

The effect of frequency presence of plastic surgery on social media

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Abstract: Surgeons involved in plastic surgery may utilize social media avenues as a tool to reach out to their online audience and attract more potential consumers of their services. The purpose of this study is to explore the plastic surgery online presence with the main focus being on exploring the frequency of exposure to plastic surgery ads and the responses from the audiences. A quantitative cross-sectional design was adopted with the surveys distributed through TikTok and Snapchat being used to distribute the surveys to the targeted audience. A total of 850 participants were recruited for the study. The study findings showed that the exposure to plastic surgery ads was 100% with most of the participants encountering the ads more than ten times in a day. Also, most of the participants responded positively by clicking the ads, saving for later, seeking further information, or planning for plastic surgery. The study concluded that social media provides a good platform for plastic surgeons to market their products and reach more audiences. However, further research should be conducted to explore how companies and clinics should utilize social media channels to improve visibility and reach a wider audience.

Keywords: *Online audience, Online presence, Plastic surgery, Social media.*

1. Introduction

Social media continues to impact marketing because of the many advantages it offers in terms of helping companies reach their targeted consumers. According to Shaully et al., the inordinate amount of time people spend on social media has paved way for the companies to adapt their business models and benefit from the interconnective nature of social media [1]. Surgeons involved in plastic surgery may utilize social media avenues as a tool to reach out to their online audience and attract more potential consumers of their services. The most commonly used social media platforms for marketing include Facebook, Instagram, LinkedIn, and Pinterest among others [2]. In particular, Instagram has revolutionized the interconnection in society with the platform having more than 1.4 billion users. As of 2022, more than 200 million companies had Instagram profiles actively interacted with the public, and displayed various products and services they offer [3]. Also, Peterson reported that the impact of social media on plastic surgery procedures and demands has been significant with TikTok and Instagram ranked among the most powerful tools used to promote the procedure [4].

Tremendous changes have been recorded in the marketing landscape. Social media platforms serve as communication, entertainment, education, and lifestyle promotion platforms. Traditionally, beauty adverts were mainly made through television shows and commercial adverts; however, currently, most of the adverts are done through social media and media influencers [5]. Similarly, Al-Saiari and Bakarman argued that plastic surgery advertisements have been promoted through social media platforms with most of the posts emphasizing the minimally invasive procedures involved in the surgery [6]. The American Society for Plastic Surgery reports an increase in the number of plastic surgeries performed and this is because of the increasing popularity of the procedure following widespread advertisements on social media.

Plastic surgery has established itself as a rapidly growing industry. The American Society for Plastic Surgery reports more than 15.5 million plastic procedures performed in 2020 alone [7]. In addition, Americans tend to research online about the potential procedure they could perform before making the decision [3,7]. Therefore, social media platforms serve as important tools that influence the decision to undergo plastic surgery or not. In a study conducted among patients who underwent rhinoplasty, Obeid, Faisal, et al. reported that social media usage influences appearance-altering practices including plastic surgery because the users are motivated by the desire to improve their appearance [8]. On the other hand, social media could also alter the self-esteem of the users especially when they realize that their appearance does not idealize the desirable beauty and this could also be a motivating factor for plastic surgery [8,9]. Viewing women who have undergone plastic surgery enhancement is most likely to influence young women to undergo plastic surgery. Such data show that the surgeons involved in having many people undergoing the procedure can utilize social media platforms and celebrity marketing [10, 11].

Despite the existing studies exploring the influence of social media exposure on the decision to undergo plastic surgery; there is no empirical evidence on this topic on the impact of the frequency of social media ad exposure on plastic surgery. The current study will seek to determine how responsive social media are likely to be on plastic surgery following exposure to plastic surgery adverts on social media platforms. The presence of plastic surgery online has been explored widely. Thawanyarat et al. explored content engagement among plastic surgeons on Instagram [12, 13]. The study focused on the role of social media in promoting plastic surgery from the patient's perspective. Patients tend to view photos from social media platforms including Facebook before and after the surgery. In addition, they can easily navigate through social media using hashtags as a means to obtain specific information about plastic surgery and this allows them to obtain the information they need [13]. In another study, Economides et al. explored the plastic surgeon's perception of the use of social media. The study contributed to the understanding of the aesthetic surgeon's perception of using social media platforms to create awareness about the services they offer [13]. The current study takes a different approach by determining the impact of the frequency of social media users' exposure to plastic surgery ads and how they responded to the ads.

