Impact of Facebook Sponsored Advertisements on Egyptian Youth's Attitudes and Purchase Intention

Nashwa Mohamed Ayman¹, Hanan Gunied² and Asmaa El-Mously³

^{1&3} Media Department, College of Language and Communication, Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt.

² Faculty of Mass Communication, Cairo University, Giza, Egypt.

E-Mails: nashwaayman96@gmail.com, hgunied@gmail.com, asmaaelmously@egypt.aast.edu

Received on: 14 January 2024

Accepted on: 05 February 2024

Published on: 16 May 2024

ABSTRACT

This research paper examines the impact of Facebook-sponsored advertisements on Egyptian youths' attitudes and purchase intentions. It aims to explore the relationship between Facebook-sponsored advertisements' personalization, perceived usefulness, perceived ease of use, and consumers' attitudes and purchase intentions. It also investigates the influence of age and gender on attitudes and purchase intention. The theoretical framework of this paper includes the Technology acceptance model. An online questionnaire was distributed through social media platforms with a sample of 417 young men and women from Cairo and Giza who are Facebook users and are between 25 and 34 years old. The findings showed that personalization, perceived usefulness, and perceived ease of use positively influence their attitudes and purchase intentions. The results also showed that attitudes mediate the relation between all these independent variables and purchase intentions and are considered a factor that affects consumers' purchase intentions. Also, it was found that there is no significant relation between gender and attitudes and purchase intentions, while those who are younger (25–30) had higher purchase intentions.

Keywords: Consumers' attitudes, Facebook sponsored advertisements, Personalization, Purchase intentions, Technology acceptance model.

1. INTRODUCTION

Sponsored advertisements are prevalent on social networking sites. Many marketers and companies use social media in their advertising strategies. Moreover, businesses can interact with the audience and promote their products in two ways: paid and unpaid. Unpaid, which is also known as an organic approach, includes brand pages that contain content posts (including pictures and videos); these brand pages allow users to interact and engage through likes, comments, and shares (Luarn et al. 2015), while paid advertising is associated with sponsored ads (Sanne and Wiese 2018).

According to Datareportal (2023), 85% of the

Egyptian population uses Facebook. Facebook's advertising system currently allows for three advertising objectives that an advertiser can distinguish: awareness, consideration, and conversion. Advertisers must devote marketing budgets to all three steps before converting a Facebook user into a paying customer. Unfortunately, Facebook advertising costs increase yearly due to advertising saturation across the social network (Semerádová et al. 2019).

When it comes to how Facebook advertising works, it was noticed that Facebook advertisements usually depend on targeting techniques that can sometimes be invasive or opaque (Andreou et al. 2019). These

advertisements target specific groups based on their profiles, online behavior, and Facebook friends' behavior on the network itself (Aguilar et al. 2018).

To elaborate more on these targeting techniques, Andreou et al. (2019) in their study stated that there are four different advertisement targeting techniques that Facebook follows: First, advertisers can target their consumers based on age, gender, language, and location. Second, based on combinations of attributes representing the characteristics they want users who receive their ads to have, they are categorized into demographics, behavior, and interests. Interests can also be predefined in which they can browse various options of attributes made by Facebook or write their attributes and browse the related attributes that will be shown.

Third, advertisers can target users via Custom Audiences, allowing them to create specific customer segments directly within the Facebook ad manager. Fourth, advertisers can target users via Lookalike audiences. This advertising technique estimates customer similarity based on the characteristics of a predefined custom audience known by the advertiser (Ghosh et al. 2019; Semerádová et al. 2019).

In order to have all this information about consumers and store all the data that eventually benefits the advertisers, Facebook algorithms and cookies play an essential role here. Facebook depends on first-party and third-party cookies, according to Gogh et al. (2021). These cookies allow Facebook to collect data about the users' online behavior on social networking sites and other sites, along with collecting information about the browser used. Consequently, access to all this data results in highly detailed user profiles on which Facebook relies to provide advertisers with targeted advertising services. Saura et al. (2021) analyzed social media algorithms and how they work, and they found that the algorithms usually track consumers' online behavior and start updating the content based on what they watch and are interested in. These data are also used to make a profit as companies show users personalized ads based on these data.

1.1 Research Significance

The significance of this study is concentrated in the following points:

1. It provides information on the impact of Facebook-sponsored advertisements Egyptian consumers' attitudes and purchase intentions.

- 2. Since Facebook is widely used by many consumers, it is important to understand the impact of its sponsored advertisements on Egyptian youth.
- 3. Since sponsored advertisements are a widely used strategy by many practitioners, it is vital to clarify the effects of such advertisements on consumers in an Egyptian context.
- 4. It sheds light on the effects of personalization.

1.2 Research Objectives

- 1. Understand Egyptian consumers' attitudes toward Facebook-sponsored advertisements.
- 2. Identify the impact of Facebook-sponsored advertisements on Egyptian consumers' purchase intention.
- 3. Investigate several factors that might affect consumers' attitudes toward sponsored advertisements and their purchase intention through TAM:
 - Impact of sponsored advertisements' personalization on consumers' attitudes and purchase intention.
 - Impact of sponsored advertisements' perceived usefulness on consumers' attitudes and purchase intention.
 - 3.c. Impact of sponsored advertisements' perceived ease of use on consumers' attitudes and purchase intention.

2. LITERATURE REVIEW

2.1 **Facebook Sponsored Advertisements**

According to Olmedilla (2016), Facebook became an attractive destination to advertisers, resulting in many ads being displayed to the users. Facebooksponsored ads can be considered a type of in-feed native advertising, which is a technique that advertisers use to reach consumers. Native advertising is defined by The Internet Advertising Bureau IAB (2021) as:

an advertising format that matches the look, feel, and function of the media environment in which it appears.

