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THE IMPACT OF YOUTUBE ADVERTISING CLUTTER ON THE VIEWERS' ATTITUDE TOWARDS YOUTUBE CHANNELS OWNED BY MAINSTREAM TELEVISION CHANNELS

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ABSTRACT

The impact of exposure to advertising clutter while watching television programs on offline media and the subsequent attitude generation of viewers towards offline media have been discussed extensively in marketing. However, surprisingly, the impact of advertising clutter on online media and the viewers' attitude towards online media have been examined only to a limited extent in marketing. Most importantly, the impact of advertising clutter on YouTube, which now has the fiercest competition for the online media that broadcasts television programs, does not seem to have sparked any discussion in recent times. Accordingly, the discussion on viewers' attitude towards YouTube TV channels with advertising clutter has also been marginalized. This study investigated the impact of YouTube advertising clutter on viewers' attitude towards YouTube channels owned by mainstream television channels. A cross-sectional survey was employed, utilizing 305 YouTube viewers. The analysis, which used regression analysis, indicated that the perceived advertising clutter has no significant direct effect on viewers' attitude towards the YouTube TV channel. However, it was found that the perceived YouTube advertising clutter significantly impacts viewer irritation which, in turn, leads to a negative attitude towards the YouTube TV channel, even though this negative effect is minor. Results related to the impact of additional mobile data cost incurred by YouTube advertising clutter were counterintuitive, and this could be due to measurement error. The moderator impact of the skippable or non-skippable nature of YouTube advertisements on the relationship between perceived YouTube advertising clutter and irritation was insignificant.

Key Words: YouTube TV, Social media advertising, Advertising clutter, Skippable advertisements, Data cost

1. Introduction

With the invention of smart devices, the conventional practices of watching television are being changed. As a result of digitalization, consumers now have innovative and dynamic content delivery systems such as YouTube instead of conventional television networks (Loureiro, 2018). Due to facilities that have been provided by YouTube, such as the ability to download videos and anytime availability, there is a tendency of viewers to increasingly move towards YouTube from conventional television (Waldfogel, 2009). Most viewers tend to watch TV programs through YouTube because of the convenience. In this scenario, many television networks and TV series production companies have started their own YouTube channels to stream their programmes (Rodríguez-Ferrández et al., 2016). Parallel to this, today, advertisers also tend to allocate a greater proportion of their media budgets to social media advertising (Knoll, 2016), especially the YouTube. With an advertising revenue of US \$20 billion in 2020, a 30% increase from 2019, YouTube is said to be ready to overtake TV in advertising (Pressman, 2021). As a result, YouTube viewers are increasingly exposed to advertisements while they are watching television programs through YouTube. However, a main purpose of YouTube television viewers is to save time and convenience (Gannes, 2009). Therefore, YouTube advertisements are likely to interfere with their purpose and lead to viewer irritation towards the YouTube TV channel.

Research about mass media has long established that advertising clutter can lead to a negative attitude in consumers' minds about advertisements, and indirectly, about the advertising medium (Speck & Elliott, 1997). This situation can be aggravated when it comes to YouTube TV because YouTube TV programs carry advertisements inserted by YouTube, as well as the television company streaming the program. Some literature relating to research done on YouTube advertising in Sri Lanka has also contributed to that idea stating that Excessive and frequent exposure to commercials can frustrate customers and can adversely influence consumer behavior toward the product or brand (Pramitha et al., 2021). Most importantly, this negative attitude of viewers on advertising clutter could also reduce the consumer loyalty to the website (Belanche et al., 2017). Accordingly, youtube viewers may also form a negative attitude towards youtube channels by being exposed to an advertising clutter. Further, the data cost, about which viewers in developing countries tend to be sensitive of (Pressman, 2021), could add to the irritation. On the other hand, the ability to skip some advertisements on YouTube, an option unavailable to conventional television viewers, could mitigate the adverse impact of advertising clutter (Pashkevich et al., 2012). These areas, that have not been explored, are the focus of this paper which examines the impact of YouTube advertising clutter on viewers' attitude towards YouTube TV channel due to the irritation caused by clutter, and the roles played by data cost and the skippable/non-skippable nature of advertisements in this context. The study was conducted in Sri Lanka concerning mainstream free-to-air TV channels operating their own channels on YouTube.

2. Literature Review & Conceptualization

2.1. Television through YouTube

Social media have become an extensively discussed topic in recent years among younger generations. Among the many social media networks, YouTube is one of the most popular networks which allows users to post, view, comment, and link to videos on the site. Also it has been identified as the second most used social media worldwide in 2022, recording over 2.5 billion monthly visitors (Kemp, 2022). As a result, consumers are increasingly adopting social networking services in their daily lives, they have started watching television programs through the YouTube platform. Most importantly, with the use of social media such as YouTube for watching television programs, the traditional television broadcasters' audience is getting older and the broadcasters have lost their younger audiences. In response, one of the actions they have taken is to increase the use of social media to broadcast their programs to address younger audiences (Arndt et al., 2016).

