A Conceptual Framework to Measure the Relationship between Social Media and the Decision-Making Process of Plastic Surgery Consumers in Jordan

Abeer Kassab \textsuperscript{a} and Emad Masoud \textsuperscript{b*}

\textsuperscript{a} Princess Sumaya University for Technology, Jordan.  
\textsuperscript{b} Higher Colleges of Technology, United Arab Emirates.

Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJARR/2022/v16i830489

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/88390

Received 10 April 2022  
Accepted 21 June 2022  
Published 23 June 2022

ABSTRACT

Aims: This article describes a unifying conceptual framework to measure the impact of social media on the decision-making process of plastic surgery consumers.

Methodology: A conceptual framework for the plastic surgery consumers was developed based on the work of (Blakey, 2011; Schwarz et al., 2013; and Roberts & Lilien, 1993), and a conceptual model was previously developed by Akar et al. (2015).

Results: The conceptual framework consists of three components that can be considered in relationship to each other: Social Media, Social Influence Process, and Decision-Making. Although the availability of measures for each of these components varies, the framework can be used to examine the relationship between Social Media and the Decision-Making Process of Plastic Surgery Consumers in Jordan.

Conclusion: A conceptual framework that illustrates the relationships between social media and the decision-making process is an essential step toward providing a scientific base for studying plastic surgery consumers in Jordan.

*Corresponding author: Email: emasoud@hct.ac.ae;
Keywords: Social media; social influence; decision-making process; cosmetic plastic surgery consumers.

1. INTRODUCTION

Consumers may gain valuable product information for their buying decisions by using web sources [1,2]. One of the web sources is social networking sites (SNS) which are channels for social influence that influence buying decisions. Users’ activities on these sites such as like, commenting, and sharing information, ideas, or experiences produce social influence. According to Currás-Pérez et al. [3], SNS give users access to the opinions of close friends, family, and colleagues, as well as the viewpoints of others who have used a particular product or service. Furthermore, “online SNS such as Instagram and Facebook allow businesses to build product pages, which individuals who follow can receive or spread product-related information” [4]. “Having access to product information makes purchasing selections easier” [5].

There are few studies about social networking sites, especially Facebook, which focus on the impact of social influence on the decision-making process of plastic surgery consumers. The present study will try to fill this gap in the literature. From plastic surgery consumers’ perspective, this study will contribute to the literature by determining the phase of the decision-making process in which social influence affects most online social network sites.

2. LITERATURE REVIEW

Consumers are turning to social media sites to seek information, which has evolved into a large-scale search engine [6]. SNS provides a platform for building personal connections with members of the target audience and further tailoring the company’s commercial offer to each customer. In addition, social networks are an excellent tool for those with similar interests or practices. Users can communicate with one another in several ways. Individuals may browse the network for other users with similar interests or invite others to join through their profiles. These networks provide a unique chance for highly targeted advertising. Social media usage assists the company’s success by allowing individuals to share their experiences and offer feedback that influences customers. Therefore, the current study aims to investigate the effect of social influence on consumers’ adoption of cosmetic surgery treatments using social media platforms. Plastic surgery clinics are rapidly extending their use of social media, which is gradually becoming a crucial element of general society. These technologies allow younger generations to communicate with one another and will most likely continue to increase in popularity as a means of communication. According to Mavvuure et al. 2014; [7], Plastic surgeons are increasingly embracing social media, but few understand how to utilize it effectively. The research used the systematic literature review to provide a conceptual framework to measure the relationship between social media and the decision-making process of plastic surgery consumers by tracking the plastic surgery articles generally and in Jordan particularly.

