the recommended 0.50 cut-off point as were the standardised factor loadings, confirming convergent validity (Hair et al., 2017) (see Table 1). In addition, as shown in Table 2, for every pair of constructs, the square-root of the AVE (correlation between a construct and itself) was higher than the corresponding inter-construct correlation which is indicative of discriminant validity (Fornell and Larcker, 1981).

### 4.2 Test of hypothesis

After the measurement model was validated with acceptable fit, the structural paths were tested by examining the overall relationship among the constructs. Table 3 presents the path coefficients of these relationship tests which capture results of H1 to H8, with all paths being significant except the path from exposure condition to ad skepticism ( $\beta = -0.17$ ,  $t$ -value =  $-1.35$ ,  $p > 0.05$ ). In essence, the model supported Hypotheses H1–H8, but no support was found for H4b since exposure condition did not exert any significant influence on ad skepticism. The results also showed that no significant effects ( $p > 0.05$ ) were found for any of the three control variables.

**Table 1** Measurement model results

Code	Constructs and measurement items	Factor loading	CR	AVE	$\alpha$
	<i>Display ads I see on Facebook/Twitter/Instagram...</i>				
	<i>Personalisation</i> (Baek and Morimoto, 2012)		0.84	0.60	0.79
Pers1	Make me feel I'm a unique customer	0.76***			
Pers4	Are tailored to my shopping situation at the time	0.74***			
Pers6	Are related to my search history at the time	0.82***			
	<i>Exposure condition</i> (Fransen et al., 2015; Kim, 2018a, 2018b)		0.90	0.67	0.85
Expc2	Do not intrude on the content I was accessing	0.80***			
Expc3	Have control features I could use (e.g., skip or close button)	0.91***			
Expc4	Are not forced upon me (e.g., I could scroll past the ad)	0.73***			
	<i>Perceived novelty</i> (Koslow et al., 2003)		0.89	0.71	0.91
Pern1	Are innovative	0.77***			
Pern2	Are distinctive	0.79***			
Pern3	Are unanticipated	0.87***			
Pern5	Are visually interesting	0.92***			
	<i>Ad skepticism</i> (Obermiller and Spangenberg, 1998)		0.78	0.52	0.78
Ads1	Are reliable sources of product information *	0.75***			
Ads2	Are generally truthful *	0.70***			
Ads3	Make me feel accurately informed *	0.71***			
Ads4	Present a true picture of the product being advertised *				
	<i>Attitude toward online advertising</i> (Wang and Sun, 2010a)				
Atoa1	I consider online advertising very essential	0.76***	0.90	0.63	0.89
Atoa2	My general opinion of online advertising is favourable	0.75***			
Atoa3	Online advertising is interesting and fun to see	0.74***			
Atoa4	I appreciate seeing advertising messages on the Internet	0.88***			
Atoa5	Overall, I like online advertising	0.83***			

Notes: Deleted items: personalisation (Pers2, Pers3, Pers5); exposure condition (Expc1, Expc5); perceived novelty (Pern4); ad skepticism (Ads); extraversion (Ext1, Ext5); neuroticism (Neut4); cognitive avoidance (Cav1) \*\*\* $p < 0.001$ ; \*Reversed scale item.  $N = 570$ .

**Table 1** Measurement model results (continued)

Code	Constructs and measurement items	Factor loading	CR	AVE	$\alpha$
	<i>Display ads I see on Facebook/Twitter/Instagram...</i>				
	<i>Extraversion</i> (John and Srivastava, 1999)		0.86	0.66	0.85
Ext2	I see myself as someone who is talkative	0.81***			
Ext3	I see myself as someone who is quiet*	0.79***			
Ext4	I see myself as someone who is assertive	0.91***			
Ext6	I see myself as someone who generates enthusiasm	0.76***			
Ext7	I see myself as someone who is sociable	0.78***			
	<i>Neuroticism</i> (John and Srivastava, 1999)		0.91	0.73	0.74
Neut1	I see myself as someone who is tense	0.89***			
Neut2	I see myself as someone who worries a lot	0.93***			
Neut3	I see myself as someone who is not easily upset*	0.85***			
Neut5	I see myself as someone who can be moody	0.80***			
Neut6	I see myself as someone who gets nervous easily	0.79***			
	<i>Ad avoidance</i> (Cho and Cheon, 2004)		0.81	0.65	0.80
	<i>Cognitive</i>				
Cav2	I deliberately ignore any display ad I see on SMPs	0.84***			
Cav3	I look away from display ads when I'm on SMPs	0.65***			
Cav4	I deliberately do not pay attention to display ads on SMPs	0.79***			
	<i>Behavioural</i>				
Bav1	I ask SMPs to block ads	0.84***			
Bav2	I scroll away/down past display ads I see on SMPs	0.86***			
Bav3	I skip/close/hide display ads that I see on SMPs	0.82***			