There are several other important reasons why many TV channels introduce their own YouTube Channels to viewers. One of the most important reasons is that YouTube can be used as an advertising medium because it assists advertisers to overcome the shortcomings such as one way nature of communication and the expensive use of traditional advertising media such as print and broadcast media (Boateng & Okoe, 2015). Also, television broadcasting companies have started to introduce their own YouTube channels as a mean of preventing the distribution of unauthorized video clips belonging to conventional television networks (Waldfoegel, 2009). According to Rodríguez-Ferrándiz et al. (2016), each television network, each TV series, and even the TV series production companies tend to have their own YouTube channels. As a result, consumers now have an innovative and dynamic content delivery system through YouTube instead of television networks (Loureiro, 2018).

2.2. Emergence of YouTube as an Advertising Medium and Ad Clutter on YouTube

As identified above, social media appears to have become one of the latest environments in which advertising takes place (Knoll, 2016). As one of the most popular social media sites, YouTube also presents a powerful platform for marketing, advertising, and business activities (Vytyaz, 2018). So much so that this widespread consumption of the YouTube platform has made an influence the way advertisers design their advertisement strategies (Dehghani et al., 2016). Further, digital video offers new opportunities and formats for television advertising. Therefore, television channels also can advertise on digital videos for free or by paying a subscription (Brechman et al., 2016). According to available evidence, the previously discussed emerging pattern of social television viewing has created an audience promising to enhance viewer engagement, extending the value of brands and content properties, and most importantly opening up new advertising opportunities for media industries (Guo, 2018). However, the ultimate result of this is social television viewers are often exposed to advertisements while watching television through platforms such as YouTube.

With YouTube advertising becoming a key trend, the increase in the number of advertisements broadcast on the YouTube platform appears to be creating a YouTube advertisement clutter. Perceived advertisement clutter can be defined as one's belief

that the amount of advertising in a medium is excessive (Speck & Elliott, 1997). Therefore, when the amount of advertising on YouTube is excessive, it can lead to advertising clutter on YouTube. Further, according to Ha and McCann (2008), no matter how low the amount of advertising is in relation to the editorial content of the media, viewers will see it as a clutter because every advertisement is irrelevant, misleading, and annoying. In such a situation, it is very timely and worth examining viewers' attitudes towards these ads, and towards YouTube advertising clutter in particular, because viewers' opinions about social media advertising still appear to be under-researched.

2.3. Viewer Attitude towards YouTube Advertisement Clutter

Generally, consumer attitude toward online advertisements (Boateng & Okoe, 2015) and about YouTube advertisements in particular (Chungviwatanant et al., 2017) is negative. According to Ha and McCann (2008), online users are more goal-oriented than the audience of offline media. These consumers decide not to pay attention to advertising when they perceive a lack of relevance of the ads to their lives (Knoll, 2016) because their attention resources are reserved for editorial content (Ha & McCann, 2008). Another research finding confirms this idea, showing that consumers tend to avoid advertisements on television as well as on social media; because their intention is not to watch advertisements but to accomplish their intended task (Tandyonomanu, 2018). Further, ads are more likely to be perceived as an interruption because such ads hinder a user's control of browsing the intended page (Ha & McCann, 2008). According to Knoll (2015), teenager's negative attitude toward social media advertisements mostly depend on their past negative experiences, advertisement irrelevance, and untrustworthiness of the advertisements; to a lesser extent, viewers get irritated because of advertising clutter or disruption caused by the advertisements. Moreover, according to Belanche et al. (2017), interruption from advertisements increases the viewer's frustration and irritation. According to Rodriguez (2017), most individuals are not receptive to social media advertisements and most of them are annoyed by them.

When viewers have a negative attitude towards YouTube advertisements, the consequences of a negative attitude towards YouTube advertisements are also an important area to be analyzed. Consumer irritation with the number of ads on the internet leads to a negative attitude and subsequent ad avoidance (Cho, 2004). The same study reveals that consumers who intensely dislike internet ads are likely to increase their negative attitude towards internet ads and avoid the source of their displeasure. Since YouTube is also an internet-based medium, the above statement can be applied to YouTube ads too. According to Belanche et al. (2017), interruption from advertisements increases the viewer's frustration and irritation and it may lead to reducing the loyalty to the web site. Another research finding reveals that irritation with advertisements could result in viewers forming a negative attitude towards products or services and towards the company represented in the advertisements (Chungviwatanant et al., 2017).