Compared to other forms of advertising which try to stand out and force attention, Native Advertising is the exact opposite in its attempt to fit in seamlessly with its environment.

While Windels et al. (2018) mentioned that Native advertisements work well with social networking sites for three reasons stated as follows: The nature of social networking sites deliver to large scale of audiences, the nature of news feeds provides a natural space for the advertisements to be displayed normally, and the way consumers use newsfeed on mobile phones with infinite scrolling allows for larger native advertisements to be displayed within the Social networking Sites structure. Carolyn et al. (2016) also stated that the sponsored ads that appear on social networks, such as Facebook and Instagram, can be customized based on users' web search history and interests. Encouraging social network service (SNS) followers to be involved in sharing, reading, and exchanging experiences about a product or brand.

2.2 Personalization

Lambrecht and Tucker (2013) argued that personalized Facebook advertising is thought to be more appealing and highly relevant to user interests as personalization positively affects consumer responses. Personalization and message relevancy can happen through different methods, such as advertisements generated based on friends' likes, consumers' likes, and business pages they follow. In addition, Personalized social media advertising is created by analyzing a user's online profile and actions and matching advertising content to their interests, needs, or browsing history (Dodoo and WU 2019; Morris et al. 2016; Doodo and WU 2019).

Moreover Suarsa et al. (2020), in their study in Indonesia, surveyed 261 Instagram users to examine the factors that shape attitudes toward Instagram advertisements, and they found that personalization is an essential factor in affecting attitudes. They also found that the more positive their attitudes were, the higher their purchase intention. At the same time, a study conducted in Egypt wanted to examine the effectiveness of ad personalization and its impact on consumer attitudes and behavioral intention through a consumer psychology perspective. The study used qualitative and quantitative methods through surveys and focus group discussions. It was found that personalization of advertisements had a positive impact on attitudes and interactions and, ultimately, the ad effectiveness, Despite the existence of some privacy concerns (Abdel Monem 2021).

Personalization was found to positively impact consumers' attitudes, perceived usefulness, and entertainment (Gaber 2019). Furthermore, Youn and Kim (2019) stated that tailored and personalized messages have emerged as a primary driver of positive perceptions towards news feed native ads on Facebook. By delivering customized content, users perceive these ads as valuable sources of information, entertainment, and promotional rewards. Also, the more personalization is present in RTB (Real-Time Bidding) advertisements, the more likely users will have a positive attitude towards them. It is worth noting that regardless of how personalized or relevant the advertisement is, users have a more favorable attitude towards advertisements that arrive at the proper time and are beneficial to them (Zhang et al. 2021).

2.3 Attitudes

Kotler and Armstrong (2012, 150) defined attitudes as "a person's consistently favorable or unfavorable evaluations, feelings, and tendencies toward an object or idea". Also, Icek et al. (2008) mentioned that attitudes seem to follow and are based on beliefs about the attitude object. So, the more positive the beliefs are and the more they are held strongly, the more favorable the attitudes will be. Beliefs represent subjectively held information, so people might hold beliefs that are not reasonable and objective. On the contrary, these beliefs might be biased by emotions or desires and not derived from a logical reasoning process. Hence, attitudes will be subjective and biased as well.

Moreover, Hadija (2008) argued that studying attitudes is important in understanding consumers' perceptions and acceptance of advertising messages. That is why, to understand the attitudes and behaviors toward social networking advertising, it is crucial to examine the factors that might affect the attitudes. Many factors usually influence attitudes; according to Ott et al. (2016), informative advertisements were found to increase consumers' attention and impact their attitudes and purchase intentions. Consumers evaluate the advertisement positively when it affects their cognitive process. Therefore, quality messages with useful information on social network advertisements were found to elicit favorable attitudes and behaviors (Blanco et al. 2010). Also, El Ashmawy (2014), in his study, concluded that Entertainment, informativeness, credibility, interactivity, customization have a positive relationship with attitudes toward Facebook advertising, while the irritation variable has a negative relationship. Irritation

is one of the main reasons consumers criticize the advertising they are exposed to (Gaber et al. 2019). On the contrary Mstaffa and Saeed (2023), in their study on consumers of telecommunications company services and university professors in the Kurdistan region, found that consumers are motivated to see social media advertisements because of their informative characteristics, as they learn more about prices, quality, and other information However, intrusiveness was not a major reason for advertisement avidness. While Arya and Kerti (2020) found that entertainment value, credibility, and informativeness have a huge effect on consumers' attitudes, irritation influences these attitudes negatively. Moreover, Sheikhalizadeh and Soltani (2023) mentioned that the more the advertisement is informative and provides consumers with new and recent information, and the more the advertisement is valuable and useful, the more positive attitudes are.

2.4 Purchase Intentions

Purchase intentions refer to the degree of perceptual conviction a customer holds to purchase a product or service (Yaqoob 2018). It also refers to the transaction behavior that takes place after assessing and evaluating products and services (Tariq et al. 2017). According to Husnain and Toor (2017), Purchase intentions are a significant factor in evaluating consumer behavior since they usually anticipate and predict the likelihood of a purchasing decision. The more the purchase intention, the more it indicates consumers' readiness to buy a product or service. So as a result, purchase intention is essential for tracking consumer behaviors (Pereira 2018).