Notes: Deleted items: personalisation (Pers2, Pers3, Pers5); exposure condition (Expc1, Expc5); perceived novelty (Pern4); ad skepticism (Ads); extraversion (Ext1, Ext5); neuroticism (Neut4); cognitive avoidance (Cav1) \*\*\* $p < 0.001$ ; \*Reversed scale item.  $N = 570$ .

#### 4.3 Mediation tests

In examining the mediating effect of perceived novelty, ad skepticism, and ATOA, the significance of the indirect effects was tested using bias-corrected (BC) 95% confidence intervals and a bootstrap sample of 5,000 (Preacher and Hayes, 2008) to detect the effect of each mediator while the others were controlled for (see Table 4). Results show significant indirect effects of personalisation ( $\beta = -0.40$ , BC 95% CI = 0.04 to 0.25,  $p < 0.001$ ) and exposure condition ( $\beta = -0.58$ , BC 95% CI = 0.03 to 0.18,  $p < 0.001$ ) through perceived novelty on ad avoidance. Since the direct personalisation → ad avoidance path was still significant, and the direct exposure condition → ad avoidance path was not significant, the findings suggest a partial mediating effect and a full

mediating effect of perceived novelty in these respective relationships, thus H9a and H9b are supported. No mediating effect of ad skepticism was found for personalisation ( $\beta = -0.36$ , BC 95% CI = 0.36 to 2.21,  $p > 0.05$ ) or exposure condition ( $\beta = -0.33$ , BC 95% CI = 0.29 to 1.32,  $p > 0.05$ ) so, H10a and H10b were not supported. In support of H11a and H11b, ATOA emerged as a partial mediator of the personalisation → ad avoidance relationship ( $\beta = -0.23$ , BC 95% CI = 0.25 to 2.12,  $p < 0.001$ ) and full mediator of the exposure condition → ad avoidance relationship ( $\beta = -0.35$ , BC 95% CI = 0.32 to 2.01,  $p < 0.001$ ). Overall, the model explained a considerable variance in ad avoidance ( $R^2 = 0.43$ ), perceived novelty ( $R^2 = 0.23$ ), ad skepticism ( $R^2 = 0.11$ ), and ATOA ( $R^2 = 0.32$ ).

**Table 2** Discriminant validity

Construct	Mean	SD	PS	EXC	PN	AS	ATOA	EXT	NT	AAV
1 Personalisation (PS)	4.57	1.24	0.77 <sup>a</sup>							
2 Exposure condition (EXC)	4.68	1.63	0.57	0.82 <sup>a</sup>						
3 Perceived novelty (PN)	4.78	1.47	0.32	0.55	0.84 <sup>a</sup>					
4 Ad skepticism (AS)	4.64	1.51	-0.49	-0.60	-0.45	0.72 <sup>a</sup>				
5 Attitude (ATOA)	4.31	1.68	0.55	0.64	0.56	-0.56	0.79 <sup>a</sup>			
6 Extraversion (EXT)	5.01	1.72	0.38	0.43	0.26	-0.54	0.45	0.81 <sup>a</sup>		
7 Neuroticism (NT)	4.39	1.55	0.39	0.58	0.46	-0.36	0.52	0.26	0.85 <sup>a</sup>	
8 Ad avoidance (AAV)	4.78	1.38	-0.51	-0.53	-0.47	0.45	-0.56	-0.35	-0.56	0.81 <sup>a</sup>

Note: <sup>a</sup>Square root of the AVE; off-diagonal values are the inter-construct correlations.