Therefore, it is clear that negative attitude toward YouTube advertising generates a negative impact on the product or services advertised through YouTube and the company represented in advertisements. Furthermore, negative attitude toward ads leads to an unfavorable impact on the website and advertising medium (Belanche et al.,

2017; Chungviwatanant et al., 2017). However, no research could be found that examines whether being exposed to advertisements while watching TV programs on YouTube will create a negative attitude among viewers towards the YouTube television channel owned by the mainstream television channel. This is a gap emerging through analyzing available literature.

According to Vytiaz (2018), the proliferation of content advertising on YouTube has attracted advertisers' attention to investing in this evolving medium as effective brand communication and online advertising platform. However, the ultimate result of this investment is 'creating an advertising clutter' on YouTube. Advertising clutter is the presence of a large amount of non-editorial content in an editorial medium (Ha & McCann, 2008). It has been noted that when there is a clutter, advertisements receive less attention from consumers because consumers are irritated by the advertisements, and subsequently they avoid the advertisements altogether (Ha & McCann, 2008). Therefore, it can be expected that the previously discussed consequences of negative attitude toward 'YouTube advertisements, in general, can be extended to 'YouTube advertising clutter as well.

Much research has been done on advertisement clutter in different media. According to Speck and Elliott (1997), perceived ad clutter directly affects one's attitude towards advertising in a medium, and it indirectly affects the advertising medium. Further, research also reveals that this perceived ad clutter might lead to negative attitudes and subsequent advertising avoidance on the internet as well (Cho, 2004). Connecting the concept of YouTube advertising clutter to the above arguments, the present study proposes that,

H₁: Perceived advertising clutter in YouTube television programs will generate a negative attitude among viewers towards the YouTube channel owned by a mainstream television channel.

In addition to that, According to Rodriguez (2017), most people are not receptive to advertisements on social media sites and most of them are annoyed by them. Another research finding reveals that consumer irritation with the number of ads on the internet is caused by the perception of advertising clutter (Cho, 2004). According to Belanche et al. (2017), if advertisers fail to persuade viewers to watch online ads, it could lead to an increasing sense of advertising clutter and subsequent negative reactions such as the perception of dullness, irritation, or unfavorable attitudes. Since YouTube is also an online social medium, advertising clutter while watching television programs through YouTube could lead to viewer irritation. Therefore, the present study provides a hypothesis that proposes,

H₂: Perceived advertising clutter in YouTube television programs leads to viewer irritation.

Next, YouTube users disagree with YouTube ads that interfere with the process of enjoying the videos they need and they tend to avoid advertisements whenever possible due to irritation resulting from YouTube ads (Tandyonomanu, 2018). As mentioned earlier this irritation could result in viewers forming a negative attitude towards the products/services and companies represented in the advertisements (Chungviwatanant

et al., 2017). In such a situation, irritation resulting from YouTube advertising clutter is also likely to have a negative attitude towards the YouTube TV channel which shows advertisements in their television programs. Based on the above arguments, the present study proposes that,

H₃: The irritation resulting from YouTube advertising clutter will generate a negative attitude towards the YouTube channel owned by a mainstream television channel.

The discussion in this section conceptualized the relationship between advertising clutter and attitude towards the YouTube advertising channel. The next section will discuss how this relationship may be influenced by the skippable or non-skippable nature of the advertisements.

2.4. Viewers' Attitudes towards Skippable Vs Non-Skippable YouTube Advertisements

Under the categories of YouTube ads, mainly there are two types of advertisements. One is in-stream video advertisements and the other one is in-video advertisements (Dehghani et al., 2016). In-stream video advertisements can be further categorized into two categories, namely, skippable in-stream advertisements and non-skippable in-stream advertisements. Skippable in-stream advertisements can be skipped after a few seconds they are exposed to the viewers; viewers can watch the rest of the advertisement if they desired to watch (Yang et al., 2017). Non-skippable advertisements cannot be skipped and are exposed to the viewers before, during, or after the main video (Chungviwatanant et al., 2017). YouTube users generally disagree with the advertisements that interfere with the process of enjoying the video they need and avoid the advertisements whenever possible (Tandyonomanu, 2018). When comparing skippable and non-skippable in-stream advertisements, most people dislike non-skippable in-stream advertisements because it limits the opportunity to skip uninteresting or irrelevant advertisements (Pashkevich et al., 2012). However, according to Rodriguez (2017), allowing people to skip advertisements after a few seconds is not effective because people do not typically voluntarily decide to watch ads on social media. Given these contradictory views, it is worth examining whether the skippable and non-skippable nature of YouTube advertisements affects viewer irritation caused by YouTube advertising clutter. According to the above findings, the nature of YouTube advertisements (skippable/non-skippable) might moderate the relationship between YouTube advertising clutter and irritation. Therefore, the present study proposes that,

H₆: The nature of the YouTube advertisements (skippable/non-skippable) moderates the relationship between perceived advertising clutter in YouTube television programs and irritation resulting from YouTube advertising clutter, such that the perceived advertising clutter will be more strongly positively related to irritation when the perceived non-skippability of advertisements is higher.

