

Examining some dynamics related to YouTube ad clutter in a high-clutter context

YouTube ad clutter in a high-clutter context

Tharindu Senarathna and Dinuka Wijetunga
*Department of Marketing, Faculty of Management and Finance,
University of Colombo, Colombo, Sri Lanka*

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Abstract

Purpose – This study aimed to test some dynamics related to YouTube advertising clutter and viewers' attitudes towards YouTube channels operated by traditional television (TV) companies (These YouTube channels tend to have a greater ad clutter since their videos have embedded ads of programme sponsors in addition to regular YouTube advertisements).

Design/methodology/approach – Employing a positivistic, quantitative methodology, the study collected data through an online survey from a sample of 295 YouTube viewers in Sri Lanka. Data were analysed using the regression-based PROCESS macro, utilising the SPSS software.

Findings – Ad clutter has a negative impact on viewers' attitudes towards the YouTube channel, but only indirectly, through irritation. Skippability of advertisements does not moderate the relationship between ad clutter and ad irritation, but non-skippability increases ad irritation (direct relationship).

Practical implications – YouTube channel owners should pay careful attention to having an optimum level of advertising because clutter resulting in high ad irritation leading to a negative attitude towards the channel could reduce subscriptions. Offering an ad skippability option is unlikely to reduce irritation if there is high clutter.

Originality/value – Although ad clutter is well-researched, its impact on viewer responses to online media channels is uncommon. With YouTube poised to become a top ad revenue-generating medium, this study contributes by examining some dynamics related to ad clutter in a possibly high-clutter context.

Keywords YouTube, Social media advertising, Advertising clutter, Skippable advertisements, Ad irritation
Paper type Research paper

1. Introduction

A key method through which digital platforms generate revenue is through the sale of audiences to advertisers, i.e. through the monetisation of attention (Ørmen and Gregersen, 2023). With advertising revenue of the United States (US) \$20 billion in 2020, a 30% increase from 2019, YouTube is said to be ready to overtake television (TV) in advertising (Pressman, 2021). Its advertising revenue was almost US \$7 billion in just the first quarter of 2023 (Global Media Insights, 2023). Recently, YouTube has introduced mechanisms for content creators and channel owners to share in these monetary benefits (Kyncl, 2021). For reaping these benefits, increasing subscriptions to the YouTube channel are key (Cohen, 2021). This poses a challenge for channel owners. A large subscription base helps to attract advertisers, which increases their revenue through more advertisements. However, the increased number of advertisements could then erode the subscription base because, according to research related to traditional media, advertising clutter generates negative audience attitudes towards the



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advertising medium (Speck and Elliott, 1997; Rotfeld, 2006). Thus, managing the amount of advertisements in a channel without generating viewer displeasure becomes a delicate balancing act.

Literature suggests that in the online context too, clutter could lead to various negative consequences (Ha and McCann, 2008; Knoll, 2016), including negative attitudes and loyalty towards the website (Belanche *et al.*, 2017a; Cho and Cheon, 2004). Therefore, it is likely that viewers would become irritated (Belanche *et al.*, 2017a) by ad clutter that interrupts their YouTube viewing and form-negative attitudes towards channels with high ad clutter. However, there appears to be limited empirical investigation into viewers' feelings about YouTube channels (or other online media) that have advertising clutter. In this context, this study contributes by examining some dynamics related to viewers' psychological reaction to ad clutter in a high-clutter context within YouTube, namely YouTube channels operated by traditional free-to-air TV companies.

The relationship between traditional TV networks and YouTube has changed over the years. From one of intense rivalry, the relationship has evolved to one where traditional TV networks now have their own YouTube channels (Rodríguez-Ferrándiz *et al.*, 2016). Some TV channels in the United States have even started live-streaming through YouTube TV, subscription service streaming popular TV channels (James, 2017). Although live streaming is not yet available in most other countries, YouTube channels operated by traditional free-to-air TV companies are quite common (Kuyucu, 2019). These companies upload selected content aired by their TV channels on their YouTube channels (Rodríguez-Ferrándiz *et al.*, 2016).

These YouTube TV channels can generate income for the TV companies from advertisements through the monetisation programmes of YouTube (Kyncl, 2021). Furthermore, videos uploaded by traditional TV companies also carry advertisements embedded in the videos, paid for by the advertiser directly to the YouTube channel owner (YouTube Help, 2023), i.e. the TV company. This creates high ad clutter since the videos on these channels carry advertisements inserted by YouTube as well as those embedded in the videos by the TV companies uploading the content. This study focused on YouTube channels operated by TV companies since they tend to have heavy ad clutter.