2.1 Social Media

The phrase “social media” refers to a collection of Internet applications that perform various but complementary tasks. Social media or social networking sites include Facebook, Instagram, Twitter, Linked In, and Google. Facebook is the largest social network in the world, with 2.89 billion monthly active members as of the second quarter of 2021. The number of active Facebook users topped one billion in the third quarter of 2012, making it the first social network to accomplish so. Users signed into Facebook in the last 30 days are considered active [8]. In this field, there is broad and continuing expansion. The applications for cosmetic Surgery have extended well beyond personal communications as experience with social media channels has evolved. Plastic surgeons are increasingly embracing this nontraditional marketing sector to engage with their patients, educate the community, advertise, and stay competitive [9-11]. Social media provides a low-cost, high-capacity marketing tool with built-in data tracking (Kazeniac 2009). Social networking sites that provide weekly information on user engagement, such as the number of “hits” and characteristics of users, provide a way to start calculating return on investment. However, even if a surgeon creates a social media account, how would they know if a variety is seeing the page of potential or current patients? What characteristics distinguish these “social media users,” and do their demographics correspond to our normal patient populations?
Several researchers looked at the common characteristics of plastic surgery patients who use social media and found that they are younger, employed, and educated (Wheeler et al., 2011). Surprisingly, however, sites like Facebook, a social media behemoth, have witnessed a substantial increase in users above the age of 55, with an increase of 922.7 percent from 2009 to 2011. Plastic surgeons must learn about and participate in social networking to communicate with the increasingly Internet-savvy patient base.

Professional plastic surgery organizations have already embraced social media, with the American Society for Aesthetic Plastic Surgery (ASAPS) and the American Society of Plastic Surgeons (ASPS) incorporating Twitter, Facebook, and YouTube (as well as iPhone) applications into their national meetings and websites (Wheeler et al., 2011). Furthermore, ASAPS and ASPS have created distinct patient-interactivity websites, such as Project Beauty (www.projectbeauty.com) and Beauty for Life (www.beautyforlife.com). With its "ask-a-surgeon" features, Project Beauty and Realself are social media platforms aiming to educate the public about cosmetic surgery while allowing users to get real-time answers to their plastic surgery inquiries [12-14]. This interaction is beneficial for people who want to feel "connected" to their doctors or other medical professionals (Wheeler et al., 2011).

2.2 Cosmetic Plastic Surgery Consumers

Cosmetic Surgery, often known as Aesthetic Surgery, is an elective surgery aiming to improve a person's appearance. Such operations include Liposuction, breast augmentation, rhinoplasty, blepharoplasty (eyelid surgery), and rhytidectomy (facial lift) are some of the treatments available [8]. Cosmetic Surgery is any surgical treatment to achieve what the patient believes to be a more attractive appearance that entails alterations to bodily features that appear normal on presentation to the surgeon, according to an article published in the Australian Journal of Plastic Surgery [14].

Nearly 15 million cosmetic surgery procedures were performed in 2020, representing a 59 percent rise since 2000. (American Society of Plastic Surgeons [ASPS] 2020). This trend could be concerning, considering that these procedures are not without danger; they are now being performed on hundreds of thousands of young women undergoing the physical, social, and psychological changes that come with puberty and adulthood [8]. In 2020, 229,000 13–19-year-olds got cosmetic surgery treatments, according to the ASPS (2020). Even though the majority of cosmetic surgery patients are women (92%) and above the age of 19 (95%), there has been an upsurge in cosmetic surgery treatments among teenagers over the previous decade (ASPS 2020).

Cosmetic surgery patients are becoming more diversified in terms of ethnicity and socioeconomic status (ASPS 2020), and the attractiveness of cosmetic Surgery is growing globally (International Society for Aesthetic Plastic Surgery [ISAPS] 2019; [16]. According to one recent report on these developments, cosmetic Surgery has become likened to fashion accessorizing in the media since people may now decide how to modify their appearance [17]. Unsurprisingly, elective cosmetic Surgery is now booming and rapidly growing (Elliott, 2008). Over 24 million cosmetic treatments were performed globally in 2019, according to the International Society of Aesthetic Plastic Surgery (ISAPS, 2019). The United States (15.9%), Brazil (10.3%), Japan (5.9%), Mexico (4.8%), and Italy (4.4%) were the top five nations that conducted the most cosmetic treatments (ISAPS, 2019). Breast augmentation was the most common Cosmetic Surgery practiced globally in 2019, followed by liposuction and eyelid surgery. Botulinum toxin, hyaluronic acid, hair removal, and nonsurgical fat reduction were among the most popular nonsurgical procedures [18].