In addition to the skippable nature of the advertisements, it is also possible that the negative attitude may be affected by the mobile data cost that has to be incurred due to the YouTube advertisements shown when watching a television program via YouTube. This is the third area of focus of this study.

2.5. Additional Cost of Mobile Data Due to YouTube Advertisements

Mobile data consumption by YouTube advertisements while watching YouTube videos is an area that needs to be looked into. Surprisingly, a very limited number of studies have been done in this area. With the emergence of internet-enabled mobile phones and particularly social media, mobile phone is becoming a key entry point to the internet (Stork et al., 2013). However, according to data collected by the International telecommunication society, the majority of the population express a feeling of uncertainty about the cost of internet access, and this uncertainty prevents people from using mobile internet (Westlund & Bohlin, 2008). Another research finding illustrates that in most countries price is considered as the main barrier for people to access the internet (Stork et al., 2013). Therefore, it appears that mobile data cost is an important consideration for mobile internet users when accessing the internet. Since YouTube is a social medium and mobile internet is closely related to YouTube, the cost issue can also be expected to be connected with YouTube. Moreover, researches also reveal that users accept advertisements on social media sites as content if they can keep the service free (Hadija et al., 2012). This study shows that consumers agree to be exposed to advertisements in a free service more easily than agreeing to pay for the service of social networking. However, when people are exposed to YouTube advertisements while they watch their intended TV programs through YouTube, they do have to incur an additional cost for advertisements. In such a situation, there is a possibility to generate an irritation towards the YouTube advertisement among viewers.

Given the above information, it can be proposed that when consumers perceive YouTube programs as having an excessive number of advertisements, they may be concerned about the cost of mobile data consumed by YouTube ads, and in turn, that concern may increase their irritation towards ads. Based on that argument, the present study proposes that,

- H₄:** Perceived advertising clutter in YouTube television programs leads to high perceived mobile data cost.
- H₅:** High perceived mobile data cost of YouTube advertisements leads to viewer irritation.

These relationships are depicted in Figure 1.