Broadly, the paper addresses the research problem, "What are viewers' psychological reactions to ad clutter in the high-clutter context of YouTube TV channels?" Three research questions were formulated in relation to this problem. First, whether perceived ad clutter impacts viewers' attitude towards the YouTube TV channel. Second, whether this impact is mediated by ad irritation since ad clutter can result in irritation (Belanche *et al.*, 2017a), and irritation could negatively impact many variables such as purchase intention (Dehghani *et al.*, 2016) and loyalty towards websites (Belanche *et al.*, 2017a). Third, the possible moderating effect of ad skippability on the relationship between ad clutter and irritation. Skipping is the YouTube equivalent of zipping and zapping – methods that viewers have been using to avoid TV ads (Loureiro, 2018). Since skippability allows control over viewing ads, it is said to reduce irritation (Aslam *et al.*, 2021). Thus, there is a possibility that at higher levels of skippability, irritation resulting from ad clutter would be less compared with lower levels of skippability.

The next section outlines the literature supporting the conceptualisation of the study, followed by the methodology adopted, data analysis, discussion and implications of findings.

2. Literature review and conceptualisation

2.1 Television through YouTube: a high ad-clutter context

With the advent of social media, traditional TV broadcasters' audience is getting older, and the broadcasters have lost younger audiences (Arndt *et al.*, 2016). In response, they have started using new platforms such as social media to telecast their programs (Arndt *et al.*, 2016;

Kuyucu, 2019), which includes creating their own YouTube channels (Kuyucu, 2019). For these companies, having their own YouTube channel also provides additional advertising revenue generation medium since YouTube is a medium that assists in overcoming shortcomings of traditional advertising media, such as one-way communication and high expenses (Boateng and Okoe, 2015).

YouTube has introduced multiple methods of ad revenue generation (Kyncl, 2021). One is sharing the revenue from advertisements placed by YouTube (Kyncl, 2021) and another is directly embedding advertisements of sponsors within the videos (YouTube Help, 2023). Traditional TV companies are more adept at using this second option than ordinary users who operate YouTube channels because TV companies have well-established mechanisms for attracting advertising sponsorship since that is their main source of income (Müller-Bungart, 2007). Therefore, these YouTube TV channels tend to have high advertising clutter; they have both advertisements inserted by YouTube and advertisements embedded in the videos. Hence, the selection of YouTube TV channels operated by traditional TV companies for this study.

2.2 Viewer attitudes towards advertising and ad clutter

Although ad clutter has several dimensions – intrusiveness, competitiveness and quantity (Ha, 2017) – high quantity, which is the presence of a large amount of non-editorial content in an editorial medium (Ha and McCann, 2008), is considered the key element (Jung and Heo, 2021). It is also the characteristic most relevant for YouTube because of the heavy increase in social media advertising in recent times (Jung and Heo, 2021). Therefore, when the amount of advertising on YouTube is high, it creates ad clutter on YouTube. From a viewer's perspective, one's belief that the amount of advertising in a medium is excessive is "perceived ad clutter" (Ha and McCann, 2008; Speck and Elliott, 1997).

Generally, consumers respond negatively to online advertisements (Boateng and Okoe, 2015), and YouTube advertisements (Chungviwatanant *et al.*, 2017; Sebastian *et al.*, 2021). This negative attitude may even be higher compared to offline media because users are more goal-oriented on online media than offline media (Cho and Cheon, 2004; Ha and McCann, 2008). On the internet, their intention is to accomplish some task (Tandyonomanu, 2018), and ads are more likely to be perceived as an interruption because they hinder a user's control of internet browsing (Ha and McCann, 2008; Luna-Nevarez and Torres, 2015). Such negative attitudes towards ads could have a negative impact on consumers' attitudes towards products and services and the company presented in advertisements, as well as their loyalty towards the advertising mediums such as websites (Belanche *et al.*, 2017a). Since, as shown above, viewers have a negative attitude towards advertisements in general, one could expect a highly negative response when they perceive there is ad clutter.

