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Skipping Skippable Ads on YouTube: How, When, Why and Why Not?

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Abstract—YouTube introduced skippable video ads, which gives Internet users the option to skip the ads after a 5-second non-skippable segment. This interactive format has now become dominant in the industry as it offers greater control to the audience. However, if users always skip skippable ads, the advertisers' purposes would not be served. Bombarding users with long-duration non-skippable ads is also not a viable option as it can result in negative user experiences. On the scholarly front, this problem has mostly been tackled using quantitative studies. The literature still lacks an in-depth understanding of users' perceptions of skippable ads. Hence, adopting a qualitative lens of investigation, this research explores users' responses toward skippable ads. Using in-depth interviews, it investigates (1) how, (2) when, (3) why, and (4) why not users skip skippable ads. Themes related to the question of "how" include habitual skipping and emotional skipping. Regarding the question of "when", a few respondents would have liked to skip even before five seconds. About half of the respondents thought that the non-skippable duration of five seconds was reasonable but they would skip as soon as skipping is allowed. Occasionally, some respondents were open to consider a longer duration of non-skippability. Skippable ads are skipped due to repetitions, time constraints, lack of personalization, and users' negative attitudes towards advertising. In contrast, they are not skipped if they are captivating and personalized. Additionally, when users are in a relaxing mood, skippable ads may not be skipped. The contributions of the findings are discussed.

Keywords—online ads, skippable ads, YouTube, video ads

I. INTRODUCTION

A. Background and the Research Problem

On the web—from social media platforms and news websites to brand pages, digital strategists and content marketers are uploading an astounding amount of video content for online users to consume at will. Video sharing websites such as YouTube and Youku have turned out to be popular communication channels for information, education, entertainment as well as ads, particularly because video is a rich medium that is conducive to engaging users [1, 2]. Unlike traditional media like television, users of these websites choose to watch whatever they want from anywhere at anytime through the Internet. As such, online advertisements (henceforth online ads) have become an important marketing tool to promote product and services to potential customers [3, 4, 5].

With the growing popularity of video sharing websites, the ad industry has also been undergoing a paradigm shift from traditional advertising to advertising in the form of online digital media [1, 6, 7, 8]. This is also important for businesses because users are no longer acting as passive receivers on these websites. Instead, they play an active role during the

online interactions in terms of what to click and what to see [9]. More precisely, they can choose online videos based on their preference as well as have some level of control over online ads to be watched and consumed. The way to conceptualize, create, and disseminate online ads have a significant impact on marketing ROI and users' perceptions [10]. Meanwhile, it is no wonder that YouTube's net advertising revenue in the US has increased to \$3.96 billion in 2018, up from \$2.24 billion in 2015 with the increase of about 76% [11].

YouTube introduced skippable video ads, which give users the option to skip the ads and return to their video content directly after a 5-second non-skippable segment [12]. This interactive format has now become dominant in the industry as it offers greater control to the audience, and promotes their overall video watching experience [2, 12].

However, from the advertiser's perspective, the effectiveness of skippable ads remains questionable. Previous studies suggest that skippable ads give users control over advertising, and increases their satisfaction [12]. But if users always skip skippable ads, the advertisers' purposes would not be served. Bombarding users with long-duration non-skippable ads is also not a viable option as it can result in negative user experiences [2, 13].

B. Related Literature and Research Objective

On the scholarly front, this problem about video ads has been explored mostly using quantitative approaches [2, 13, 14]. One of these studies conducted a survey to investigate how ads on YouTube were associated with brand awareness and individuals' intentions to purchase [13]. Results indicated that customization and informativeness in ads were positively related to YouTube advertising, and advertising value affected both brand awareness and individuals' intentions to purchase. Using quantitative survey, another study found that perceived control of skippable ads was negatively associated with users' intention to avoid ads [14]. Furthermore, perceived intrusiveness partially mediated the relations between users' perceptions of control and users' intention to avoid ads. Prior quantitative studies also conducted experiments to investigate how users reacted to skippable ads on YouTube [2]. It was found that high-arousal skippable ads were watched for a longer time and found to be effective in ad-congruent contexts.

However, given their quantitative nature, these works fail to offer a richer understanding of how users feel when watching online ads. The literature still lacks clarity when it comes to users' perceptions of skippable ads. Hence, adopting a qualitative lens of investigation, this research explores users' responses toward skippable ads. Specifically, it investigates

(1) how, (2) when, (3) why, and (4) why not users skip skippable ads.