Because of Jordan's competitiveness in the regional market, which offers relatively moderate pricing mixed with high-quality treatments, the cosmetic surgery business in Jordan has drawn a rising number of consumers, both Jordanian and foreign, during the last ten years [19-22]. Qusai Al Musa, secretary of the Jordanian Society for Plastic and Reconstructive Surgeons, stated that Despite the lack of public statistics on cosmetic Surgery in Jordan, he had seen a pattern. Jordanians, he noticed, went to greater attempts to maintain their look. Prospective consumers are drawn to the high-rated services and low rates of medical issues, which has attracted many customers from Arab countries such as Saudi Arabia and Iraq, as well as from America and Europe. Despite its talents and competence, the industry has suffered from bad marketing, and some unqualified physicians perform these treatments in their clinics for
financial gain, placing patients in danger. To achieve better outcomes, patients should conduct thorough research on doctors and select a doctor who is licensed and certified in cosmetic and reconstructive Surgery [23].

2.3 Decision-Making Process of Plastic Surgery Consumers on Facebook

The decision-making process offers means to the ideas, information processing, and assessment of choices that occur inside the mind of a plastic surgery patient [24]. Consumers’ decision-making processes are influenced by the information created as a consequence of user interactions on social networking sites [1,2]. According to Li [25], “Users’ activities are influenced not just by their motivations but also by other users in the consumers' online network”. As stated by Wang and Lin (2011), When confronted with too much online information, people tend to follow others' decisions rather than forming their own, which reduces cognitive effort.

Furthermore, customers utilize social media sites to obtain product and business information because they believe these sources are more credible than the information offered by marketers [26-28]. In the decision-making process of plastic surgery customers, the role of Facebook in each phase of the decision-making process is demonstrated.

2.3.1 Problem/need recognition

The process begins with recognizing the need for plastic Surgery, triggered by internal or external stimulation [29]. “The size and importance of the problem or desire are next established” [30,31]. Facebook or Instagram acts as an inspiration source for customers’ purchases and decides with or conforms to reference groups.

2.3.2 Information search

“Information is actively sought or passively obtained with high awareness in two ways: from the consumer's existing memory (which is generally utilized in regular choices) or from the external environment (which is used because of the consumer's awareness of the purchase risk)” [32]. “Personal sources (relatives, colleagues, social network followers, etc.), non-personal sources (blog posts, customer reviews, efficient bloggers, etc.), experiential sources (watching videos on the Internet), and social conformity (decisions based on others' purchases and peer/reference group pressure) are the four types of external sources” [30]. For planned purchases, Facebook/ Instagram is a source of information or confirmation.

2.3.3 Evaluation of alternatives

Perception development (based on ideas about product attributes) and preference formation are the two components (based on the perceptions). The assessment criteria are applied to the options in the evoked set. Facebook/ Instagram serves as a resource for assessing the options and determining the best option [29].

2.3.4 Actual purchase

The purchase's brand, location, and quality are determined [29]. Facebook/ Instagram is a source of information for the place and time of purchase.

2.3.5 Post-purchase evaluation

Plastic Surgery customers might be happy, somewhat satisfied, or unsatisfied after making a purchase [33]. The amount of satisfaction will influence future engagement and favorable word-of-mouth regarding the cosmetic surgery procedure. Facebook/ Instagram serves as a place for people to express their opinions and share their experiences.

2.4 Social Influence Process

In experimental social psychology, social influence is an important subject [34]. Turner [35] defined social influence as "the processes whereby people directly or indirectly influence the thoughts, feelings, and actions of others." Social influence is associated with knowledge about other people and does not always occur through face-to-face contact [36,37]. Due to the Internet and social media usage, social influence had extended compared to the past (when people's impact was restricted to their small social circle) [38]. The measurements of social media activities that users engage in, such as following, liking, or commenting, are used to describe social impact in the context of online social networks [39, 40 Ye & Wu, 2010; 27,28]. According to McKenna and Bargh [41], social interaction on the Internet differs from real-life interactions in four ways: (a) users can communicate with others anonymously, (b) physical distance is unimportant, (c) physical
appearance is unimportant, and (d) simultaneous interaction is not required.