In any medium, ad clutter can have detrimental impacts – cognitive, affective and behavioural – not only on the efficacy of advertising but also on the medium carrying the advertisements (Ha, 2017). In terms of the affective impact, ad clutter could have a negative impact on consumers' attitudes towards the ad, the brands being advertised and the medium (Ha, 2017). Considering advertising effectiveness, in offline media (magazines and TV – Speck and Elliott, 1997; and radio – Riebe and Dawes, 2006) research has identified that ad clutter reduces ad recall (Riebe and Dawes (2006), reduces the understanding of ads, generates negative attitudes towards advertising and prompts ad avoidance (Speck and Elliott, 1997). In online media too, it is said that clutter could reduce consumer attention (Koslow and Stewart, 2022). Empirically, it is established that when there is clutter, ad effectiveness in terms of recall is reduced in Facebook advertisements (Nelson-Field *et al.*, 2013). A study of e-magazines (Zanjani *et al.*, 2011) also identified that perceived clutter caused by the incongruity between ads and their context could reduce ad recall and recognition. Although

Lee and Cho (2010) did not identify a significant effect of clutter on ad recall or ad attitude in web advertising, others have identified that people avoid web ads when there is clutter (Cho and Cheon, 2004).

What is more important for this study is the impact of ad clutter on how viewers react towards the medium of advertising. In offline media, the detrimental effect of ad clutter, such as reducing the appeal of a medium (Kubin, 1986 as cited in Speck and Elliott, 1997), has been discussed for decades (Rotfeld, 2006). In TV and magazines, Speck and Elliott (1997) found that ad clutter creates a negative attitude towards the medium. In the online context, however, in spite of some extensive conceptual discussion (Ha and McCann, 2008; Ha, 2017), empirical investigation of the impact of ad clutter on viewers' attitudes towards the medium appears to be lacking. Yet, it has been noted recently that cluttered advertising contexts require research attention (Taylor and Carlson, 2021). Research on offline media implies that ad clutter could have negative consequences for online media too; however, it has been noted that the effect of clutter could differ for different media (Ha, 2017). Therefore, in a context such as YouTube, where subscriptions to a channel are a key element in successfully monetising audience attention (Cohen, 2021), investigating viewers' responses to channels with high ad clutter is worthwhile.

Against this backdrop, based on the different negative consequences of ad clutter in the on- and offline media, we propose that perceived ad clutter in a YouTube channel owned by a traditional TV company (which could possibly have greater clutter than other YouTube channels) will have a negative impact on viewer attitude towards the channel.

H1. Perceived ad clutter in YouTube TV programs will generate a negative attitude among viewers towards YouTube channels owned by traditional TV companies.

2.2.1 Mediation effect of irritation. In discussing consumers' psychological reactions to online ads, irritation or annoyance has often been discussed as a negative consequence of ad clutter (Cho and Cheon, 2004; Dehghani *et al.*, 2016; Knoll, 2016; Loureiro, 2018). Irritation is the "perception of displeasure and momentary impatience caused by an ad" (Loureiro, 2018, p. 201). For example, as previously noted, viewers are more goal-oriented when consuming online media, and the disruption to these tasks caused by ads creates frustration and irritation (Belanche *et al.*, 2017a; Dehghani *et al.*, 2016; Knoll, 2016). Providing empirical support to this idea, Edwards *et al.* (2002) found that perceived intrusiveness of forced exposure to pop-up ads irritates consumers. Loureiro (2018) suggests that consumers in a bad mood towards advertising (which could be caused by situations such as clutter) can develop irritability. Cho and Cheon (2004) go as far as considering irritation as an inherent characteristic of ad clutter. This literature implies that ad clutter could lead to ad irritation.

On the other side of the equation, it is well established in different contexts that ad irritation can lead to several negative consequences. For example, Loureiro (2018) found that irritation could lead to ad scepticism and ad avoidance in both YouTube and TV contexts. It has also been identified that irritation negatively impacts the ad value of YouTube ads, which, in turn, has an impact on ad awareness and purchase intention (Dehghani *et al.*, 2016). Others have found that irritation with YouTube ads leads to negative ad attitudes, which in turn affects the purchase intention and purchase behaviour (Aslam *et al.*, 2021; Yang *et al.*, 2017). Finally, in the broader online context, Belanche *et al.* (2017a) suggest that irritation could reduce loyalty to a website. These discussions identifying multiple different negative consequences of ad irritation indicate the possibility that ad irritation could also lead to a negative attitude towards a YouTube TV channel.