#### 4.4 Moderating effect of personality traits

Hypotheses H9 and H10 postulated variations in the strength of the effect of personalisation and exposure condition on ad avoidance among the two personality traits of interest (extraversion and neuroticism). To this end, a multi-group analysis (MGA) was used to compare the model between each pair of subgroups (i.e., high vs. low extraversion; high vs. low neuroticism). As a prerequisite to conducting MGA, equivalence of constructs was established to ensure that variations between the groups stem from structural disparities in path coefficients and not measurement differences through a series of measurement invariance tests (Byrne, 2008). To do this, the goodness of fit of the hypothetical structures between each pair of groups was first established using the required fit indices, then configural, metric and structural invariance's were tested for both personality traits (see Table 5). Results indicate that full metric invariance was achieved in both cases (extraversion:  $\Delta\chi^2 = 15.60$ ,  $p > 0.05$ ; neuroticism:  $\Delta\chi^2 = 13.47$ ,  $p > 0.05$ ) and differences exist between the two pairs of each personality

grouping (extraversion:  $\Delta\chi^2 = 10.99, p < 0.05$ ; neuroticism:  $\Delta\chi^2 = 27.28, p < 0.05$ ) at the model level.

**Table 3** Direct results

<i>Path description</i>			$\beta$ estimate	t-value	p-value	Result
H1	Personalisation	→	Ad avoidance	-0.42	-12.13	*** Supported
H2	Exposure condition	→	Ad avoidance	-0.67	-8.52	*** Supported
H3a	Personalisation	→	Perceived novelty	0.38	4.76	*** Supported
H3b	Exposure condition	→	Perceived novelty	0.54	11.35	0.01 Supported
H4	Perceived novelty	→	Ad avoidance	-0.32	-6.28	*** Supported
H5a	Personalisation	→	Ad skepticism	-0.56	-9.76	*** Supported
H5b	Exposure condition	→	Ad skepticism	-0.17	-1.35	0.15 Not supported
H6	Ad skepticism	→	Ad avoidance	0.12	2.31	0.04 Supported
H7a	Personalisation	→	ATOA	0.65	22.58	*** Supported
H7b	Exposure condition	→	ATOA	0.41	13.58	*** Supported
H8	ATOA	→	Ad Avoidance	0.21	19.31	*** Supported
<i>Controls</i>						
Age → Ad avoidance			0.12	1.02	0.86	
Gender → Ad avoidance			0.05	0.93	0.57	
Familiarity → Ad avoidance			0.03	0.39	0.48	

Note: \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . RMSEA = 0.04, NFI = 0.95, CFI = 0.98, RFI = 0.94,  $\chi^2/df = 1.63$ .

Accordingly, a critical ratio for differences test was subsequently conducted in AMOS to ascertain the significant path by path variations across the two subgroups of each personality trait. Results as shown in Table 6 indicate that extraversion was a significant moderator of the personalisation → ad avoidance relationship (z-score = -3.52,  $p = < 0.001$ ), and in support of H9a the effect was stronger among highly extraverted users (see Table 6). Although the exposure condition → ad avoidance relationship varied significantly (z-score = -2.65,  $p = < 0.001$ ) across the two subgroups, the effect was stronger among the high extraversion group as such H9b was not supported. Neuroticism emerged as a moderator of both personalisation → ad avoidance (z-score = -2.83,  $p = < 0.001$ ) and exposure condition → ad avoidance (z-score = -3.43,  $p = < 0.001$ ) relationships, and in support of H10a and H10b, these effects were weaker ( $\beta = -0.18, p < 0.05$ ) and stronger ( $\beta = -56, p < 0.05$ ) respectively, for individuals who reported high levels of neuroticism.

**Table 4** Mediated path results

Path description		<sup>a</sup> Direct effect	<sup>b</sup> Direct effect	Indirect effect	Result
H9a	Personalisation → PN → Ad avoidance	-0.42***	-0.37**	-0.40***	Supported
H9b	Exposure condition → PN → Ad avoidance	-0.67***	-0.23 <sup>ns</sup>	-0.58**	Supported
H10a	Personalisation → AS → Ad avoidance		-0.23*	-0.36 <sup>ns</sup>	Not supported
H10b	Exposure condition → AS → Ad avoidance		-0.51***	-0.03 <sup>ns</sup>	Not supported
H11a	Personalisation → ATOA → Ad avoidance		-0.19***	-0.23***	Supported
H11b	Exposure condition → ATOA → Ad avoidance		-0.32 <sup>ns</sup>	-0.35***	Supported

Notes: \*\*\* $p \leq 0.001$  \*\* $p \leq 0.01$  \* $p \leq 0.05$ . <sup>a</sup>Without mediator, <sup>b</sup>With mediator.

PN = Perceived novelty, AS = Ad skepticism.