Kelman [34] proposed the concept of social influence processes, in which users select an online service based on the recommendations of others, particularly those who use it frequently and have a favorable opinion of it (Aronson, Timothy, & Akert, 2010; [42] Kelmen outlined three broad levels of the social influence process: identification, internalization, and compliance. These are the most important constructs of social influence processes that may be applied to various service businesses [43,44].

Researchers have examined the effect of the social influence processes framework in various sectors, including online communications [44], Yushi et al., 2018). Customers select a technology based on their personal preferences as well as the views and suggestions of other users (Wokke & Rodenrijs, 2018; Bagozzi et al., 2002a; [46] Dhokia, Bagozzi, & Pears, 2004). More broadly, social influence occurs when social groups affect customers’ behavior and opinions [46] [47]. Kelman’s (1958, 2017) theory is based on three types of social influence processes: compliance, identification, and internalization. Kelman (1958) described compliance as an indication of favoritism for a certain activity, while Aronson et al. [47] stated that compliance was a method of responding favorably to the desires of others identification describes how the social group influences individual behavior [48] Kelmen, 1958, 2017]. Internalization is adopting a practice consistent with your traditions [48] Kelmen, 1958, 2017]. Identification is a procedure that allows clients to adopt specialized technologies to maintain a meaningful connection with society (Bagozzi et al., 2002b; [48]. People appreciate and accept specific technology consistent with their belief systems throughout the internalization process [48,49]. According to studies, identification and internalization are the most critical factors in forming customers’ attitudes toward continuing to perform Cosmetic Surgery [48] Cheung & Lee, [50,51].

Social influence can be considered informative or normative [52, 53, 47, 54, 55]. When consumers accept information gained from others as proof of reality, this is referred to as informative social influence [53, 47]. In contrast, when customers respond to the expectations of other people or groups, this is referred to as normative social influence [53]. Subjective norms are commonly used to describe normative social influence [55] and perceived societal pressure to undertake or avoid taking action [56]. Normative influence on actions is prompted by either descriptive norms (what is usual or normal) or deterrent norms (what is not typical or normal) [57]. According to Henningsen and Henningsen [58], Individuals adjust positions when normative influence is successful because it is the preferable option to conform to the group.; however, Individuals reevaluate their opinion as a result of group members’ discussions about realities, facts, and other sorts of knowledge if informative influence is successful.

Chen et al. [59] asserted that “The impact of online word-of-mouth on purchasing behavior is considerable”. Jalilvanda et al. [60] pointed out that “Reviews and ratings serve two main purposes in social influence: informative (offering further user-oriented information) and suggestive (giving positive or negative signals about the popularity of the product)”. O’Brien [61] stated that “emotionally attached users to a social network consume social media by seeking others’ activity, resulting in a virtual kind of peer pressure”. Consumers’ proclivity to converse with peers about purchasing greatly impacts their attitude toward products and services, resulting in either buying the same brand or avoiding other brands attempting to be like their peers [5]. According to Power and Philips-Wren [62], Peer pressure on social media is more rapid and extensive than face-to-face interaction.

Yadav et al. [63] pointed out that the social environment is essential in influencing and formulating perceived needs and that monitoring others may inspire people to use the same products and services. Other people’s product assessments are utilized as information sources for items, and individuals perceive it more favorably when they see that others like it; thus, People believe that the product is superior based on these assessments [53]. According to Richins [64], Customers who are satisfied with a product often repurchase it, and they may influence other people’s perceptions of the product by mentioning it positively.

Park et al. [65] noted that “Online customer reviews are essential in buying decisions since this type of information offers indirect product experiences”. According to Ling and Yazdanifard [66], “ratings impact consumer purchasing decisions, indicating that this influence is more remarkable for females than males”. A study undertaken by Bea and Lee [67] stated that there
are considerable gender variations in customers’ perceptions of online consumer evaluations. The study indicated that females are more affected by the opinions of others on purchase intention than males. Garbarino and Straehilevitz [68] found that females are more likely than men to decrease their perceived risk and increase their willingness to buy online by responding to a friend's recommendation.