Given the antecedents and consequences of ad irritation discussed above, it is reasonable to assume that ad clutter could lead to a negative attitude towards a YouTube TV channel through ad irritation. Based on this, we propose,

H2. Viewers' ad irritation mediates the relationship between perceived ad clutter and their negative attitude towards YouTube channels owned by traditional TV companies.

2.2.2 Moderating effect of skippable/non-skippable nature of ads. Advertisements on YouTube can be either skippable or non-skippable full-length advertisements (Aslam *et al.*, 2021). Skippable advertisements can be skipped by the viewers after a few seconds; viewers could watch the rest of the advertisement if they desire (Yang *et al.*, 2017). Non-skippable advertisements cannot be skipped, and viewers are exposed to them before, during, or after the main video (Chungviwatanant *et al.*, 2017). Non-skippable advertisements, therefore, force viewers to watch them in their entirety (Aslam *et al.*, 2021).

Since the introduction of skippable advertisements by YouTube at the end of 2010 (Aslam *et al.*, 2021), there has been research interest in this form of advertising. There are studies on ad characteristics that influence skipping behaviour: Campbell *et al.* (2017) examine the influence of basic (e.g. happiness) vs complex (e.g. humour) emotions in the ad content and Belanche *et al.* (2017a) the influence of high and low arousal characteristics on viewers' skipping behaviour. There are also studies on personal and contextual factors such as previous exposure, habit and time urgency (Belanche *et al.*, 2017b) and product involvement and ad intrusiveness (Belanche *et al.*, 2020b) that influence skipping behaviour.

Comparisons between skippable and non-skippable advertisements are sparse; Belanche *et al.* (2020a)'s study on brand recall of skippable vs non-skippable advertisements is an exception. Studies on consumer preferences between skippable and non-skippable advertisements are even fewer and they are not in complete agreement regarding the mitigating effect of the skippability of advertisements on consumers' negative responses to advertisements. Hegner *et al.* (2015) found that the perceived control offered by skippable advertisements had no effect on viewers' perceived intrusiveness of the ad, attitude towards the ad or attitude towards the brand. In contrast, Riedel *et al.* (2023) found that consumers prefer brands that use skippable advertisements to non-skippable ones. Aslam *et al.* (2021) found that viewers not only considered skippable advertisements as less irritating than non-skippable ones, but also that the negative impact of irritation on attitude towards the ad was less for skippable advertisements. Similarly, Pashkevich *et al.* (2012), identified that viewers were more satisfied with skippable advertisements than non-skippable ones, especially because non-skippability forced them to watch advertisements that were not relevant to them. In a broader study on viewer opinions of YouTube advertisements, Sebastian *et al.* (2021) reported that viewers were "distressed" and "angered" by non-skippable advertisements because they were forced to watch them.

In general, other than the findings of Hegner *et al.* (2015), research appears to support the idea that viewers prefer skippable advertisements over non-skippable ones. There are several possible reasons for this preference. Viewers are exposed to the advertisement for a longer period when they are non-skippable, which causes greater disruption to the viewing of video content (Aslam *et al.*, 2021). Therefore, they are more intrusive than skippable advertisements. Furthermore, skippable ones provide a greater sense of autonomy and control over advertisements than non-skippable ones (Aslam *et al.*, 2021; Belanche *et al.*, 2017a, 2020a).

In view of the above, it can be assumed that even when viewers perceive a YouTube TV channel to have ad clutter, the irritation caused by the clutter may be less if many of the advertisements can be skipped, than when most are full-length ones. Therefore, we propose,

H3. The skippable/non-skippable nature of the ads moderates the relationship between perceived ad clutter in YouTube TV programs and ad irritation, such that the perceived ad clutter will be more strongly positively related to irritation when the perceived non-skippability of ads is higher.

These hypothesised relationships are depicted in Figure 1.

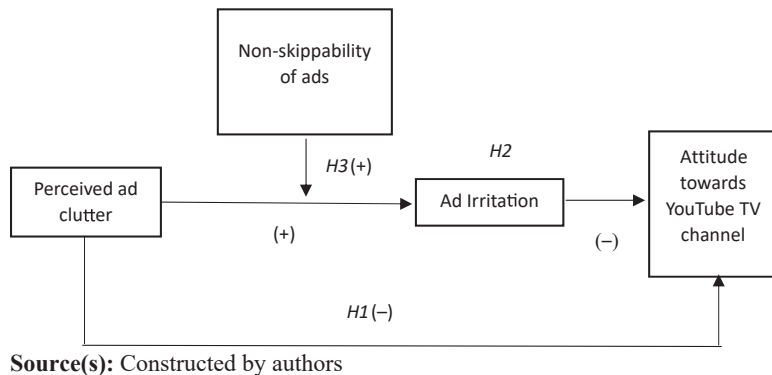


Figure 1.
Conceptual model

3. Methodology

This was positivistic quantitative research since it sought to establish specific associations between variables. The research utilised a cross-sectional survey strategy.