**Table 5** Multi-group invariance test

Measure		Cut-off criteria	Low	High	Configural invariance	Metric invariance	Structural invariance
Extraversion	$\chi^2$	--	445.62	494.73	940.42	946.02	951.41
	df	--	235	235	470	477	484
	$\chi^2/df$	$\leq 3$	1.90	2.10	2.00	1.98	1.96
	NFI	$\geq 0.95$	0.96	0.96	0.96	0.96	0.96
	TLI	$\geq 0.95$	0.96	0.97	0.97	0.97	0.98
	GFI	$\geq 0.95$	0.95	0.95	0.95	0.95	0.95
	CFI	$\geq 0.95$	0.98	0.98	0.98	0.98	0.98
	RMSEA	$\geq 0.08$	0.05	0.05	0.05	0.05	0.04
	$\Delta\chi^2$ test	$p > 0.05$				0.32 <sup>ns</sup>	0.03
Neuroticism	$\chi^2$	--	444.34	490.78	934.20	947.67	961.48
	df	--	235	235	470	477	484
	$\chi^2/df$	$\leq 3$	1.89	2.10	1.98	2.00	1.98
	NFI	$\geq 0.95$	0.96	0.97	0.96	0.96	0.95
	TLI	$\geq 0.95$	0.97	0.96	0.98	0.97	0.97
	GFI	$\geq 0.95$	0.96	0.96	0.96	0.95	0.94
	CFI	$\geq 0.95$	0.97	0.98	0.98	0.98	0.98
	RMSEA	$\leq 0.08$	0.06	0.05	0.05	0.05	0.05
	$\Delta\chi^2$ test	$p > 0.05$				0.09 <sup>ns</sup>	0.04

Note: Configural = unconstrained model, metric = factor loadings constrained, structural = paths constrained.

**Table 6** Multigroup results

Hypothesised paths	Low extraversion		High extraversion		Result
	$\beta$ estimate	$\beta$ estimate	<i>z</i> -score		
H9a Personalisation → AAV	−0.26***	−0.34***	−3.52***	Supported	
H9b Exposure condition → AAV	−0.27 <sup>ns</sup>	−0.41**	−2.65***	Not supported	
Low neuroticism		High neuroticism			
H10a Personalisation → AAV	−0.20***	−0.18*	−2.83***	Supported	
H10b Exposure condition → AAV	−0.14***	−0.56***	−3.43***	Supported	

Note: \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ , ns = not significant, AAV = Ad avoidance.

## 5 Discussion

The study examines how personalisation and exposure condition influence consumers' avoidance of display ads as well as how perceived novelty, ad skepticism and ATOA function as internal responses that mediate the ad characteristic – ad avoidance relationship in the social media setting. The findings supported mostly, the stated hypotheses and largely, the viewpoint of the SOR paradigm. First, the results indicate that personalisation enhances favourable ad responses – perceived novelty and ATOA – and minimises unfavourable consumer responses (ad skepticism and ad avoidance) toward ads. This not only affirms previous research (De Keyzer et al., 2015; Walrave et al., 2018) that report the positive effects of personalisation but also establishes that self-referent ads stimulate perceptions of resourcefulness about the ad and shape the general disposition consumers form toward online advertising. In support of earlier studies (Baek and Morimoto, 2012; Tran, 2017) our findings are also indicative of the fact that when consumers perceive social media display ads as tailored to their interests, their feelings of distrust toward the ad are diminished and the urge to not attend and/or scroll away from the ad is reduced. It seems worthwhile to mention that, compared to these earlier studies; our findings show a stronger negative effect of personalisation on ad skepticism. A conceivable explanation for this finding could be the increasing consumer cognisance of tracking of their online activities as well as collection and analysing of their personal data and information for marketing purposes which makes them less distrustful of personalised ads.

Regarding exposure condition, findings show its positive effect on perceived novelty and ATOA, and its negative effect on ad avoidance. However, it had no significant effect on ad skepticism. Within the parameters of this current study, findings suggest that not having ads interfere with their online activity or intrude on the content they wish to access, and having control over ad exposure, does not only cause consumers to perceive social media display ads, as different and appealing but also informs their judgement and predispositions toward online advertising, and assuages their cognitive and behavioural inclination to avoid such ads. This may be exhibited in the reduced likelihood of them

ignoring, closing, skipping, hiding, or scrolling past such ads in order to continue with their social activities. These findings contest the position of Hegner et al. (2015) that forced exposure condition holds no relevance to consumers' perception and responses to ads but confirms the viewpoints of other researchers (e.g., Choi and Kim, 2021) who demonstrated that ad content control and non-intrusion (vs. lack thereof) lessened negative ad perceptions, attitude and avoidance responses toward ads. Essentially, in unforced exposure conditions, ads are less likely to be overlooked, closed, or scrolled past by social media users during their online activities.