This study aimed to bridge the gap by focusing specifically on determining the response of social media users to plastic surgery ads. The study aimed at addressing two research questions: (a) to identify the frequency of social media users exposed to plastic surgery ads and (b) how responsive are social media users who are exposed to plastic surgery ads.

2. Literature Review

2.1. Plastic Surgery Social Media Posting

Social media posts about plastic accounts are mainly posted by the public at 70.6% compared to 6.0% by plastic surgeons. Also, 5.4% of the tweets contained the hashtag #plasticsurgery; though, almost half of the posts were by plastic surgeons [13]. The use of social media continues to grow as many people use the internet to obtain information including medicine and plastic surgery [14]. Plastic surgeons are known to be creative and adaptable to new techniques and emerging technologies that are advantageous in the current highly competitive market. On the other hand, even if the surgeons refrain from posting images on social media platforms, the pictures may still find themselves on the internet through patient-generated reviews [14]. However, Naftali et al. recognize that the information shared on social media platforms may sometimes be inaccurate and misleading [15]. Most of the media platforms containing information about breast augmentation tend to be false or misleading [15]. The use of social media to advertise plastic surgery procedures has become a normal phenomenon in the current era [15]; however, concerns have been raised on the authenticity of the shared information and this also indicates the need to determine how the recipients of the information respond to the ads.

In another study, Mess et al. explored the trends in the posting of plastic surgery on social media. In a study involving 774 patients, the reports showed that Facebook and YouTube were the most

commonly utilized social media platforms in 2018 [16]. Furthermore, the patients were most interested in the posts of contests where they would win free treatment, or plastic surgery products. Selecting the right platforms to obtain information is critical for the prospective targets of plastic surgery [16]. On the contrary, while the use of social media in promoting plastic surgery activities has grown, Eldaly and Mashaly believed that the link between plastic surgery and social media was complex. Importantly, surgeons are becoming more concerned about the ethical and professional impacts of the interaction between social media users and the plastic surgery photos posted [17]. In another perspective, Gupta et al. focused on the sponsorship of plastic surgery adverts on social media. In a systematic review focusing on the studies published in MEDLINE, the study found the need to use social media platforms to offer credible and authentic information to users so that they can make appropriate health decisions [18].

2.2. Plastic Surgery Ads on Social Media

Businesses use social media to communicate information about the products offered. Plastic surgeons are not exceptions in the use of social media to advertise their products. According to Wheeler et al., most plastic surgeons promote their products through social media [19]. The intention of the advertisement is to have as many people as possible seek and consume the services of a given surgeon. Social media platforms are used in advertising plastic surgery because patients can access social media sites including YouTube, Facebook, and Twitter, and also, use the platforms to acquire more exposure and understanding of aesthetic surgery [18,19, 20]. The advertising is meant to attract more clients; however, there are cases where the adverts have been associated with dangerous and unrealistic expectations. Social media platforms are specifically important because they allow patients to chronicle their experiences, seek support, learn more about plastic surgery procedures as well as evaluate the providers. The amount of content posted on social media platforms may sometimes be voluminous and such may affect the ability of the patients to obtain targeted information that suits their needs.

2.3. Response of Social Media Users to Plastic Surgery Ads

The response of social media users or patients to plastic surgery ads matters a lot to surgeons. The essence of advertising plastic surgery services is to attract more consumers to their services. Klietz et al. explored the perspectives of the patients the plastic surgery advertisements on social media and reported that posts involving diseases and aesthetic interventions reported the highest response rates [21]. The study also recognized the importance of plastic surgeons using social media platforms to inform and educate their patients as this will increase the interest of the patient's viewers to visit the posts and take action. Also, Klietz et al. showed that plastic surgeons post private posts not only to convert the visitors into patients but also to create awareness about the doctors and their work. Whenever a follower on social media are considering undergoing a plastic surgery procedure, they are most likely to unconsciously link the procedure to the doctor they saw on social media platforms [21]. The study provided significant insights into the intention of online visitors on the plastic surgery adverts on social media platforms but failed to highlight the specific responses that the visitors provided on the posts. Besides, the study recognized that a successful advertisement ought to influence specific reactions and responses from the viewers. Personalizing the adverts may have more impact in terms of drawing the attention of social media users to respond to the adverts. Also, most of the studies have analyzed the impact of social media adverts on plastic surgery on the attitudes and intention to undergo the procedure [22, 23]. Hermans et al. explored the relationship between the frequency of Instagram posting and the intention to undergo a plastic surgery procedure [24].