The data collection instrument was a self-administered questionnaire. In operationalising variables, measures used in previous research were utilised to ensure validity and reliability. Perceived YouTube advertising clutter, the independent variable, was measured using scales previously used by [Cho and Cheon \(2004\)](#) and [Speck and Elliott \(1997\)](#). Irritation resulting from YouTube advertisements was operationalised using the scale adopted by [Chungviwatanant et al. \(2017\)](#). Both these variables were measured using five-point Likert scales. A slightly adapted version of the brand attitude scales used in previous research on the relationship between ad attitude and brand attitude ([Homer, 1990](#)) was used to measure the attitude towards the YouTube TV channel. These were semantic differential scales, and the adaptation required simply replacing brand names with YouTube Channels. Perceived non-skippability of ads was measured by a single negatively worded question – “This YouTube channel does not allow me to close most of the ads it shows after a few seconds”. In addition to these questions, the questionnaire comprised a filtering question that ensured all respondents watch YouTube channels owned by one or more traditional TV companies in Sri Lanka. Then, the respondents were requested to select one channel out of those and provide their perceptions on all variables in relation to the selected channel.

Convenience sampling was used in sample selection and data were collected utilising a Google form. It has been suggested that when using regression analysis, a sample size of $N > 104 + m$ (where m is the number of predictors in a multiple regression) is sufficient for detecting medium-size relationships ([Green, 1991](#); [VanVoorhis and Morgan, 2007](#)). Including the interaction term in the moderator testing regressions, this study had a total of five predictors. Therefore, the required sample size was 109. However, we used a larger sample to increase the power of detecting even smaller relationships. The initial number of completed questionnaires was 353. Of these, 48 were rejected because the respondents had indicated that they do not watch any YouTube channels of Sri Lankan TV companies. A further 10 were rejected since they were identified as comprising outliers when checking assumptions of regression analysis ([Regorz, 2021](#)). Thus, the size of the sample used in the final analysis was 295.

The sample comprised YouTube viewers over 16 years. This age category was selected because viewers over the age of 16 can be considered old enough to have sufficient knowledge and understanding about YouTube channels and advertising. Of these, 76.6% were between

16–25 years, 21.4% were between 26–35 years and 2% were above 35. The sample included males (45.8%) and females (54.2%) from different locations (17 districts) in Sri Lanka.

4. Data analysis

The data were analysed using the statistical computer package SPSS (version 22), and hypotheses were tested using the regression-based PROCESS macro (Hayes, 2018). The first two hypotheses, namely, the direct relationship between Perceived ad clutter and attitude towards YouTube TV channel (H1) and the mediation effect of irritation in this relationship (H2), were tested using Model 4 of the PROCESS macro. For testing H3 – whether the clutter will lead to greater ad irritation when ads cannot be skipped than when ads can be skipped – was tested using Model 7 of the PROCESS macro, which is used for testing moderated mediation (Hayes, 2018). In addition to testing the moderating effect hypothesised in H3, using moderated mediation (stage one) enabled us to test the full conceptual model. In other words, it allowed testing whether the mediation effect of Ad irritation between perceived ad clutter and attitude towards the YouTube TV channel is different at different levels of skippability of ads (Edwards and Konold, 2020). Testing moderated mediation involves the use of two regression equations (Edwards and Konold, 2020). The first tests the moderating effect of the moderator (non-skippability of ads) on the link between the predictor (perceived ad clutter) and the criterion variable in the moderation hypothesis (Ad irritation) by regressing the criterion variable on the predictor, moderator and the interaction term obtained by multiplying the predictor and moderator. The second regresses the dependent variable of the conceptual model (attitude towards the YouTube TV channel) on the predictor (perceived ad clutter) and the mediator (ad irritation). An index of moderated mediation is calculated using these two equations (Edwards and Konold, 2020).