Purchase intentions were found to be affected by many factors, as many authors mentioned in their studies Al Nufoury (2021), Gutierrez et al. (2023) and Hameed et al. (2023) such as Social impressions, including advertisements that appear because of a friend's likes are one of the factors that affect purchase intentions along with the consumers' impressions about the brand's Page followed by the impressions of electronic word of mouth according to Al Nufoury (2021), He also stressed on the impact of attitudes as it plays a mediated role between these factors and purchase intentions. Meanwhile, Gutierrez (2023) mentioned that privacy concerns and attitudes are both factors that affect purchase intentions in the social media advertising context. Also, Hameed (2023) argued that Brand awareness is one of the factors that influence purchase intention, as consumers will gain better knowledge and will be in a better position to decide whether to make a purchase or not based on the information they will get. Kaur et al. (2020) also agreed with these results, he argued that attitudes, brand awareness, and electronic word of mouth influence purchase intentions. Furthermore, Zaher and Shosha (2023) surveyed Egyptian university students and their attitudes and purchase intentions toward mobile advertisements, and they found that some advertising message characteristics affect the consumers' purchase intentions, such as informativeness, personalization, credibility, and entertainment. The informativeness characteristic comes in first place, followed by personalization in second place, followed by credibility and entertainment in third place. At the same time, irritation was found not to affect consumers' purchase intentions.

Furthermore, the relationship between attitudes and purchase intention or buying behavior has been examined by many researchers as follows: First (Kotler and Armstrong 2012) stated that four psychological factors influence consumer buying behavior, these factors are: motivation, perception, learning, and beliefs and attitudes. Then Rehman et al. (2014), in their study, stressed that attitudes usually influence consumers' feelings towards brands, which eventually leads to influencing purchase intentions. Secondly, according to Maria et al. (2015), significant relationship between attitudes and behaviors has been found, as attitudes can strongly predict consumer behavior concerning a product or service. It was found that attitudes toward the advertisements have a positive relationship with consumers' behavior, viral intentions, and purchase intentions. In addition, Dwivedi et al. (2018) found that people usually form attitudes towards advertising and these attitudes affect their decision-making process to buy a particular product from an advertiser. And the more favorable the attitude is, the stronger the behavioral intention the consumer will have (Lee et al. 2019). On top of that the results of Rehman et al. (2014) indicated that Facebook advertisements positively affect buying behavior.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Theoretical Framework

The Technology Acceptance Model (TAM) is considered an adaptation of Ajzen's Theory of Reasoned Action (Davis et al. 1989). It tries to focus on predicting and explaining human behavior in different situations. This theory gives the understanding of users' behavioral intentions when they use or adopt technology-based innovations, and it has been demonstrated

to be beneficial in predicting approximately 40% of intentions to use new technologies (Legris, et al. 2003). Also, it suggests two main predictors: perceived usefulness and perceived ease of use. As for perceived usefulness, it can be understood as the ability to enhance consumers' online experience. while "perceived ease of use" refers to how easy it is for consumers to use the technology in question (Davis 1989). The Technology Acceptance Model (TAM) shows that these two factors are crucial in determining users' attitudes toward technology, influencing their intention to use and adopt the technology (Mathieson 1991).

The technology acceptance concept, when applied to the context of social network marketing, argues that consumers' attitudes towards social network advertising influence their intentions to engage in electronic word-of-mouth (eWOM) behaviors, visit a company's website, and make purchases (Luna and Torres 2015).

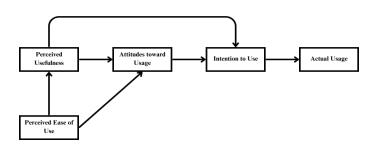


Figure 1. Technology Acceptance Model

Note: The Technology Acceptance Model (TAM) (Davis 1989).

Source: Li (2010).

The researchers used the Technology Acceptance model as the basic research model. However, the researchers integrated (personalization) as an antecedent variable that affects attitudes towards the advertisements along with perceived ease of use and perceived usefulness which in the end affect the purchase intention. Forming an augmented TAM model that is more suitable for the topic of the study. Many studies generally support the influence of personalization on users' attitudes and purchase intentions as mentioned in the literature review.

Lin et al. (2016), Pavlenko (2018) and Zhao et al. (2020) have done the same, the researchers in their studies used the Technology Acceptance Model and added external variables such as personalization or relevancy, privacy concerns, relevancy, intrusiveness, and incentive offerings. So, in this study, the TAM model will be used as follows:

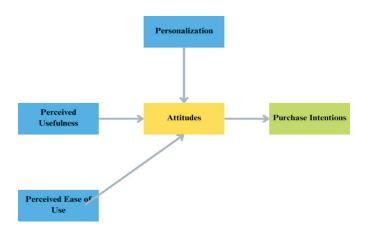


Figure 2. Proposed TAM Model

3.2 Methodology

3.2.1 Research Sampling

The researchers chose a purposive sample, which is a type of non-probability sample, and it is based on choosing a population having specific characteristics (Tayie 2009, 43). Purposive sampling is a nonrandom sampling technique that enables the researchers to choose the respondents freely based on certain characteristics and qualities they possess (Etikan et al. 2016).

The study was conducted on 400 respondents with the following characteristics: Egyptian youths (age: 25-34), females and males, from Cairo and Giza, and who are Facebook users. According to Napoleoncat (2023) and Statista (2023), the largest segment of Facebook users in Egypt in 2023 are between 25 and 34 years old.

3.2.2 Research Questions

RQ1.a How does the personalization of Facebooksponsored advertisements affect the Egyptian youth's attitudes?