Though this investigation, this research can contribute to both theory and practice. On the theoretical front, it extends the limited existing works by revealing users' perceptions of skippable ads on the Internet. On the practical front, this research is valuable for companies investing in YouTube advertising. It also offers insights to YouTube on ways to enhance user experiences on the platform.

The remainder of this paper proceeds as follows. The following section describes the methodology of this research, which included two subsections. The first subsection describes the research design and the recruitment of the participants. The second subsection includes the coding process and the analysis of the data. Thereafter, the findings are discussed in Section III, which has four subsections. The first subsection explains how skippable ads are skipped. The second subsection indicates when skippable ads are skipped. The third subsection explains why skippable ads are skipped. This is followed by the reasons why skippable ads are not skipped in the fourth subsection. Finally, the paper concludes by highlighting its contributions, limitations, and future research directions.

II. RESEARCH METHOD

A. Research Design and Participant Recruitment

YouTube users are exposed to online skippable ads when they watch videos on the platform. There is a lack of a priori theoretical frameworks that provide an understanding of how YouTube users would perceive those ads that come at specific points in time in their viewing. Therefore, this exploratory research conducted in-depth interviews for the purpose of its investigation [15].

In particular, it involved unstructured interviews. Respondents were asked a series of open-ended questions to uncover their perceptions of skippable ads (Malhotra et al., 2017)—related to the questions of (1) how, (2) when, (3) why, and (4) why not. Such a methodological lens was deemed appropriate to obtain a rich understanding of individuals' experience with skippable ads on YouTube.

This research recruited participants on the basis of two eligibility criteria. First, they must view YouTube videos regularly. Second, they must be familiar with other video-on-demand services (e.g., Netflix). These two eligibility criteria ensured a suitable demographic for the purpose of this research, and have also been used as a way to filter participants in previous works related to online ads [13, 16].

A total of 22 respondents were recruited using convenience sampling and further snowballing. Among the respondents, 10 were males, and 12 were females. The respondents were postgraduate students within the age group of 21 to 30 years. Each of the interviews took about 30-45 minutes. All the interviews were administered face-to-face. Informed consent was obtained beforehand.

Besides audio recording, handwritten notes were taken during the interviews. Respondents were asked how they feel when encounter skippable ads on YouTube, and were asked to share their recent experiences. They were also free to play any YouTube video of their choice on their mobile phones, and describe their ad experience in real time [17]. Whenever needed, probe questions (e.g., "Can you share any other

experiences regarding YouTube ads?" and "What else can you recall about that experience?") were asked to reveal respondents' experiences [18]. Responses were transcribed for the purpose of coding.

B. Data Coding and Analysis

The interviews were analysed using inductive thematic analysis [19, 20, 21]. The analysis involved open coding and constant comparison into the views and experiences of the respondents. One coder who was trained in qualitative research methods read the first interview transcript to identify and assign open codes. Thereafter, the next transcript was processed with two-fold purposes: to constantly compare with the extant open codes, and to find new open codes. When done with the first three interview responses, the coder discussed the codes extensively with the first author. Thereafter, the remaining interview responses were coded and analysed. Whenever a new code emerged in an interview data, the data set already coded was reviewed and re-examined. Thus, using this iterative process, the emerging codes were constantly challenged and further refined at each step of the process. Code saturation was achieved when no new codes were emerged from the data.

Codes with conceptual overlapping were merged into themes to achieve a higher-level synthesis. As codes were being consolidated into themes, the emergent themes were compared to each other with the aim of establishing logical connections among them.

III. FINDINGS

The findings have been presented along the four dimensions of (1) how, (2) when, (3) why, and (4) why not. The themes emerging around each of these four dimensions are explained below.

A. Skipping Skippable Ads: How?

The data identified two themes of how skippable ads are skipped. The first theme identified was users' nature of habitual skipping. As people are regularly exposed to skippable ads, they develop a habit of clicking the 'skip' option, thereby rendering skippable ads ineffective. This trend is reflected in the following remark from a respondent: "*Follow your subconscious, and will jump. Because that the long skipping behaviour creates a habit.*" However, as a downside of habitual skipping, some respondents stated that habitual skipping leads them to miss exciting content in the ads.