All scales with multiple items had acceptable Cronbach's alpha values above 0.7, indicating high internal consistency (Field, 2018). The normality of the distribution of data was checked using normal probability plots and histograms (Field, 2018), and all variables were normally distributed.

The PROCESS macro of SPSS does not provide checks for assumptions of regression; therefore, all regression models used in the tests were constructed manually on SPSS to check whether they satisfy the assumptions (Regorz, 2021). Since both the independent variable (ad clutter) and the moderator variable (non-skippability) were measured as continuous variables, when constructing the regression model for moderator testing, these variables first needed to be centred and the interaction term constructed by multiplying the centred variables (Frazier *et al.*, 2004). Although the PROCESS macro performs these tasks in the analysis, they were performed manually when constructing the regression models in SPSS for testing the assumptions. Checking assumptions using the constructed models led to identifying 10 outliers in different models, which were removed and the regressions run again. The final models satisfied all the required conditions. Linearity of the relationships, uncorrelated errors and homoscedasticity were all checked using the Z-predictors vs Z-residual plots, which depicted random scatters (Field, 2018). Histograms and P-P plots of residuals indicated normal distributions and variance inflation factor (VIF) statistics below 10, with an average VIF close to 1 and tolerance above 0.2 in all multiple regressions, indicated a lack of multicollinearity (Field, 2018). The correlation matrix (see Table 1) also indicates no multicollinearity since none of the predictor variables have an r value above 0.8 (Field, 2018).

The results of testing the first two hypotheses are presented in Figure 2.

As shown in Figure 2, the direct impact of perceived ad clutter on the attitude towards YouTube TV channels without the mediator (total effect) is insignificant at $p < 0.05$; therefore, H1 is not supported. In testing mediation (H2), although traditionally it was assumed that the

direct relationship between the independent and dependent relationship is a necessary condition (Frazier *et al.*, 2004), it has since been established that this is unnecessary (Edwards and Konold, 2020; Zhao *et al.*, 2010). “The one and only requirement to demonstrate mediation is a significant indirect effect . . . by a superior bootstrap test” (Zhao *et al.*, 2010, p. 200). Accordingly, Figure 2 indicates there is an “indirect only” mediation of the relationship between perceived ad clutter and attitude towards the YouTube TV channel through ad irritation. While the direct effect is insignificant, the indirect effect is significant since the 95% confidence interval [-0.225, -0.012] does not contain zero (Zhao *et al.*, 2010); thus, H2 is supported. This indicates that perceived ad clutter has a negative impact on attitude towards the YouTube TV channel through increasing viewers’ ad irritation. It is also noteworthy in Figure 2 that ad clutter has a significant positive impact on irritation, and irritation has a significant negative impact on attitude towards the channel.

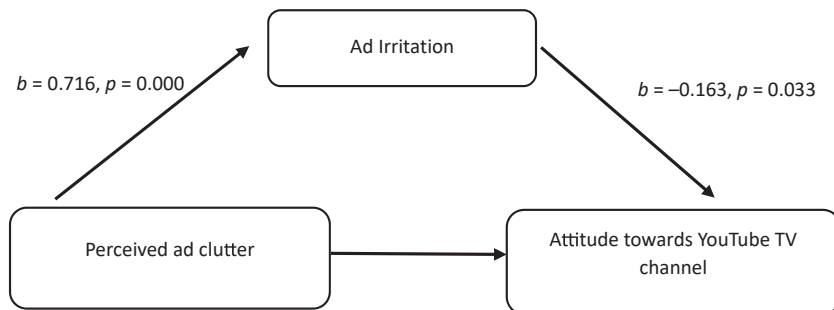
Figure 3 depicts the results of testing H3 – the moderating impact of non-skippability of advertisements on the relationship between perceived ad clutter and ad irritation.

Figure 3 shows that H3 is not supported. The moderating impact (i.e. the impact of the interaction term) on the relationship between perceived ad clutter and ad irritation is insignificant ($b = -0.73, p = 0.083$), indicating that non-skippability does not moderate this relationship. Considering the full conceptual model, perceived ad clutter still has a significant positive impact on ad irritation and ad irritation has a significant negative impact on the attitude towards the YouTube TV channel. Further, the direct effect of clutter on attitudes is insignificant. However, there is no moderated mediation. For a moderated mediation to be significant, the bootstrapped confidence interval related to the index of moderated mediation