RQ1.b How does personalization of Facebook-sponsored advertisements affect the Egyptian youth's purchase intention?

RQ2.a What is the impact of perceived ease of use of Facebook-sponsored advertisements on Egyptian youth's attitudes?

RQ2.b What is the impact of perceived ease of use of Facebook-sponsored advertisements on Egyptian youth's purchase intention?

RQ3. a. How does the perceived usefulness of Facebook-sponsored advertisements affect the Egyptian youth's attitudes?

ILCC.

RQ3.b: How does the perceived usefulness of Facebook-sponsored advertisements affect the Egyptian youth's purchase intention?

RQ4. What kind of relationships exist between consumers' attitudes toward Facebook-sponsored advertisements and their purchasing intent?

3.2.3 Data Collection Method

Based on the previous research, the researchers used a quantitative method through distributing an online survey, as the survey represents one of the most significant methods for gathering data in the field of media research because of its flexibility (Tayie 2005, 49). The questionnaire was written in Arabic and English to suit each respondent and was distributed through social media channels such as Facebook, Instagram, and WhatsApp. The researchers depended on a statistician to conduct the analysis part using Statistical Package for the Social Sciences (SPSS) which is the most used software in social science studies.

4. FINDINGS AND ANALYSIS

4.1 Descriptive Analysis

4.1.1 Demographics

The study sample after refining the answers, consisted of 252 responses collected from the age interval (25-29), which means they represent (60%) of the sample, (40%) of the overall sample are from the age interval (30-34). Also, (87%) of respondents were from Cairo and (13%) from Giza. While the females represented (67%) of the sample and (33%) were males.

4.1.2 Personalization

As shown in Figure 3, when survey respondents were asked whether they were aware that Facebooksponsored advertisements are personalized to their interests or not, the majority of the respondents, 82% of the respondents know that the sponsored advertisements are personalized to their interests, which can be considered evidence that there is a high level of awareness among the survey respondents about the personalization of Facebook-sponsored advertisements. While 6.2% of them did not know that there is such a thing, 11.8% of respondents showed that they do not care that the advertisements are personalized.

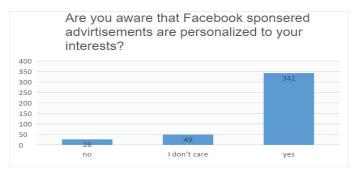


Figure 3. Survey Respondents' Awareness of Facebook Sponsored Advertisements Personalization

As shown in Figure 4, when survey respondents were asked to show their opinion about the first statement, "Facebook sponsored advertisements that appear to me are related to my personal interests," the majority of them said that they agreed (181 respondents). In comparison, 113 respondents were neutral, 88 strongly agreed, 29 disagreed, and only 6 strongly disagreed. As for the second statement, "Facebook sponsored advertisements are related to the websites and apps I visit ", 189 respondents said they agree, 124 stated they strongly agree, while 71 respondents were neutral, and 27 respondents and 6 respondents disagreed and strongly disagreed, respectively. This means that most survey respondents notice and know that the sponsored advertisements that appear on Facebook are based on their online behavior and browsing.

Regarding the third statement, "Facebook sponsored advertisements are related to people I follow and posts I like", 195 respondents agreed with this, 105 were neutral, 78 strongly agreed, whereas 35 respondents disagreed and only 4 strongly disagreed. While in the last statement, "Facebook sponsored advertisements seem to be designed specifically for me", 146 respondents agreed, 73 strongly agreed; however, 128 were neutral in this regard, and 59 disagreed, and 11 respondents strongly disagreed.

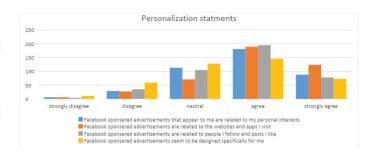


Figure 4. Respondents' feelings towards Facebook Sponsored Advertisements Personalization Statements

All these answers show that the majority of the sample (59.7%) find that the sponsored advertisements are personalized to their interests, and their online behavior, while 7.2% of the sampled cases don't see that Facebook sponsored advertisements relevant or personalized to them, however, 33.1% of them were neutral in this regard which means that whether they don't notice such thing, or some advertisements that are displayed to them are not accurately relevant to their interests or online behavior.

4.1.3 Perceived Ease of Use

Survey respondents were asked to express their opinions regarding the ease of use of Facebooksponsored advertisements through 5-point Likert scale statements. Concerning the first statement "Facebook sponsored advertisements save my time and effort finding the products I might like, 153 respondents were neutral, 146 respondents agreed, while only 38 respondents strongly agreed. On the other hand, 59 respondents disagreed, and 21 respondents strongly disagreed with such a statement.

As for the second statement, "Facebook sponsored advertisements can link me to the advertised products directly", the number of those who agree increased, as the majority of respondents stated that they agree that Facebook sponsored advertisements can link them to the advertised products (207 respondents), while the number of those who were neutral at the first statement decreased to 112 respondents in this statement, and 61 respondents strongly agreed while 30 and 7 respondents disagreed and strongly disagreed, respectively.

Regarding the third statement, "Facebook sponsored advertisements are easy to use", 172 respondents stated that they agreed, 141 respondents stated that they were neutral, 63 respondents said that they strongly agreed, while 32 respondents disagreed, and 9 respondents strongly disagreed with such a statement.