The second theme identified was emotional skipping, whereby respondents would not actually skip the ads but would engage in other online and/or offline tasks while the ads would play in the background. In other words, they would skip and avoid the ads not in reality by clicking the 'skip' option but emotionally by engaging in other activities. This theme is similar to the notion of emotionally unsubscribed customers in the realm of email marketing, whereby email recipients would avoid marketing emails not in reality by unsubscribing but emotionally by either deleting or simply ignoring the promotional messages [10]. Several respondents confirmed that they would not bother to actually skip the skippable ads but use the duration of the ads to "*check notifications on the phone...*", "*have a look at my inbox*", "*read something*", and "*go to the kitchen to get a drink.*" The identified themes and the corresponding responses are provided in Table I.

TABLE I. IDENTIFIED THEMES AND RESPONSES FOR HOW SKIPPABLE ADS ARE SKIPPED

Dimension	Theme	Response
How	Habitual skipping	<p>“Viewing habits do have a significant effect on skipping ads, and after a period, sometime may skip the ad subconsciously. Habit is always try to skip the ads, it is in such a flow that skipping sometimes leads to miss exciting content.”</p> <p>“Follow your subconscious, and will jump. Because that the long skipping behaviour creates a habit.”</p>
	Emotional skipping	<p>“Not accepting at all. Go for a break to eat food, do chat with friends”</p> <p>“I always do something else. Such as read something, and check notifications on the phone. Sometimes it is just time for some drinks.”</p>

B. Skipping Skippable Ads: When?

The first few seconds of skippable ads play a crucial part to attract users’ attention, and convince them to continue to watch the ads. Given the option, a few respondents would have liked to skip even before five seconds. Respondents expressed that “*Unless the content of the ad can attract me in the first few seconds (such as high-tech, or fashion), I would like [it] to be short*” and “*When things appear, it is based on intuition. The first second will follow the intuition. Advertising is plot, picture, music.*”

About half of the respondents thought that the non-skippable duration of five seconds was reasonable but they would skip as soon as it is allowed. It is evident from the following comments: “*I think 5 seconds is enough to judge whether you want to continue watching.*” and “*Because it will pay attention to 5 seconds. Will wait for 5 seconds time to skip.*”

Users can also continue to watch ads beyond five seconds if the content of the ads attracts them. Occasionally, some respondents were open to consider a longer duration of non-skippability. Respondents stated that “*Look at the content. Accept up to 15~20 seconds.*” The identified themes and the corresponding responses are provided in Table II.

C. Skipping Skippable Ads: Why?

As reported in Table III, the data identified four themes related to why skippable ads are skipped. The first theme identified was ad repetition. Too many repetitions of ads have a damning effect on users’ perceptions. Respondents stated that “*if I already watched the commercial before and I know what it is about and I’m not interested, I skip it.*”

The second theme identified was time management. When people go online, they usually have a specific goal in mind—either work-related or recreational. As such, online ads are perceived as intrusive amid their online schedule. Therefore, users would like to skip the ads as quickly as possible. Respondents stated that “*If you can skip it, the time will be shorter and it will not affect my schedule.*” and “*I am sensitive to time, too long, I can’t accept it.*”

The third theme identified was lack of personalization. Online ads should be well targeted to consumers. Ads that are

irrelevant are more likely to be skipped promptly than those that are personalized. Personalization plays a crucial role in online ads, and it is evident from a female respondent’s comment “*If it’s about male products, for example, razors, I skip it with no doubt. But if it’s of cosmetics, normally I’d like to watch it.*”

TABLE II. IDENTIFIED THEMES AND RESPONSES FOR WHEN SKIPPABLE ADS ARE SKIPPED

Dimension	Theme	Response
When	< 5 Sec	<p>“Unless the content of the ad can attract me in the first few seconds (such as high-tech, or fashion), I would like [it] to be short.”</p> <p>“When things appear, it is based on intuition. The first second will follow the intuition. Advertising is plot, picture, music.”</p>
		“I think 5 seconds is enough to judge whether you want to continue watching.”
	= 5 Sec	<p>“Because it will pay attention to 5 seconds. Will wait for 5 seconds time to skip.”</p>
	> 5 Sec	<p>“I can accept up to ten seconds. Because I think it is more than ten seconds, it is equivalent to forcing me to read a certain part.”</p> <p>“Look at the content. Accept up to 15~20 seconds.”</p>