2.5 Social Influence Source

The two dimensions of social influence sources are social ties, which can be classified as strong or weak, and media. (i.e., media pages on Facebook or Instagram). Individuals' assessments can be triggered by the social influence among group members, influencing the crowd's wisdom [69,70]. asserted that Individuals respond to social influence from various sources, including unfamiliar peers and even intangible reference groups. Song and Kim [71] also emphasized external referents and discovered that, in some cases, utilizing external referents to explain particular actions is more effective. Postmes et al. [72] argued that When communicators in computer-mediated communications have a shared social identity, they become more receptive to group influence.

Users on Facebook may form different types of relationships by categorizing "friends" based on their degree of proximity, ranging from "close friends" to "friends of others." Various kinds of social connections influence purchasing decisions. For instance, Strong relationship messages significantly affect the decision-maker more than weak tie messages [73,1,2,5]. Yadav et al. [63] stated that "social influence increases with tie strength." In social network sites, the degree of ties between communicators is crucial in raising awareness.

At first, Facebook was only for individuals, but later on, businesses and brands were given the ability to build Facebook pages. According to Haigh et al. [74], Facebook pages allow businesses to post news and corporate information. These pages may also keep customers and fans informed about upcoming events and special offers [75]. Followers of corporate Facebook pages may either silently observe or actively participate in discussions [76].

The way customers obtain and share information about products and how they offer and consume items has changed substantially due to new media, which enables various options for gathering data [77]. according to Mangold and Faulds [6]. Customers use social media sites more regularly to seek information and make purchase decisions. The vast volume of information customers shares regarding products via social media impacts other customers at every level of consumer behavior.

Through the information and opinions gathered from the interactions, social media works as a rich information source that impacts consumer decision-making [62]. Social media interaction ties, according to Kwahk and Ge [38], are avenues for providing normative social influence to group members and gaining valuable insights, resulting in informational social influence in social network groups. Kwahk and Ge also discovered that social media interaction ties had a favorable impact on both informative and normative social influence.

2.6 Social Platform Activities

Different activities on social media sites produce social influence. Social networking sites, for example, are one of the most popular ways for Online users to communicate. Users on social networking sites can exchange information, like posts and comments, and send private messages in addition to creating profiles.

Influence in online social networks can take the form of a direct invitation from another node (for example, a friend) or just indirect observation of another node's activity connected to the group (for example, a friend's photo upload to a social group) [78]. In their online social network, customers are alerted about product "likes" and purchases made by their peers. According to Chu and Kim [79], users of social networking sites aid their social connections’ purchase decisions by providing necessary product knowledge and experience. In a report on the social economy, McKinsey & Company [7] stated that "social technology has made a strong connection with main sociological patterns and habits by information exchange with participants in the network, comparing experiences and personal status with others. According to Hunt et al. [80], Facebook engages people in online interaction by providing tools that enable interpersonal conversation.

From the above literature review in this sector, the researchers came up with the proposed
conceptual framework to examine the impact of social media on the decision-making process of plastic surgery consumers in Jordan, as shown in Fig. 1.

3. FUTURE OF THE FRAMEWORK

The conceptual framework described here will allow researchers, practitioners, and decision-makers to more effectively examine the impact of social influence source and social platform activities on the social influence process and the impact of the social influence process on the decision-making process of Plastic Surgery Consumers in Jordan. Also, it will help to determine the phase of the decision-making process of plastic surgery consumers in Jordan, investigate whether the social media or social media platform activities affect the social influence process, and determine the factor that most affects the social influence process. The findings will provide valuable insights for academic researchers and practitioners and suggest areas to be explored in future research.

4. CONCLUSION

The paper has provided a detailed overview of the literature on the relationship between social media and the decision-making process in general and Plastic Surgery in particular. A conceptual research framework has been proposed to measure the relationship between social media and the decision-making process of plastic surgery consumers in Jordan. Plastic surgeons could use the instrument to collect data about their customers to make strategic decisions. Also, they could strive to segment the customers into various categories to know where to position themselves in the future. Further, Plastic surgeons could use the data obtained from their customers to benchmark their services with their competitors’ services.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES


17. Bordo MD. Exchange rate regime choice in historical perspective.


© 2022 Kassab and Masoud; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history: The peer review history for this paper can be accessed here: https://www.sdiarticle5.com/review-history/88390