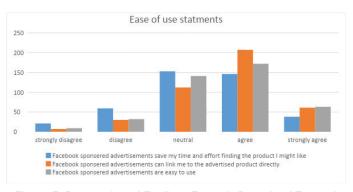


Figure 5. Respondents' Feelings Towards Perceived Ease of Use Statements

Analyzing the respondents' answers trends, it is evident that the majority of the respondents perceived Fakebook sponsored advertisements as easy to use as 54% of the sample agreed or strongly agreed, while the fewest number of respondents don't perceive Facebook sponsored advertisements as easy to use with 8.6% of the sampled cases disagreed or strongly disagreed, however, 37.4% of them were neutral in this regard as shown in Figure 5.

4.1.4 Perceived Usefulness

As shown in Figure 6, respondents were asked to elaborate on their opinions regarding the perceived usefulness of Facebook-sponsored advertisements through five Likert scale statements. As for the first statement, "Facebook sponsored advertisements help me find different products and services, "214 respondents agreed. In contrast, only 62 strongly agreed, 107 respondents were neutral, whereas 29 and 5 respondents stated that they disagreed and strongly disagreed, respectively.

As for the second statement, "Facebook sponsored advertisements keep me up to date with new products/services available in the marketplace", 169 respondents stated that they agreed, 145 respondents were neutral, and 56 respondents strongly agreed, while 40 respondents disagreed, and 7 respondents strongly disagreed.

Regarding the third statement, "Facebook sponsored advertisements help me stay informed about products/ services", 214 respondents said they agreed, while only 62 strongly agreed, 107 respondents were neutral. Meanwhile, 29 respondents disagreed, and 5 respondents strongly disagreed. Concerning the fourth statement, "Facebook sponsored advertisements provide valuable information for products, " 184 respondents were neutral, 122 respondents agreed, 40 respondents strongly agreed, 56 respondents disagreed, and 15 respondents strongly disagreed.

In the last statement, "Facebook sponsored advertisements help me learn which brands have the features that I'm looking for", 164 respondents agreed, 45 respondents strongly agreed, while 154 respondents were neutral, and 42 and 12 respondents disagreed and strongly disagreed, respectively.

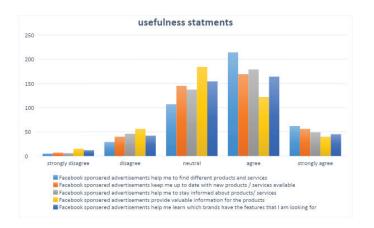


Figure 6. Respondents' Feelings Towards Perceived Usefulness

These answers show that most respondents agreed or strongly agreed that Facebook-sponsored advertisements are useful. This is evident in Figure 19, which shows that 50.3% agree or strongly agree that Facebook-sponsored advertisements are useful, and 8.4% of the sampled cases disagree or strongly disagree with that. However, 41.2% of them were neutral in this regard.

4.1.5 Attitudes

As shown in Figure 7, respondents were asked to elaborate on their feelings/attitudes regarding Facebook-sponsored advertisements through five Likert scale statements. In the first statement, "Facebook sponsored advertisements a good thing", 199 respondents were neutral, while 132 and 28 respondents agreed and strongly agreed with the statement respectively, whereas, 50 and 18 respondents disagreed and strongly disagreed, respectively.

As for the second statement, "Overall, I like Facebook Sponsored advertising", 168 respondents were neutral in this regard, while 79 respondents agreed that they like sponsored advertisements, and 27 only strongly agreed. On the other hand, many respondents disagreed (107 respondents), and 36 strongly disagreed. Regarding the third statement, "I find advertisements on social networks enjoyable", 182 respondents were neutral. Meanwhile, 115 respondents disagreed that Facebook-sponsored advertisements are enjoyable, 48 strongly disagreed, while 51 and 21 respondents agreed and strongly agreed respectively.

Regarding the fourth statement, "Facebook Sponsored advertisements are essential", 175 respondents were neutral, 105 respondents agreed with the statement, while 35 respondents strongly agreed. However, 63 respondents disagreed, and 39 respondents strongly disagreed.

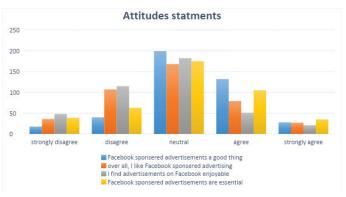


Figure 7. Respondents' Attitudes towards Facebook
Sponsored Advertisements

It is evident that when respondents were asked about the essentiality of Facebook-sponsored advertisements and whether they perceive them as a good thing, those respondents who agreed, strongly agreed, were more than those who disagreed or strongly disagreed. However, when it came to whether the advertisements were enjoyable or they liked the advertisements, the proportion of respondents who disagreed or strongly disagreed was more than those who agreed or strongly agreed. Meanwhile, the proportion of neutral answers remained higher in all the statements. So, it can be concluded that the respondents' attitudes towards Facebook-sponsored advertisements are mostly neutral and negative, as 30.9% of the sampled cases have negative attitudes, 48.2% of them were neutral in this regard, and 20.9% have positive attitudes.

4.1.6 Purchase Intentions

As shown in Figure 8, respondents were asked to elaborate on their feelings regarding Facebooksponsored advertisements' purchase intentions through five Likert scale statements. In the first statement "I plan to purchase products that are promoted on Facebook", 175 respondents were neutral, 88 respondents agreed, and 34 strongly agreed, while 91 respondents disagreed, and 29 respondents strongly disagreed.

As for the second statement, "I would visit the website of a product/brand I like after seeing advertised on my Facebook" many respondents agreed with the statement (223 respondents), and 52 respondents strongly agreed, while 100 respondents were neutral, and 31 and 11 respondents disagreed and strongly disagreed, respectively.