The study also established differences in the ad characteristic-ad avoidance nexus across personality traits. The effects of personalisation and exposure condition on ad avoidance were stronger among highly extraverted consumers. As expected, the findings suggest that because extraverts are more frequent users and more engaged on SMPS, they indulge in higher levels of self-disclosure (Gosling et al., 2011), and possibly, perceive personalised ads on these platforms as more self-related. The presumable social media savviness of extraverted consumers could also cause them to consider personalised ads as an inevitable part of social media usage, thus pacifying their urge to avoid such ads. Similar findings emerged regarding exposure condition which was unexpected. However, because extraversion is characterised by innate assertiveness, consumers with higher levels of extraversion may be more concerned about the degree of autonomy they can exert over ads, as such perceive more favourably, ads that provide such controls (i.e., unforced exposure). The impact of personalisation and exposure condition on ad avoidance was weaker and stronger respectively, among highly neurotic consumers. The weak personalisation effect could be explained by the general unfavourable perceptions neurotics have about advertising, and their likelihood to misrepresent themselves on these platforms (Mooradian, 1996; Seidman, 2013), leading highly neurotic individuals to find personalised ads less consistent with their interests. Also, owing to their passive use of social media and high predisposition to distress and frustration, when their exposure to ads is unforced (i.e., the ad does not intrude or could be removed), reactance is minimised.

Lastly, although the negative effect of personalisation and exposure condition on ad avoidance does not occur through ad skepticism, consistent with the theoretical basis of the study, the empirical evidence confirms the mediating role of perceived novelty and ATOA in the relationships between both ad cues and ad avoidance. Their partial mediating effects in the case of personalisation is an indication that tailoring ads to consumers interests and communicative behaviours, can mitigate their tendency to engage in cognitive and behavioural efforts to evade the ad, nonetheless such inclinations are enhanced when consumers have a generally favourable disposition toward online advertising and perceive some level of uniqueness or innovativeness in the ad. As such the study establishes perceive novelty and ATOA as underlying mechanism through which the effects of personalisation occur besides, perceived relevance, privacy concern and perceived intrusiveness established in previous studies (e.g., De Keyzer et al., 2015; Van Doorn and Hoekstra, 2013).

The full mediating effect of ATOA and perceived novelty in the exposure condition and ad avoidance relationship, shows that the attenuating effect of exposure condition on ad avoidance only manifests if consumers have a generally favourable opinion of online advertising, like online advertising and appreciate seeing advertising messages on the internet. This finding also highlights the relevance of novelty, as allowing consumers control over their advertising exposure, through relevant features that make them partake

in the ad viewing process and by not intruding on the content they are accessing, only lessens their inclination to ignore and/or take actions to evade ads, if they perceive such ads as distinctive, innovative, and visually appealing. These findings, therefore, lend support to Sheinin et al. (2011) who argue that novelty plays an integral role in consumer's ad evaluation, and Odoom et al. (2022) who established ATOA as a relevant intermediately of the linkage between exposure condition and behavioural responses to display ads.

### 5.1 Theoretical implications

Theoretically, the study makes some contributions to the ad avoidance literature. Prior studies have focused on issues of reactance, privacy concern, and intrusiveness or goal impediment among others as internal responses (Bang et al., 2018; Youn and Kim, 2019) that drive ad avoidance. In this research, we establish perceived novelty and ATOA as additional internal response variables that facilitate the stimulus effect of the ad characteristics on avoidance behaviours in the context of social media. By this, the current study indicates the necessity of considering consumer predisposition toward online advertising in general and their perceptions of inventiveness of ads as factors which could enhance their responses to display ad formats and types, and possibly improve advertising effectiveness. Our results, therefore, ascertain perceived novelty and ATOA as key intermediate responses that heighten the persuasiveness of personalised ads.