The current study hypothesizes that the frequency of exposure to plastic surgery adverts would consistently reflect the response rates from social media users. There are currently limited empirical findings outlining the implications of the frequency of exposure to plastic surgery adverts on the Snapchat and TikTok platforms and their responses to the adverts.

2.4. Hypothetical Framework

This study aimed to explore the frequency of exposure to plastic surgery ads on social media and the responses from online users on Snapchat and TikTok. Based on the proposed research question and the existing literature on this research topic, the study was guided by the following hypothetical model.

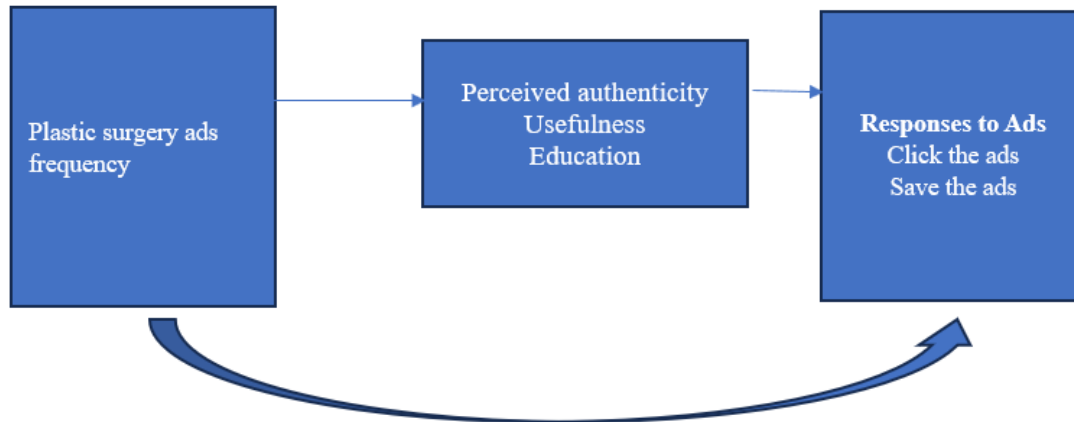


Figure 1.

The proposed model shows that the perceived usefulness of the plastic surgery ads influenced the responses from Snapchat and TikTok users. It is argued that social media users rely on the information they obtain from the social media platform to inform their decisions to undergo the surgical procedure. Therefore, having more trust in the information they obtain from the social media platforms, they are likely to click on the ads and save them for future reference. Also, the users will most likely visit the ads because they want to learn more about plastic surgery procedures and get reviews about the surgeons performing the procedures. In determining the impacts of the frequency of social media use and the responses from the users, extensive empirical research is required to validate whether the impact perceived relationship indicated in the hypothetical model.

3. Methodology

3.1. Research Design

This study adopted the quantitative cross-sectional design to explore the plastic surgery ads presence online. In this study, the frequency of social media users being exposed to plastic surgery ads was the independent variable, and their response to the ads was the dependent variable. We employed a survey research design in collecting numerical data considering that this was a quantitative study. The use of a survey administered through Snapchat and TikTok was preferred because it is a simple and cost-effective method of recruiting the target participants.

3.2. Research Participants

In exploring the impact of the frequency of exposure to plastic surgery ads on social media on the user's response, we use the social media users on Snapchat and TikTok. In terms of demographic characteristics, the participants mainly constituted the youth aged between 20 and 35 years. The snowballing sampling method was selected considering that the sample frame was not specifically identified and this method would help in identifying the appropriate sample for the study. Although the

sampling method could result in bias in the data collected, its selection was based on the suitability to identify the Snapchat and TikTok users who would participate in the study on a voluntary basis.

3.3. Data Collection and Measurement

The data were collected using surveys administered to the participants through TikTok and Snapchat. The surveys captured two questions including the one exploring the frequency of the social media users were exposed to plastic surgery ads and their responses. Under the frequency of exposure to social media ads featuring plastic surgery, the participants were to indicate how many times they had seen plastic surgery ads appearing on social media, indicate whether they followed any accounts referring to plastic surgery and whether they watched the ads that appear to them when using social media. In terms of the response to the social media ads, the participants were expected to indicate whether they clicked to read and see the content, saved it for later, shared it with friends and relatives, ended their explanation about plastic surgery, or applied for plastic surgery.