	Attitude towards YouTube TV channel	Perceived ad clutter	Ad irritation
Perceived ad clutter	-0.083		
Ad irritation	-0.148*	0.673**	
Non-skippability of ads	-0.035	0.275**	0.388**

Table 1.
The correlation matrix

Note(s): * $p < 0.05$; ** $p < 0.01$
Source(s): Compiled by authors



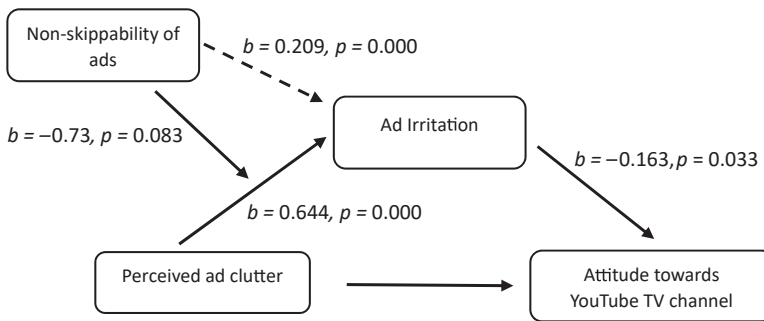
Total effect, $b = -0.086, p = 0.155$

Direct effect, $b = 0.031, p = 0.701$

Indirect effect, $b = -0.117, 95\% \text{ CI } [-0.225, -0.012]$ [Based on 5000 bootstrapped samples]

Source(s): Constructed by authors

Figure 2.
Direct and indirect effects of perceived ad clutter



Direct effect Clutter → Attitude, $b = 0.031, p = 0.701$

	Effect	95% CI
Index of moderated mediation	0.012	[-0.001, 0.032]

[Based on 5000 bootstrapped samples]

Source(s): Constructed by authors

Figure 3. The moderating effect of non-skippability

should not contain zero (Edwards and Konold, 2020). As indicated in Figure 3, this confidence interval [-0.001, 0.032] does contain zero. This indicates that the mediating effect of ad irritation on perceived ad clutter and attitude towards the YouTube TV channel does not vary at different levels of ad skippability.

The dashed arrow in Figure 3 relates to an output of the regression equation used in testing moderation that was not hypothesised in this study, namely, the direct impact of non-skippability of ads on ad irritation. It indicates that non-skippability has a significant direct positive impact on ad irritation.

5. Discussion

In summary, the results of the study indicate that contrary to the expectations expressed in H1, there is no direct impact of ad clutter on viewers' attitudes towards YouTube channels owned by traditional TV companies. However, ad clutter indirectly impacts the attitude towards the channel through ad irritation (H2). Further, although it was expected that the ability to skip ads after a few seconds would mitigate the ad irritation caused by ad clutter (H3), it was found that this is not the case. An additional finding is that non-skippability increases irritation.

The insignificant direct negative impact (H1) of ad clutter on attitude towards the channel seems to imply a greater readiness of viewers to accept a high ad clutter; however, the indirect-only, mediated impact suggests otherwise (Zhao et al., 2010). The study shows that ad clutter negatively impacts viewers' attitude towards the YouTube channel indirectly, through ad irritation. This provides empirical support to the idea conceptually discussed by Ha (2017) that ad clutter could result in negative affective consequences for the medium. Previous studies have identified such negative effects on online ad efficacy (Cho and Cheon, 2004; Nelson-Field et al., 2013; Zanjani et al., 2011) and offline media (Riebe and Dawes, 2006; Speck and Elliott, 1997), and this study contributes by adding an online social medium, YouTube channels, to the list.

The mediation analysis (H2) also provides empirical evidence supporting the views implied by previous researchers that ad clutter could result in ad irritation (Cho and Cheon, 2004; Loureiro, 2018). The findings are also consistent with previous observations in the literature regarding the negative consequences of ad irritation (Aslam *et al.*, 2021; Belanche *et al.*, 2017a; Dehghani *et al.*, 2016; Loureiro, 2018; Yang *et al.*, 2017). In particular, previous researchers have identified negative affective outcomes of ad irritation such as negative attitudes towards ads (Aslam *et al.*, 2021; Yang *et al.*, 2017), ad value (Dehghani *et al.*, 2016) and ad scepticism (Loureiro, 2018). This research identified ad irritation resulting in a higher negative attitude towards YouTube channels operated by traditional TV companies.