Existing avoidance research (Kelly et al., 2010; Rejón-Guardia and Martínez-Lopez, 2014) have pointed to consumer perceptions and beliefs about online advertising as drivers of their attitude toward online ads, which makes the question of what shapes these perceptions and beliefs linger. Derivatively, the study confirms exposure condition (i.e., unforced/voluntary exposure) and personalisation as sources of novelty perceptions and general online advertising attitude formation. As such, it serves as an important addition to the display and social media advertising, and avoidance literature and responds to calls to enhance understanding of factors to reduce online ad avoidance and social media advertising effectiveness (Kelly et al., 2010; Seyedghorban et al., 2016).

Also of theoretical significance, is the support the study provides for the role of personality traits in consumers' evaluation and responses to ads. With extraversion and neuroticism moderating the personalisation, exposure condition and ad avoidance linkage, the study confirms personality traits as essential boundary conditions for the ad characteristic-ad avoidance nexus, and extends the sparse literature (Bang et al., 2019; Dodoo and Wen, 2019) on the usefulness of considering personality traits in social media ad (message) design.

### 5.2 Practical implications

The findings of the study also offer practical implications in terms of ad design for marketers, advertisers, and other practitioners within the social media ecosystem. Generally, the study findings show that to get consumers to perceive display ads more favourably, and minimise avoidance responses, advertiser should prioritise personalisation and voluntary exposure in presenting ads on SMPs. Because SMPs are characterised by heightened self-disclosure, and consumers are increasingly becoming

aware of personalisation strategies, personalisation approaches perceived as new or different will enhance the expected outcome of tailoring such ads. Industry reports show that SMPs rely heavily on advertising revenue and so, to make these platforms more appealing to marketers, personalisation strategies can be better refined and optimised to the consumer's benefit by focusing on more than user demographics and interests to even account for user personality traits. The possibility of deducing a consumer's personality trait using their social media footprint owing to algorithmic advancements has been pointed out in prior studies (Liu et al., 2017). This could be employed to bring more depth to personalised social media ads.

Similarly forced ad exposure is not an effective strategy in the social media context because socialisation and entertainment are the primary goals of these platforms and the degree of autonomy these platforms provide should be extended to the ads hosted in these spaces. It would, therefore, be instructive for advertisers to imbue display ads with controllable and interactive mechanism beyond skippable and remove/hide options to other more ingenious features that reduce perceptions of forced exposure and allow users to view ads at their discretion in order to lessen unfavourable dispositions and avoidance inclinations. To illustrate, most pre-roll ads on Facebook do not provide ad control options as such users cannot determine the timing of ad exposure and so, interactive control mechanisms that come with some rich media ads (e.g., pause/play the ad) can be employed to enhance novelty perceptions, induce more favourable dispositions, and eventually mitigate avoidance responses.

## 6 Conclusions, limitations, and future research avenues

Conclusively, the study supports the core notion that, ad-related features, and execution – personalisation and exposure condition – are essential mitigators of consumers' avoidance behaviours in the context of social media. More importantly, the study submits through the lens of the SOR model that these minimising effects are:

- 1 facilitated by the extent to which consumers have a general positive disposition toward online advertising, and perceive social media display ads as inventive
- 2 regulated by the personality traits of users.

In effect, it seems sound to maintain that albeit display ad execution may be effective in lessening avoidance inclinations and behaviours of social media users, their internal processes can function as intermediate factors, and their personality traits as conditions that strengthen or weaken these relationships. This hints the importance of focusing on not only ad-related but also consumer-related variables for effective display advertising (message) design and execution and favourable consumer responses in the context of social media.

Like most research, this study has its limitations. First, the study was based on self-reported survey data, and so, did not observe or measure actual avoidance responses. As such future studies could tackle this shortcoming by employing scenario-based methods or experimental designs which would offer significant additional insights. Second, the use of path analysis to establish causality calls for care when interpreting the study outcome. Third, respondents were sampled from three social media platforms – Facebook, Twitter, and Instagram – which vary in function. That is to say,

people's motivation for using these platforms varies, and so future studies may consider 'user motivation' as a moderator variable that may confound the interrelationships established in the current study. Fourth, still speaking from a moderation viewpoint, although the study found that the ad features mitigate ad avoidance, it failed to establish how these features could interact with one another to minimise avoidance and so, future research may examine such interactions. Fifth, the study focused on two personality traits associated with social media usage, future research can examine other traits such as narcissism to establish its role in ad avoidance on SMPs. Lastly, although the study data was obtained from a relatively large respondent sample it is still prudent that caution is exercised when generalising the results to the social media population.

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