3.4. Data Analysis

The data obtained were statistically analyzed to determine whether the frequency of exposure to the plastic surgery ads impacted the responses to the ads. A comparative analysis was conducted to determine the relationship between the frequency of exposure to the ads, having an account following plastic surgery, clicking and watching the ads, and the response following the exposure to the ads.

4. Results

This study describes the plastic surgery presence online by determining the frequency of the exposure to plastic surgery ads and the response from the viewers. The following table summarizes the frequency and the responses given by the various participants in the study.

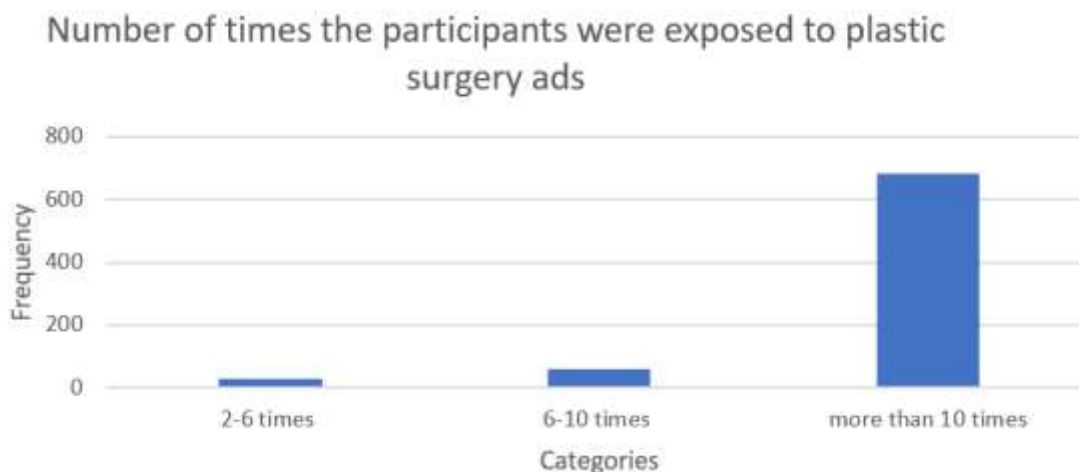


Figure 2. Number of times the participants were exposed to plastic surgery ads.

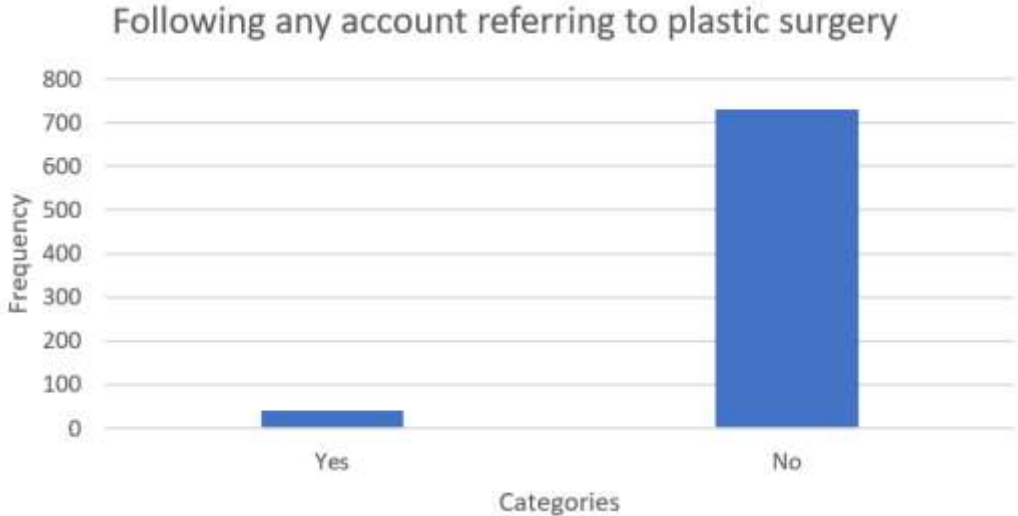


Figure 3. Following and account referring to plastic surgery.