Regarding the last statement, "I would think of purchasing a product or service after seeing it advertised on Facebook", 183 respondents agreed with the statement, 52 respondents strongly agreed,

while 131 respondents were neutral, 38 respondents disagreed, and 13 respondents strongly disagreed.

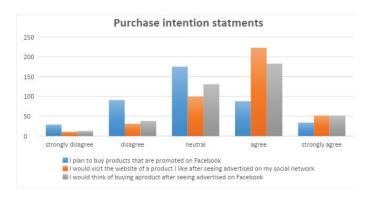


Figure 8. Respondents' Feelings towards Facebook Sponsored
Advertisements Purchase Intentions Statements

It can be concluded that most of the respondents agreed or strongly agreed that they had the intention to buy the advertised products with 48.2%, while 12.5% of the sampled cases disagreed or strongly disagreed that they had this intention, however, 39.3% of them were neutral in this regard.

4.2 Research Questions Analysis

RQ1.a: Addressed the effect of Facebook-sponsored advertisements personalization on consumers' attitdes, the results show that the value of chi-square is (102.898) with a 95 % level of confidence, which indicates that there is a highly significant relation between personalization of Facebook-sponsored advertisements and respondent's attitudes towards Facebook sponsored advertisements (sig= .000). While the correlation coefficient value appeared to be (0.358), which refers to a positive moderate relation. This means that respondents who evaluated their experience with personalization in Facebook-sponsored advertisements positively have more positive attitudes towards these advertisements.

RQ1.b: **Tackled** the relationship between personalization and purchase intentions, Because the value of the chi-square test of independence appeared to be (109.718), this shows that with a 95 % level of confidence, there is a highly significant relation between personalization of Facebook-sponsored advertisements and respondent's purchase intention (sig=.000). Whereas the correlation coefficient value is (0.332), which refers to a positive weak relation. So, this means that respondents who experience a high level of personalization in Facebook-sponsored advertisements are prone to have a high level of purchase intention.

RQ2.a: addressed the relationship between perceived ease of use and attitudes, and the results approve that there is a highly significant relation between perceived ease of use and attitudes (sig=0.000) with a 95% level of confidence according to the Chi-square test (237.262). While the correlation coefficient value is (0.616), which refers to a positive moderate relation. This means that respondents who perceive Facebooksponsored advertisements as easy to use have positive attitudes towards these advertisements.

RQ2.b: Wanted to explore the relationship between perceived ease of use and purchase intentions towards Facebook-sponsored advertisements. The results indicate a highly significant relation between perceived ease of use and purchase intentions (sig=0.000), as the value of the Chi-square test of independence is (334.343) with a 95 % confidence level. This relation is a strong positive relation according to the correlation coefficient value (0.652), which means that respondents who have a high level of perceived ease of use for Facebook-sponsored advertisements have a high level of purchase intention.

RQ3.a: Intended to explore the relation between perceived usefulness and attitudes towards Facebooksponsored advertisements. According to the chisquare test of independence (254.311) with a 95 % confidence level, there is a highly significant relation between the perceived usefulness of Facebooksponsored advertisements and respondents' attitudes towards Facebooksponsored advertisements (sig=0.000). The correlation coefficient value is (0.615), which refers to a positive moderate relation. This means that respondents who perceive Facebooksponsored advertisements as useful have positive attitudes towards these advertisements.

RQ3.b: Wanted to explore the relation between Perceived usefulness and purchase intentions, and the results of the Chi-square test (300.455) showed that, with a 95 % level of confidence, there is a highly significant relation between the perceived usefulness of Facebook sponsored advertisements and respondent's purchase intention (sig=0.000). The correlation coefficient value is (0.595), which refers to a positive moderate relation. This means that respondents who perceive Facebook-sponsored advertisements as useful have a high level of purchase intention.

RQ4.a: Intended to explore the relationship between attitudes and purchase intentions. The results indicate a highly significant relation between attitudes and purchase intentions (sig=0.000) with a 95%

confidence level according to the Chi-square test (265.890). This relation is a positive moderate one as the correlation coefficient value is (0.628). These results mean that positive attitudes toward Facebooksponsored advertisements will lead to a high level of purchase intention.

Also, a partial correlation test was conducted to explore how attitudes affect the relationship between the independent variables and the dependent variable. When exploring the relation between Personalization and purchase intentions while holding the mediator variable (attitudes) constant, the partial correlation coefficient appeared to be significant (sig =0.003), with a value (0.148) which refers to a weak positive relation between the two variables so with 99% of confidence we can conclude that the high level of personalization will lead to high level of purchasing intention when excluding the attitudes as a mediator variable. While the relation between Perceived ease of use and purchase intentions was examined by holding the mediator variable (attitudes) constant, the partial correlation coefficient is significant (sig =0.000), with a value (0.433) which refers to a mediator direct relation between the two variables. So, with a 99% confidence level, we can conclude that high levels of perceived ease of use will lead to high levels of purchasing intention when excluding the effect of the mediator variable (attitudes).

When exploring the relation between perceived usefulness and purchase intentions while also holding the mediator variable (attitudes) constant, the partial correlation coefficient resulted to be significant (sig =0.000), with value (0.341) which refers to a moderate positive relation between the two variables. So, with a 99% confidence level, we can conclude that the high level of perceived usefulness will lead to a high level of purchasing intention when excluding the effect of (attitudes) as a mediator variable.

4.3 Analysis of the Relation between Demographic Variables and Attitudes and **Purchase Intentions**

4.3.1 Gender and Attitudes

The value of the Chi-square test of independence (4.853) showed that, with a 95 % confidence level, there is no significant relation between respondent's gender and their attitudes toward Facebooksponsored advertisements (sig=0.303). So, this means that there is no significant difference between males and females in their attitudes.