TABLE III. IDENTIFIED THEMES AND RESPONSES FOR WHY SKIPPABLE ADS ARE SKIPPED

Dimension	Theme	Response
Why	Ad repetition	<p>“Yes. if I already watched the commercial before and I know what it is about and I’m not interested, I skip it.”</p> <p>“some ads are continuously repeated, really annoying to see, always skip them straightaway”</p>
		“The time is short and there is no way to do anything else. I don’t want to miss the video behind.”
	Time Management	“If you can skip it, the time will be shorter and it will not affect my schedule.”
	Lack of personalization	<p>“It depends on what the commercial is about. If it’s about male products, for example, razors, I skip it with no doubt. But if it’s of cosmetics, normally I’d like to watch it.”</p> <p>“some ads are not related to my interest, and serve no purpose of what I want or what I like. Hence no point of watching those ads”</p>
	Negative perceptions of ads	<p>“Most of the time. I hate ads. I always skip.”</p> <p>“just close my window. I hate the ads. I consider to change the video.”</p>

The fourth theme identified was negative perceptions of ads. Some respondents expressed that they simply hate ads. Exposure to ads often forces them to change the video that they would otherwise watch as evident from the following comment: “*just close my window. I hate the ads. I consider to change the video.*”

D. Skipping Skippable Ads: Why not?

As reported in Table IV, three themes were identified regarding why skippable ads are not skipped. The first theme identified was grabbing attention. When online ads are able to grab attention of receivers, users would remain hooked to the ads. Individuals’ attention is finite and fleeting. It is difficult to capture and even harder to retain. The amount of time that advertisers have to capture attention incredibly short because innumerable brands are vying for attention in the online setting. The importance of capturing attention is evident from respondents’ comments such as “*According to whether the content can attract me. When the commercial is beautifully made, for example, a lot of commercials of Apple, usually I stick to it*” and “*When the story is impressive to attract me. What the poster will still arouse the impression. Some will still turn into buying desires.*”

TABLE IV. IDENTIFIED THEMES AND RESPONSES FOR WHY SKIPPABLE ADS ARE NOT SKIPPED

Dimension	Theme	Responses
Why not	Grabbing attention	<p>“<i>According to whether the content can attract me. When the commercial is beautifully made, for example, a lot of commercials of Apple, usually I stick to it.</i>”</p> <p>“<i>When the story is impressive to attract me. What the poster will still arouse the impression. Some will still turn into buying desires.</i>”</p>
	Personalization	<p>“<i>Yes, why not? For example, I was intrigued by the L’Oreal hair dye product colorista, so I googled it after watching the commercial. I think it’s about how the commercial being produced, but also about the product itself.</i>”</p> <p>“<i>Depends on my interest. If the ad is about travelling, I like travel, I will watch it.</i>”</p> <p>“<i>I will watch about the promotion of hotels and fashion. Interested to see.</i>”</p>
	Relaxation	<p>“<i>Relaxed but not so urgent. I usually watch TV with my mobile phone. At this time, I usually lie in bed, too lazy to move out of bed. So, even if there is an advertisement, I can watch it.</i>”</p> <p>“<i>If I am not in a hurry. I feel relax. I don’t do anything.</i>”</p> <p>“<i>Too short, nothing can be done, I just only watch it and relax.</i>”</p>

The second theme identified was personalization. Previous works also suggested that personalized ads help individuals to get what they are looking for in their online search [22, 23]. It

is always important to ensure that online ads reach the right audience with personally relevant messages. When individuals would find online ads as useful and aligned with their interests, they would likely give favorable response to the ads. This research also finds similar evidence during the interviews where respondents stated that “*Depends on my interest. If the ad is about travelling, I like travel, I will watch it*” and “*I was intrigued by the L’Oreal hair dye product colorista, so I googled it after watching the commercial. I think it’s about how the commercial being produced, but also about the product itself.*”

The third theme identified was relaxation. When users spend their time for leisure, they would likely watch ads without further skipping them. It seems that watching online ads is part of their leisure activity. Respondents commented that “*I usually watch TV with my mobile phone. At this time, I usually lie in bed, too lazy to move out of bed. So, even if there is an advertisement, I can watch it*” and “*If I am not in a hurry. I feel relax. I don’t do anything.*”

IV. DISCUSSION & CONCLUSION

This research makes at least four contributions. First, it extends previous works [2, 13, 14, 16] by developing a richer understanding of users’ perceptions of skippable ads on YouTube. While skippable ads have become a commonly used advertising format, an in-depth understanding of their effects was missing in the literature. This research casts the spotlight on the issue of skipping skippable ads by exploring the questions of (1) how, (2) when, (3) why, and (4) why not.