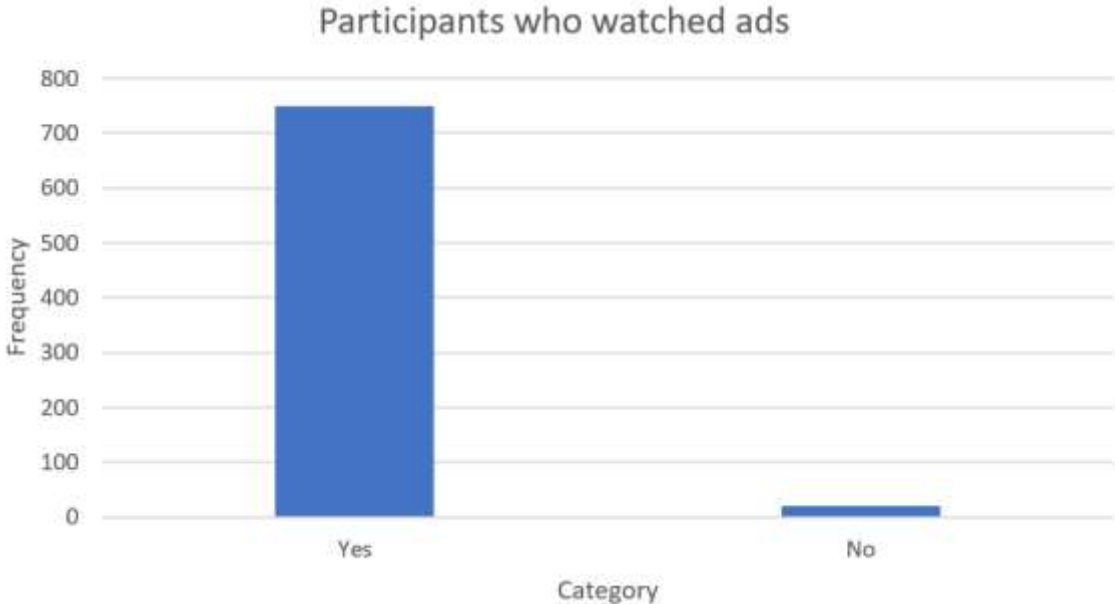


Figure 4. The summary of the participants who watched the plastic surgery ads.

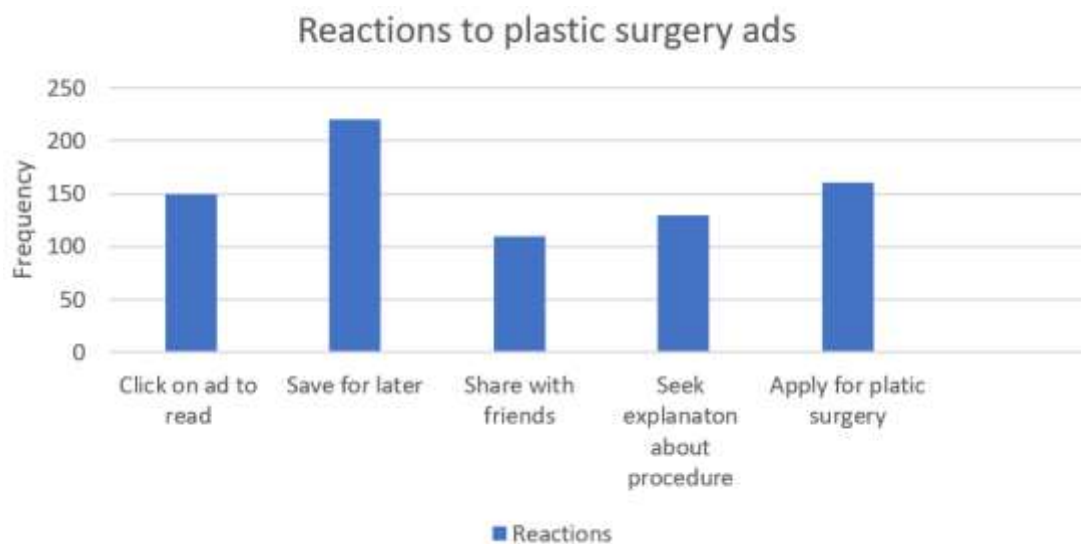


Figure 5.
The reactions of the participants to the plastic surgery ads.