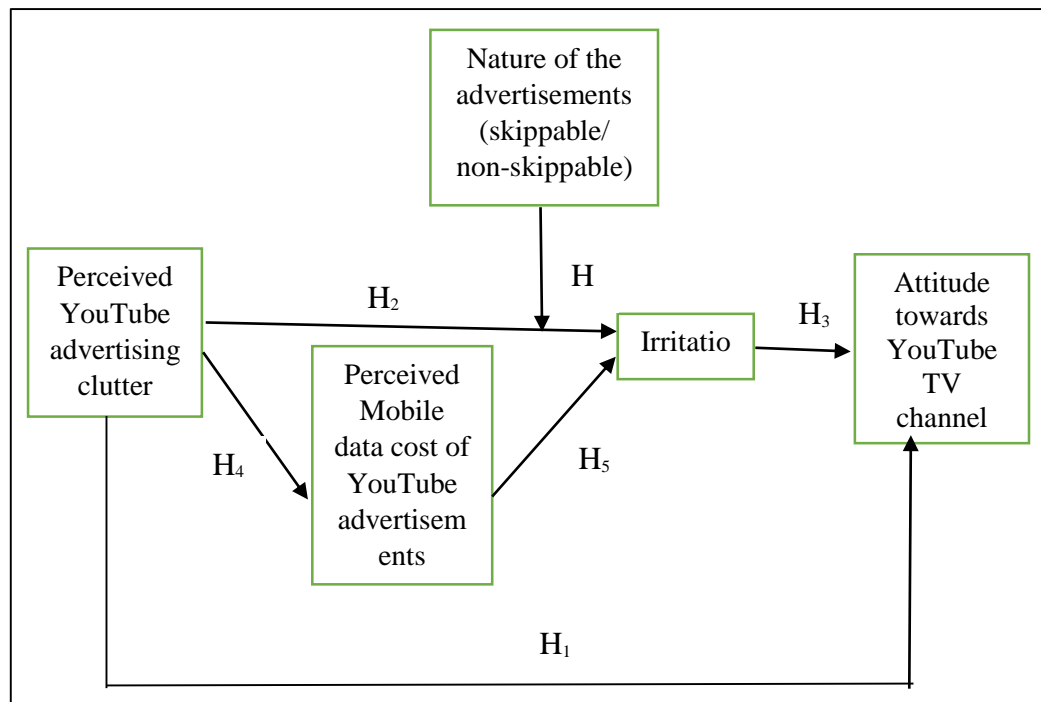


Figure 1. Conceptual model

3. Methodology

This was positivistic quantitative research. In operationalizing the variables, measurement instruments used in previous research were utilized to ensure validity and reliability. Perceived YouTube advertising clutter is the independent variable of the study and it was measured by two indicators. Those indicators were "excessiveness" of YouTube ads on the YouTube channel and advertisement "exclusiveness" of the YouTube channel (Cho, 2004; Speck & Elliott, 1997). The irritation resulting from YouTube advertisements was operationalized using the scales adopted by Chungviwatanant et al. (2017) in which four indicators have been used. Both these variables were measured using five-point Likert scales. Scales adopted by Homer (1990), using three indicators, were used to measure attitude towards the YouTube television channel among viewers, the dependent variable of the study, and these indicators were measured using semantic differential scales. The indicators used to operationalize viewers' perception of the mobile data cost of YouTube advertisements (Voss et al., 1998) were measured using five-point Likert scale. Viewers' perception of the nature of YouTube advertisements as skippable or non-skippable was measured by using two indicators. Those indicators were "can be skipped by the viewer if the viewer wishes to" and "can be closed by the viewer if the viewer wishes to". However, these indicators were not taken from previous research papers due to unavailability. These indicators were also measured by using a five-point Likert scale.

The research utilized a cross-sectional survey strategy. The sample comprised 305 YouTube viewers over 16 years of age who watch television programs through YouTube channels. This age category was selected because viewers over the age of 16 can be considered as being old enough, to have sufficient knowledge and understanding about YouTube channels and YouTube advertising. The sample included both male and female

individuals from different locations of the country and convenience sampling was employed as the sampling technique (Saunders et al., 2009). Data was collected through a self-administered questionnaire which was distributed as a Google form.

The data gathered through the questionnaire were analyzed using the statistical computer package SPSS (version 22). The hypotheses were tested using the regression method. In order to test the direct relationships between variables, i.e. H₁ to H₅, a simple regression technique was used, and the moderating relationship (H₆) was tested by using a regression-based technique introduced by Andrew F. Hayes in the PROCESS tool (version 3.5; Model 1) developed for SPSS.

4. Findings

Prior to hypothesis testing, one indicator, "This YouTube channel does not allow me to close most of the ads it shows after a few seconds" had to be dropped from the nature of advertisement scale, and another indicator, "I think the additional mobile data cost incurred due to ads on this YouTube channel is too high" had to be removed from the Perceived Mobile data cost of YouTube advertisements scale due to internal consistency problems. With the omission of this item, all five scales – perceived YouTube advertising clutter, irritation, attitude towards YouTube TV channel, perceived mobile data cost of YouTube advertisements, and nature of advertisements – had acceptable Cronbach's alpha values above 0.7 indicating high internal consistency (Field, 2018).

Afterward, both outliers and the normality of the distribution of data were tested to check the biasedness of the data. As a result of that, the responses of seven respondents who appeared to be biased were removed and only the data obtained after the outliers were removed were used for the final analysis. The normality of the distribution of data was checked by using normal probability plots and histograms. According to the P-P plots and histograms obtained, the variables were normally distributed.

Before considering whether the findings obtained by testing the hypothesis can be generalized to the population, the first thing to consider is how well the regression model fits the sample data (Field, 2018). Table 1 provides statistics relating to the model fit.

Table 1: Model fit

Model	R	R Square	F Change	Sig. F Change
1. Perceived advertising clutter → Attitude towards YouTube TV channel (H ₁)	0.083	0.007	2.059	0.152
2. Perceived YouTube advertising clutter → Irritation (H ₂)	0.656	0.431	224.177	0.000
3. Irritation → Attitude towards the YouTube TV channel (H ₃)	0.166	0.028	8.426	0.004
4. Perceived YouTube advertising clutter → Perceived mobile data cost (H ₄)	0.257	0.066	20.983	0.000
5. Perceived mobile data cost → Irritation (H ₅)	0.336	0.113	37.743	0.000
6. Nature of YouTube advertisements as a moderator of the relationship between perceived ad clutter and irritation (H ₆)	0.697	0.485	92.39	0.000

As shown in Table 1 all regression models except the regression model related to H₁ fitted the sample data, since the F ratio of each of those models was significant at $p < 0.05$. Because a good regression model must have a large F ratio and the significance of the F ratio should stand less than 0.05 (i.e. $p < 0.05$) to be accepted (Field, 2018). However, the F ratio derived from the regression model related to H₁ was 2.059, with a significance value of 0.152 (i.e. $p > 0.05$). Since this model does not meet this requirement, the relationship between the perceived YouTube advertising clutter and attitude towards YouTube TV channel is not significant. This means that this regression model does not support the hypothesis that, "Perceived advertising clutter in YouTube television programs will generate a negative attitude among viewers towards the YouTube channel which owned by a main-stream television channel". Since other models met this requirement, the generalizability of those models was checked next.