4.3.2 Gender and Purchase Intentions

The results show that the value of the Chi-square test of independence is (2.919), which means that with a 95 % level of confidence, there is no significant relation between respondent's gender and their purchase intention (sig=0.572), So, this indicates that there is no significant difference between males and females in their purchase intention.

4.3.3 Age and Attitudes

The value of the chi-square test of independence (6,219) indicates that with a 95 % level of confidence. there is no significant relation between respondent's age group and their attitudes toward Facebooksponsored advertisements (sig=0.183). This means no significant difference between age groups in their attitudes.

4.3.4 Age and Purchase Intention

On the other hand, when it comes to the relation between age and purchase intentions, the results show that there is a significant relation between respondents' age and their purchase intentions (sig=0.027) according to the value of the chi-square test of independence (10.991), with 95 % level of confidence. The nature of this relation appeared to be a weak negative one with a correlation coefficient value of (-0.079). This means that respondents with lower age have a high level of purchase intention.

4.3.5 Governorate and Attitudes

The value of the chi-square test of independence (4.502) showed that, with a 95 % level of confidence, there is no significant relation between respondent's governorate and their attitudes toward Facebooksponsored advertisements (sig=0.342). So, it can be concluded that there is no significant difference between respondent's governorates in their attitudes.

4.3.6 Governorate and Purchase Intentions

The value of the chi-square test of independence (4.246) showed that, with a 95 % level of confidence, there is no significant relation between the respondent's governorate and their purchase intention (sig=0.374). So, there is no significant difference between respondents in Cairo and respondents in Giza in their purchase intention.

5. DISCUSSION

The majority of the study sample were aware of the personalization they are exposed to and most of them identified that the sponsored advertisements that

appear to them are usually related to their interests and their online behavior which go with Doodo and Wu (2019) results. Also, the relationship between personalization with attitudes and purchase intentions was found to be positive, and this finding is consistent with Suarsa et al. (2020) who applied their study in an Instagram context. AbdelMonem (2021) also applied his study in the Egyptian context. However, the positive impact of personalization on attitudes and purchase intentions found by the current study contradicts with Gaber et al. (2019) whose study was similar to the current study in the data collection tool which was an online questionnaire, and the number of respondents and the country the study was conducted in, however, it differed in the chosen platform which was Instagram. It also contradicts Semerádová and Weinlich (2019) who executed their study on Facebook advertisements as their current study.

Other findings concerning the perceived ease of use and perceived usefulness were matching those of Lin and Kim (2016) and Luna and Torres (2015), in which perceived usefulness and perceived ease of use positively impacted attitudes and purchase intentions. This positive impact can be attributed to the informativeness and scalability of the advertisements, as long as consumers find the advertisements valuable by providing them with the needed information and easy to link them with the product advertised, they tend to form favorable attitudes, and their intention to purchase increases.

Furthermore, attitudes were proved to have a positive effect on purchase intentions which aligns with Gutierrezet al. (2023) and Lee et al. (2019), it was also proved that it mediates the relation between different independent variables and purchase intentions which was confirmed by Al Nafoury (2021). In addition, the majority of the current study sample reported having the intention to purchase the advertised products on Facebook-sponsored advertisements or visit the website of the advertised product.

It was also found that attitudes and purchase intentions didn't differ from males to females. While it was noticed that younger people had more purchase intentions than older respondents which matches the study of Roy et al. (2023) study, as they found that age negatively affects purchase intentions which means that the higher the age, the less the purchase intentions. On the other hand, the current findings contradict those of Rai (2020) who found that age does not affect consumers' purchase intentions.

CONCLUSION

The use of Facebook-sponsored advertisements has grown exponentially with its different types. and the impact of it on consumers' attitudes and purchase intentions is debatable. The present study tried to investigate this impact by focusing on certain factors such as personalization, perceived usefulness, and perceived ease of use.

Personalization, perceived ease of use, and perceived usefulness factors were found to be positively related to attitudes and purchase intentions, and attitudes were found to mediate the relationship between all these factors and purchase intentions.

This paper explains how consumers in Egypt accept Facebook-sponsored advertisements and how their attitudes form and how it leads to their purchase intentions. In addition, the present study tried to use the TAM model in a new context and add to it to form an extended model that can explain how consumers feel towards Facebook-sponsored advertisements.

6.1 Limitations and Theoretical Recommendations

There are several limitations to this study; first, the sample used in this study may not be representative of the overall consumers in Egypt, as it focused on a certain age group and certain governorate, so future research needs to be done on other different age groups and governorates. Also, the study's scope focused on a certain platform which is Facebook, and the findings of the study may not be applicable to different platforms such as Instagram, TikTok, Twitter, or Snapchat. So further investigations need to be done on these channels. Moreover, the study didn't test specific product types or industries, and consumers' attitudes may differ according to that, so this point may also need further investigation.

Another limitation to note is using only online questionnaires as the main data collection tool, however, this may not be enough, an experiment can be done to enhance the reliability of the study as it will help solicit a real-time response instead of a recalled one. The experiment can be done by providing participants with real product advertisements embedded in a created Facebook timeline look, as a simulation for a real-time Facebook experience, each respondent can be asked several questions before the experiment to learn more about his interests and the products he likes, then advertisements should be designed and embedded according to each

respondent's interests to achieve the personalization effect. After the experiment is done, respondents should answer a questionnaire.