A total of 850 participants were recruited for the study. After data cleaning, a total of $n=80$ participants were eliminated thus leaving data for $n=770$ participants that were analyzed. Out of the $n=770$ participants, about $n=680$ of them reported having been exposed to the ad more than 10 times a day. Only $n=30$ participants were exposed to the plastic surgery ads 2-6 times a day with $n=60$ being exposed 6-10 times a day. All the participants using social media were at one time exposed to plastic surgery ads. Also, the majority of the participants ($n=750$) reported having watched the plastic surgery ads with only $n=20$ not watching the ads. In terms of whether the participants followed accounts referring to plastic surgery, the majority of them ($n=730$) did not follow such accounts. The response from the participants varied significantly. Some clicked to read and see the ad ($n=150$), saved the ads for later ($n=220$), shared the ads with relatives and friends ($n=110$), sent the explanation about plastic surgery ($n=130$) and applied for plastic surgery ($n=160$). The findings are consistent with the results from previous studies that indicated exposure to plastic surgery ads elicited various responses including the desire to undergo the plastic surgery procedure [12, 15, 21]. Therefore, plastic surgeons can take advantage of the social media platforms to market their products and services and so generate more income from the increased number of consumers seeking plastic surgery services. Social media is an ideal platform with higher visibility rates to the plastic surgery contents and could be ideal to promoting plastic surgery procedures.

5. Discussion

Social media continues to provide an ideal platform for plastic surgeons to promote their products. The frequency of exposure to plastic surgery ads is critical in influencing positive responses from online viewers on social media to either seek further information about plastic surgery, seek plastic surgery services, or even save the ads for future reference. The finding from the study revealed that about 20.7% of the viewers of the plastic surgery ads on social media would apply for the procedure. Therefore, companies and individual surgeons are likely to have higher conversion rates when they advertise their plastic surgery products and procedures online. On the other hand, having an account directly referring to plastic surgery services did not have an impact on the viewer's responses. The findings are consistent with the results from Shauly et al. who reported that plastic surgeons can utilize social media to directly reach potential consumers [24]. Social media provides a critical platform for patient engagement, learning, peer-to-peer education, and reaching out to the broader public. The study also reported that

aesthetic posts were most likely to be saved by online viewers while private posts attracted clicks, likes, and comments. Similarly, Arab et al. found that viewing plastic-surgery-related materials on social media and spending more hours on the platforms increased the likelihood of considering undergoing plastic surgery [25]. Consistently, the current study found that most of the participants were exposed to the ads more than ten times per day and this could have significantly influenced their willingness to undergo plastic surgery procedures.

The responses to the plastic surgery ads on the social media platforms vary depending on many factors. The current study was limited to generalizing the reactions or responses of social media users to the plastic surgery ads; however, Economides et al. indicated that individuals in the beauty or plastic industry were most likely to respond positively to the plastic surgery ads [26]. Due to the high response rates on the plastic surgery ads presented on social media, plastic surgeons believe that such platforms provide them with the opportunity to expand their online presence and marketability. Importantly, social media applications are attracting young audiences.

On the other hand, despite providing an ideal platform for plastic surgeons to market their products, the platform has also been flagged for ethical concerns. Some scholars have argued that the social media platform is time-consuming and susceptible to breach of the patient's privacy [26, 27]. In this regard, it is important to explore the nature of ads posted by plastic surgeons and whether images of the patients who previously underwent the procedures are included. The case presents a paradox considering that other patients are likely to be motivated to undergo the procedure on seeing a significant transformation on another patient who underwent the procedure. According to Economides et al., the non-plastic surgeons are most likely to post self-promotional materials as opposed to the educational ones while the plastic surgeons were most likely to post using the plastic surgery-related hashtags [27]. In order to promote positive responses from social media users on plastic surgery ads, the content must be designed to suit the expectations of the targeted audiences.

6. Conclusion

Finally, the current study explored the plastic surgery presence on social media platforms and this included an analysis of the frequency at which the social media user is exposed to the plastic surgery ads and their responses to the ads. The findings in this study hypothetically add to the existing studies by highlighting the frequency of exposure to plastic surgery ads on social media platforms and the users' responses. The study also confirms the effectiveness of social media as a tool that plastic surgeons may use to reach more audiences and have more patients consuming their products and services. On the other hand, the potential limitation of this study is that it does not comprehensively analyze factors that influence the response of social media to plastic surgery ads. Such details would be important for the surgeons who are interested in customizing their ads so that they can attract more potential consumers. Furthermore, the surveys were not designed to collect data that would be used to estimate the exact relationship and impacts of the frequency of social media exposure and their response rates. Despite the few limitations, the current study provides robust insights into the implications of the use of social media as an appropriate marketing medium for plastic surgeons. It is recommended that the future scholarly works should be directed to understand the ethical implications of the use of social media to promote plastic surgery and how they can be addressed to leverage the benefits presented by the platform as an ideal marketing tool for cosmetic surgeons. Also, there is need to explore how the plastic surgeons can design the content to suit the expectations of the targeted audiences.

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