According to Field (2018), to generalize the findings of a sample to a wider population, several assumptions have to be met in a regression analysis. Accordingly, the first assumption is "independent errors". This assumption states that errors need to be independent (residual terms should be uncorrelated). "Normality of the residuals" is another assumption in a regression analysis. The shape of the histogram should look like a normal distribution (a bell-shaped curve) to accept the normality of the distribution and also, the residuals should be close to the diagonal line of the P-P plot (Field, 2018). The other assumptions are the homoscedasticity and linearity of the regression model. These assumptions were examined using the standardized residual plots and in order to satisfy these assumptions, the scatter plot should indicate a random scatter or scatter plot should not have a funneled (heteroscedasticity) or curved (non-linearity) look (Field, 2018). In the present study, since the regression model related to H₁ was not significant, generalizability was not checked. Apart from that, although there is a problem with the beta value of some of the remaining regression models, generalizability assumptions were well fulfilled.

4.1. The Direct Relationships

Table 2 shows the coefficients from the simple regressions related to test H₂, H₃, H₄ and H₅.

Table 2: Coefficients

Model	B	Beta	Sig.
Perceived YouTube advertising clutter → Irritation (H ₂)	0.704	0.656	0.000
Level of irritation → Attitude towards the YouTube TV channel (H ₃)	-0.164	-0.166	0.004
Perceived YouTube advertising clutter → perceived mobile data cost (H ₄)	-0.272	-0.257	0.000
Perceived mobile data cost → Irritation (H ₅)	-0.341	-0.336	0.000

As indicated in Table 2, H₂ and H₃ were supported at the significant level of $p < 0.05$. The positive beta value obtained testing H₂ (0.656) indicates the positive relationship between perceived YouTube advertising clutter and irritation. In addition to that, the R

Square stands at 0.431 (Table 1) which explains that perceived YouTube advertising clutter accounts for 43% of the level of irritation. This shows a fairly high percentage of the variation in the level of irritation caused by YouTube ads can be explained by perceived YouTube advertising clutter.

As shown in Table 2, the negative beta value (-0.166) obtained testing H_3 depicts the negative relationship between the predictor variable and the dependent variable. This negative relationship indicates that, when the level of irritation resulting from YouTube advertising clutter increases, the attitude towards YouTube TV channel becomes unfavorable. The significance value of the predictor variable ($p < 0.05$) suggests that the predictor significantly contributes to the model. Thus, it can be concluded that the level of irritation resulting from YouTube advertising clutter is negatively associated with the attitude towards YouTube channel. However, the R^2 obtained for the model (Table 1) indicates that only 2.8% of the viewer's attitude toward the YouTube TV channel can be explained by irritation. This percentage indicates that only a small percentage of the variation in attitude towards YouTube TV channel can be explained by irritation.

When the coefficients of the simple regression models testing H_4 and H_5 are taken into consideration, it can be seen that the beta values for these relationships are negative but significant at $p < 0.05$ (Table 2). According to H_4 , the relationship between perceived YouTube advertising clutter and perceived mobile data cost should be a positive relationship. Because, when the number of advertisements on a YouTube channel is increased, the additional mobile data cost that viewers have to bear should also be increased simultaneously. However, the coefficient statistics shows a negative relationship as illustrated in Table 2. Therefore, this hypothesis (H_4) is not supported by the data.

Similarly, according to H_5 , there should be a positive relationship between perceived mobile data cost of YouTube ads and the level of irritation caused by YouTube ads since the irritation has to increase corresponding with the increase in mobile data cost of YouTube advertisements. But when looking at Table 2, the beta value of the predictor variable (-0.336) reveals a negative relationship indicating that the irritation decreases as the mobile data cost increases. Therefore, this hypothesis (H_5) cannot be accepted.

4.2. The Moderator Effect

The nature of the YouTube advertisements (skippable/non-skippable) is the moderator variable of this study. In the moderator relationship, the predictor variable was perceived YouTube advertising clutter and the dependent variable was irritation. This moderating influence of the nature of YouTube advertisements was tested using the regression-based technique introduced by Andrew F. Hayes in the PROCESS tool (version 3.5; Model 1) developed for SPSS. In testing a moderator relationship, there are several steps to be completed. If the relationship consisted only of continuous variables, only two steps need to be carried out (Field, 2018). Since this relationship consisted only of continuous variables, the following two steps were carried out to test this relationship. As the first step, the continuous predictor and moderator variables of the relationship need to be centered. In the second step, the interaction term or terms of the regression model need to be created. The interaction term simply refers to the product of the moderator variable and predictor variable. In the context of this study, the

interaction term is the product of the nature of YouTube advertisements and perceived YouTube advertising clutter

Since the present study used Model 1 of the PROCESS tool (version 3.5) developed for SPSS by Andrew F. Hayes, both these steps were automatically carried out when the test was performed (Field, 2018).