Results relating to the impact of the skippability of ads (H3) were mixed. There was some support for the claim that skippable advertisements are preferred by viewers (Aslam *et al.*, 2021; Belanche *et al.*, 2020a; Riedel *et al.*, 2023; Sebastian *et al.*, 2021). Supporting this claim, particularly the positive impact of non-skippability on irritation identified by Aslam *et al.* (2021), non-skippability had a positive direct impact on ad irritation in this study. On the other hand, in the findings there was also support for the less frequent claim that skippability has no effect (Hegner *et al.*, 2015) because the ability to skip advertisements did not reduce the strength of the positive impact of ad clutter on irritation. According to the literature, skippable advertisements cause less irritation partly because of the lower disruption they cause compared to a non-skippable advertisement when watching a video (Aslam *et al.*, 2021; Sebastian *et al.*, 2021). In a cluttered situation, content viewing is frequently disrupted; therefore, even though the length of disruption by a skippable advertisement in each instance is less compared to a non-skippable one, the overall ad irritation may not be reduced by the ability to skip. This could be why a moderating effect of skppability on the relationship between ad clutter and ad irritation was not identified.

6. Implications and further research

In terms of theoretical implications, this study added to the literature on online advertising by examining some negative consequences of ad clutter. It showed that ad clutter could negatively impact viewers' attitudes towards the *online medium* that is cluttered by advertisements (namely YouTube channels), similar to the impact of ad clutter on offline media that is established in the literature (Riebe and Dawes, 2006; Speck and Elliott, 1997). Within the literature on online advertising, this contribution is particularly important to the literature on advertising on YouTube since the marketing aspect of this platform has gained greater significance recently, after channel owners have been given the opportunity to monetise their content through multiple styles of advertising (Kyncl, 2021; YouTube Help, 2023).

The study also contributed to the literature on ad irritation, first by establishing ad clutter as an antecedent of ad irritation, which has only been implied in previous literature (Cho and Cheon, 2004; Loureiro, 2018), and second, by adding to the literature on the negative consequences of ad irritation. While previous studies show that ad irritation could have various adverse implications for advertisements themselves, such as ad avoidance and a negative attitude towards the ads (Aslam *et al.*, 2021; Dehghani *et al.*, 2016; Loureiro, 2018; Yang *et al.*, 2017), this study showed that irritation could also have an adverse impact on viewers' attitude towards the advertising medium, i.e. the YouTube channel.

Finally, the study added to the somewhat limited (Belanche *et al.*, 2020a) body of literature on the effects of allowing viewers to skip an ad after a few seconds, although the findings do not resolve the discrepancies of previous research (Aslam *et al.*, 2021; Hegner *et al.*, 2015; Pashkevich *et al.*, 2012; Riedel *et al.*, 2023; Sebastian *et al.*, 2021). The findings of this study indicate that although skippability does tend to reduce ad irritation, in a cluttered situation, the control and autonomy offered by the ability to skip an advertisement is not sufficient to reduce the irritation caused by ad clutter.

These theoretical implications also provide some indications for further research. As noted above, this study does not resolve the contradictions in the literature regarding the benefits of skippable advertisements over non-skippable ones. The study suggests that viewers do not unconditionally positively respond to the control and autonomy accorded through skippable advertisements, as suggested in previous research (Aslam *et al.*, 2021; Belanche *et al.*, 2017a, 2020a). Clutter appears to be one condition that renders skippability ineffective as a strategy for appeasing viewers, indicating that viewers' affective reactions to the ability to skip advertisements are somewhat complex. Therefore, different conditions under which skippable advertisements may and may not be able to mitigate adverse responses to YouTube (and other online) advertising should be further investigated.

From a practical perspective, the study findings, which indicated that ad clutter increases viewers' ad irritation, which, in turn, leads to a negative attitude towards the channel, have implications for YouTube content providers attempting to monetise attention through selling the audiences of their YouTube channels to advertisers (Ørmen and Gregersen, 2023). Although advertising is promoted by YouTube as a key method for generating revenue (Kyncl, 2021), over-enthusiasm in leveraging this opportunity could be counterproductive. This study suggests that viewers should not be bombarded with ads to a point where ad irritation would overcome the benefits of high ad revenue because a negative attitude towards the channel could turn viewers away, resulting in a loss of subscriptions, which is key for earning ad revenue (Cohen, 2021).

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Corresponding author

Dinuka Wijetunga can be contacted at: dinuka@mkt.cmb.ac.lk