Second, this research reveals that users tend to skip repetitive ads, especially if they are not personalized. Online ads must captivate the audience right from the outset in order to deter skipping tendencies. Users’ mood also seems to have a bearing on whether or not a skippable ad would be skipped. If they are in a relaxing state of mind, they tend to be forgiving to the ads, and would not mind watching them till completion. However, when constrained by time, they tend to be ruthless in terms of skipping. These are new findings that the present qualitative research has uncovered, thereby extending earlier quantitative studies [2, 13, 14]. These points are also important to consider for businesses investing in YouTube advertising.

Third, this research finds evidence for habitual skipping behavior as people skip online ads subconsciously. Given that receivers of skippable ads have the power to skip the ads after five seconds, they simply wait for the five seconds of non-skippability to end, after which they click the ‘skip’ option as a habit. This is consistent with finding reported in [24].

Nonetheless, extending the earlier work, this paper unravels the tendency of emotional skipping of skippable ads, whereby users would not actually skip the ads but would engage in other online and/or offline tasks while the ads would play in the background. This newly-identified phenomenon in the realm of video advertising is akin to the notion of emotionally unsubscribed customers in the realm of email marketing [10]. The prevalence of emotional skipping suggests that viewership of skippable ads should be taken with a pinch of salt. An ad that is played fully does not necessarily indicate that it has been watched. This also has important implications for the online advertising model and the tracking of ROI.

Fourth, this research challenges the conventional practice of ad repetition [25, 26]. It finds that ad repetitions give an annoying experience to users. Online advertisers should be aware that consumers faced with interactive skippable ads will rapidly seek access to all the information they need to decide if they want to continue watching the ad. In this context, providing useful information at the beginning of the ad helps viewers decide if the product being advertised is of interest to them.

Notwithstanding its significance and contributions, three limitations of this research must be acknowledged. First, the sample was drawn from the student population. Therefore, the results should not be generalizable to the entire online population. Second, the findings of this research relied on the respondent's self-reported responses, which was dependent on their willingness to recall their past experiences with YouTube ads. Future work could use the screencast videography approach to investigate users' perceptions of online ads in real time [17]. Third, the research was set in the context of YouTube only. Future works could consider delving deeper into users' viewing experience on other video-streaming platforms such as Netflix.