As indicated in Table 1, the F ratio of the regression model related to H_6 is significant at $p < 0.05$ indicating that the moderator regression model fits the sample data well. Table 3 provides statistics relating to the independent variable, moderator variable, and the interaction term of the model testing moderator impact of nature of YouTube advertisement.

Table 3: Skippable nature of YouTube advertisement as a moderator

Model	B	t	Sig.
Advertising clutter (centred)	0.570	10.903	0.000
Nature of advertisements (centred)	0.252	5.500	0.000
Advertising clutter (centred) x Nature of advertisements (centred)	0.027	0.691	0.490

In establishing a moderator effect, the interaction term needs to be significant (Field, 2018). When looking at the significance of the interaction term of this model, it has been obtained as 0.490 which is greater than 0.05. This indicates that the nature of advertisements does not moderate the relationship between perceived YouTube advertising clutter and irritation. Therefore, the above hypothesis (H_6) cannot be accepted.

5. Discussion

The main intention of this study was to examine the impact of perceived YouTube advertising clutter while watching television programs through YouTube on forming an attitude towards YouTube channels owned by mainstream television channels. Within this broad idea, this study also intended to examine whether the irritation resulting from YouTube ad clutter has an impact on forming attitude toward YouTube TV channels. Another focus of the study was to explore whether mobile data cost incurred by advertisement clutter results in viewer irritation. In addition to that, the moderator impact of the nature of YouTube advertisements (whether they could be skipped or not) on the relationship between perceived YouTube advertising clutter and irritation was also explored.

When the direct relationship between perceived YouTube advertising clutter and attitude towards YouTube TV channel is taken into consideration (H_1), the statistical results obtained by testing this relationship showed that this relationship is not significant indicating that perceived advertising clutter in YouTube television programs does not generate a negative attitude among viewers towards the YouTube channel owned by a main-stream television channel. Discussing why this hypothesis was not supported, a previous study revealed that, social media users accept advertisements on social media sites as content if they can keep the service free (Hadija et al., 2012). This

study states that viewers agree to be exposed to advertisements in a free service more easily than agreeing to pay for the service of social networking. In such a situation, viewers might not have a negative attitude towards YouTube TV channels even if there is an advertising clutter on the channel. According to Chungviwatanant et al. (2017), if advertising contents are entertaining, informative, and credible, viewers may not mind there being an advertising clutter on the YouTube TV channel through a positive attitude towards advertising content. Further, Fitriani et al. (2020) revealed that the communication style used in product reviews could impact loyalty towards a YouTube channel indicating that in addition to advertisements, many other things such as the content presented can positively impact on attitude towards the YouTube channel. Due to the above-mentioned reasons, this hypothesis may not have been supported.

Even though the above direct relationship was not supported, this study does indicate that ad clutter can create some viewer irritation which, in turn, could impact on the attitude towards the YouTube TV channel; this is demonstrated in the results of H₂ and H₃.

Discussing H₂, according to the available literature, people avoid advertising messages on the internet because of perceived advertising clutter (Cho, 2004). Most importantly, Belanche et al. (2017) revealed that, if the viewer's sense of advertising clutter increases, it might lead to subsequent reactions such as irritation. Discussing the consequences of irritation resulting from YouTube advertisements, Tandyonomanu (2018) found that, the irritating nature of YouTube ads could result in viewers forming a negative attitude towards products, services, and companies represented in the advertisements. The present study introduces H₃ extending this idea to YouTube channels. The data analysis obtained a negative beta value for this relationship which is significant at $p < 0.05$ indicating that when the viewer irritation resulting from the ad clutter increases, the attitude towards YouTube TV channels tends to decrease. However, in this relationship, irritation resulting from YouTube advertising clutter accounts for only 2.8% of the attitude towards YouTube TV channel. This low percentage could be because, there can be many other factors that affect the attitude of viewers towards a particular YouTube channel, including previously discussed factors related to advertising, such as content and presentation style.

To discover the viewers' attitude towards the additional mobile data cost of YouTube advertisements, two hypotheses (H₄ & H₅) were developed based on the available literature. However, surprisingly, based on the research findings, the results of testing both hypotheses were in the opposite direction to what was hypothesized, which appeared illogical. These two relationships are outside of the normal status of being, i.e. one cannot imagine how people would think the cost would be reduced when ad clutter increases and irritation would be reduced when the perceived mobile data cost increases; therefore this can be identified as a counterintuitive finding. It is believed that the reason for such illogical results could be measurement errors. The reason to arrive at this conclusion is that the participants of the survey had not answered the questions measuring the variable "perceived mobile data cost of YouTube advertisements" in a consistent manner. The reliability test of this variable also implied that respondents had not consistently answered this question. Therefore, both hypotheses were not supported by the sample data.

The next focus of this study was to identify whether the nature of YouTube advertisements (skippable vs. non-skippable) moderates the relationship between YouTube advertising clutter and irritation. As specified in the literature, most YouTube viewers dislike non-skippable YouTube advertisements more than skippable YouTube advertisements; because they value the opportunity to skip uninteresting and irrelevant advertisements (Pashkevich et al., 2012). Accordingly, H₆ was developed based on this explanation to achieve the third objective. The purpose of this developed hypothesis was to find out whether the irritation resulting from the YouTube advertisement clutter could be reduced by giving viewers an option to skip YouTube ads they are exposed to while watching TV programs through YouTube. Although the moderator regression model fitted the data, the results of testing this hypothesis revealed that the interaction term to establish a moderator impact (Field, 2018) was not significant. As reasons for such results, the available literature revealed that allowing people to skip advertisements after a few seconds is not effective because people do not typically voluntarily decide to watch ads on social media (Rodriguez, 2017). Further, even if it is a skippable advertisement, viewers have to watch the advertisement for at least five seconds to get back to the video, and non-skippable advertisements are also generally short advertisements (Pashkevich et al., 2012). Therefore, in some cases, viewers may not see a significant difference between the skippable and non-skippable nature of YouTube advertisements. This could also be a reason why the moderating effect was not identified. Accordingly, concerning this research objective, it can be stated that the nature of YouTube advertisements (skippable vs. non-skippable) does not moderate the relationship between perceived YouTube advertising clutter and irritation.

6. Conclusion and Implications

The present study indicated that, although a direct relationship demonstrating the impact of YouTube advertising clutter on attitude towards YouTube TV channel was not significantly confirmed, when the YouTube advertising clutter increases while watching TV programs, viewer irritation also increases. Moreover, the impact of irritation on attitude towards YouTube TV channel was also established with a significant negative relationship. Together these findings indicate that when the irritation resulting from YouTube ad clutter increases, the attitude towards YouTube TV channel could decrease at least to some extent. Furthermore, findings of the moderator analysis revealed that the skippable nature of advertisements does not reduce the strength of the relationship between advertising clutter and irritation. As a whole, by examining the relationship between perceived YouTube advertising clutter and attitude towards YouTube TV channel, the present study has enriched the knowledge of how consumers respond to YouTube advertisements.

Discussing the limitations of this study, it appeared that, respondents who participated in the questionnaire survey did not answer the questions used to measure the variables "perceived mobile data cost of YouTube advertisements" and "the nature of YouTube advertisements" in a consistent manner. The reliability test which was done by using Cronbach's Alpha indicated a possible measurement error of indicators. Due to this, some questions in relation to each of these variables had to be excluded from the final analysis. Probably this measurement error could be due to negatively worded questions used in measuring these two variables. Because, methodological literature also identifies

negatively worded questions as being confusing and leading to inconsistent responses (Jamadin & Noordin, 2016; Roszkowski & Soven, 2010). Therefore, it is appropriate to conduct this research again by eliminating confusing negatively worded questions in the questionnaire and it is better to include more positively worded questions in measuring these variables.

As another limitation of this study, it could be mentioned that the variable skippable and non-skippable nature of YouTube ads was measured using self-developed indicators because there were no measurements in the existing literature. Due to an internal consistency error in measuring this variable, one of the two indicators had to be eliminated and only one positively worded indicator was used for the final analysis. Therefore it is appropriate to include more reliable and valid indicators in measuring this variable rather than including one indicator in future research.

This study provides insights into consumer behavioral patterns concerning watching television programs through YouTube, which could be useful to YouTube channels. Since both H₂ and H₃ were established, showing people are getting irritated by exposure to ad clutter and it could lead to a subsequent negative attitude towards the YouTube TV channels, admins of such YouTube TV channels should be alert regarding the ideal number of YouTube advertisements that they should play while telecasting television programs on YouTube. On the other hand, since the irritation resulting from advertising clutter explains only a little of the variation in attitude towards the YouTube TV channel, channel owners need to be concerned about the other elements that impact channel attitude. Since the moderator impact of the nature of YouTube advertisements was not significant, there is an opportunity for television channels to insert the most revenue-generating type of advertisement without considering whether it is a skippable advertisement or non-skippable advertisement while telecasting their television programs on the YouTube platform.

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