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REFERENCES

- [1] S. Banerjee, and A. Y. Chua, "Identifying the antecedents of posts' popularity on Facebook Fan Pages," *Journal of Brand Management*, vol. 26, no. 6, pp. 621-633, 2019.
- [2] D. Belanche, C. Flavián, and A. Pérez-Rueda, "Understanding interactive online advertising: Congruence and product involvement in highly and lowly arousing, skippable video ads," *Journal of Interactive Marketing*, vol. 37, pp. 75-88, 2017.
- [3] A. B. Mohammed, and M. Alkubise, "How do online advertisements affects consumer purchasing intention: Empirical evidence from a developing country," *European Journal of Business and Management*, vol. 4, no. 7, pp. 208-218, 2012.
- [4] J. Hwang, Y. S. Yoon, and N. H. Park, "Structural effects of cognitive and affective responses to web advertisements, website and brand attitudes, and purchase intentions: The case of casual-dining restaurants," *International Journal of Hospitality Management*, vol. 30, no. 4, pp. 897-907, 2011.
- [5] Y. Wang, and S. Sun, "Examining the role of beliefs and attitudes in online advertising: A comparison between the USA and Romania," *International Marketing Review*, vol. 27, no. 1, pp. 87-107, 2010.
- [6] T. Daugherty, V. Djuric, H. Li, and J. Leckenby, "Establishing a Paradigm: A Systematic Analysis of Interactive Advertising Research," *Journal of Interactive Advertising*, vol. 17, no. 1, pp. 65-78, 2017.
- [7] A. Y. Mahfouz, K. Joonas, D. Williams, R. Jia, and M. Arevalo, "A Classic American Department Store's Resurgence to Glory: Using Social Media and Online Advertising Strategies to Generate Revenue," *Southern Journal of Business and Ethics*, vol. 9, pp. 180-192, 2017.
- [8] K. Gaurav, and A. S. Ray, "Impact of Social Media Advertising on Consumer Buying Behavior in Indian E-commerce Industry," *Sumedha Journal of Management*, vol. 9, no. 1, pp. 41-51, 2020.
- [9] C. F. Hofacker, and D. Belanche, "Eight social media challenges for marketing managers," *Spanish Journal of Marketing-ESIC*, vol. 20, no. 2, pp. 73-80, 2016.
- [10] D. Chaffey, and F. Ellis-Chadwick, *Digital marketing: Strategy, implementation and practice*, vol. 5, Harlow, UK: Pearson, 2012.
- [11] Statista, U.S. YouTube ad advertising revenues 2018, Statistic. [online] Available at: <https://www.statista.com/statistics/289660/youtube-us-net-advertising-revenues/> [Accessed 25 Sep. 2019].
- [12] M. Pashkevich, S. Dorai-Raj, M. Kellar, and D. Zigmond, D., "Empowering online advertisements by empowering viewers with the right to choose: the relative effectiveness of skippable video advertisements on YouTube," *Journal of Advertising Research*, vol. 52, no. 4, pp. 451-457, 2012.
- [13] M. Dehghani, M. K. Niaki, I. Ramezani, and R. Sali, "Evaluating the influence of YouTube advertising for attraction of young customers," *Computers in Human Behavior*, vol. 59, pp. 165-172, 2016.
- [14] B. Li, and S. Yin, "How perceived control affects advertising avoidance intention in a skippable advertising context: A moderated mediation model," *Chinese Journal of Communication*, pp. 1-19, 2020.
- [15] M. Spruit, R. Vroon, and R. Batenburg, "Towards healthcare business intelligence in long-term care: an explorative case study in the Netherlands," *Computers in Human Behavior*, vol. 30, pp. 698-707, 2014.
- [16] D. Belanche, C. Flavián, and A. Pérez-Rueda, "Brand recall of skippable vs non-skippable ads in YouTube", *Online Information Review*, vol. 44, no. 3, pp. 545-562, 2020.
- [17] F. Kawaf, "Capturing digital experience: The method of screencast videography," *International Journal of Research in Marketing*, vol. 36, no. 2, pp. 169-184, 2019.
- [18] N. K. Malhotra, D. Nunan, and D. F. Birks, *Marketing research: An applied approach*. Pearson, 2017.
- [19] S. Atanasova, T. Kamin, and G. Petrič, "The benefits and challenges of online professional-patient interaction: Comparing views between users and health professional moderators in an online health community," *Computers in Human Behavior*, vol. 83, pp. 106-118, 2018.
- [20] V. Braun, and V. Clarke, V. "Using thematic analysis in psychology," *Qualitative Research in Psychology*, vol. 3, pp. 77-102, 2006.
- [21] A. Strauss, and J. Corbin, *Basics of qualitative research techniques*. Thousand Oaks, CA: Sage publications, 1998.
- [22] M. Eslami, S. R. Krishna Kumaran, C. Sandvig, and K. Karahalios, "Communicating algorithmic process in online behavioral advertising," *Proc of the CHI conference on Human Factors in Computing Systems*, ACM, Apr. 2018, pp. 1-13.
- [23] C. D. Ham, "Exploring how consumers cope with online behavioral advertising," *International Journal of Advertising*, vol. 36, no. 4, pp. 632-658, 2017.
- [24] D. Belanche, C. Flavián, and A. Pérez-Rueda, "User adaptation to interactive advertising formats: The effect of previous exposure, habit and time urgency on adskipping behaviours," *Telematics and Informatics*, vol. 34, no. 7, pp. 961-972, 2017.
- [25] D. S. Cox, and A. D. Cox, "What does familiarity breed? Complexity as a moderator of repetition effects in advertisement evaluation," *Journal of Consumer Research*, vol. 15, no. 1, pp. 111-116, 1988.
- [26] K. A. Machleit, and R. D. Wilson, "Emotional feelings and attitude toward the advertisement: The roles of brand familiarity and repetition," *Journal of Advertising*, vol. 17, no. 3, pp. 27-35, 1988.