6.2 **Practical Recommendations**

Advertisers will need to craft the advertisements creatives very well and emphasize their target audience's pain points to give them a sense of relevancy and personalization. Also, they can further exploit Facebook algorithms that use AI and machine learning in their targeting techniques to reach the right audience successfully. Facebook algorithms now

know exactly when to deliver the message and to whom. In addition to providing useful information about the advertised product and linking their advertisements to their website to elicit more favorable attitudes and facilitate the process of their consumers, eventually increasing their purchase intentions. Moreover, advertisers need to retarget those who clicked on this ad or interacted with it by any means, as this indicates that they are experiencing investigative intention in their consideration stage. It also indicates their readiness to move to the next phase of the funnel, so to convert them they need to retarget them with more personalized advertisement.

REFERENCES

Abdel Monem, Hisham. "The Effectiveness of Advertising Personalization." Journal of Design Sciences and Applied Arts 2, no. 1 (2021). https:// doi.org/10.21608/jdsaa.2021.31121.1061.

Abu-Ghosh, Dina Hesham, Hani Al-Dmour, Ali Abdallah Alalwan, and Rand Hani Al-Dmour. "Factors Affecting Jordanian Consumers' Attitudes Towards Facebook Advertising: Case Study of Tourism." In Emerging Markets from a Multidisciplinary Perspective: Challenges, Opportunities and Research Agenda, 285-302, 2018. https://doi.org/10.1007/978-3-319-75013-2_22.

Aguilar, Jose, and Gerardo Garcia. "An Adaptive Intelligent Management System of Advertising for Social Networks: A Case Study of Facebook." IEEE Transactions on Computational Social Systems 5, no. 1 (2018). https://doi.org/10.1109/ TCSS.2017.2759188.

Athanasios. Fabrício Andreou. Márcio Silva. Benevenuto, Oana Goga, Patrick Loiseau, and Alan Mislove. "Measuring the Facebook Advertising Ecosystem." In 26th Annual Network and Distributed System Security Symposium, NDSS 2019, 2019. https://doi.org/10.14722/ndss.2019.23280.

Ashmawy, Mariam El. "Measuring the University Students' Attitude toward Facebook Advertising." Master of Science, Arab Academy for Science, Maritime Transport, Technology and 2014. https://aast.edu/pheed/staffadminview/pdf_ retreive.php?url=50785_77_2_memoire%20fi. pdf&stafftype=staffpdf.

Blanco, Carlos, Miguel Blasco, and Isabel Azorín. "Entertainment and Informativeness as Precursory

Factors of Successful Mobile Advertising Messages." Communications of the IBIMA, 2010. https://doi. org/10.5171/2010.130147.

Davis, Fred D. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." MIS Quarterly: Management Information Systems 13, no. 3 (1989). https://doi. org/10.2307/249008.

Davis, FredD., RichardP. Bagozzi, and Paul R. Warshaw. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models." Management Science 35, no. 8 (1989). https://doi.org/10.1287/ mnsc.35.8.982.

Dodoo, Naa Amponsah, and Linwan Wu. "Exploring the Anteceding Impact of Personalised Social Media Advertising on Online Impulse Buying Tendency." In International Journal of Internet Marketing and Advertising, Vol. 13, 2019. https://doi.org/10.1504/ IJIMA.2019.097905.

"Egypt Facebook Users by Age 2022," 2023. https://www.statista.com/statistics/1028451/ facebook-user-share-in-egypt-by-age/.

Etikan, Ilker. "Comparison of Convenience Sampling and Purposive Sampling." American Journal of Theoretical and Applied Statistics 5, no. 1 (2016). https://doi.org/10.11648/j.ajtas.20160501.11.

"Facebook Users in Egypt - July 2023," April 2023. https://napoleoncat.com/stats/facebook-usersin-egypt/2023/07/#:~:text=There%20were%20 54%20301%20500.

Gaber, Hazem Rasheed, Len Tiu Wright, and Kaouther Kooli. "Consumer Attitudes towards Instagram Advertisements in Egypt: The Role of the Perceived Advertising Value and Personalization." Cogent Business and Management 6, no. 1 (2019). https://doi.org/10.1080/23311975.2019.1618431.

Ghosh, Avijit, Giridhari Venkatadri, Alan Mislove, and lit Kharagpur. "Analyzing Political Advertisers' Use of Facebook's Targeting Features." Workshop on Technology and Consumer Protection (ConPro '19), 2019.

Gogh, Roseline van, Michel Walrave, and Karolien Poels. "Personalization in Digital Marketing: Implementation Strategies and the Corresponding Ethical Issues." In *The SAGE Handbook of Marketing Ethics*, 2022. https://doi.org/10.4135/9781529739725.n30.

Gutierrez, Anabel, Khanyapuss Punjaisri, Bhavini Desai, Sharifah Faridah Syed Alwi, Simon O'Leary, Wornchanok Chaiyasoonthorn, and Singha Chaveesuk. "Retailers, Don't Ignore Me on Social Media! The Importance of Consumer-Brand Interactions in Raising Purchase Intention - Privacy the Achilles Heel." *Journal of Retailing and Consumer Services* 72 (2023). https://doi.org/10.1016/j.jretconser.2023.103272.

Hadija, Zeljka. "Perceptions of Advertising in Online Social Networks: In-Depth Interviews." Rochester Institute of Technology, 2008. https://repository.rit.edu/cgi/viewcontent.cgi?article=5598&context=theses.

Hameed, Farhina, Ishtiaq Ahmed Malik, Noor UI Hadi, and Muhammad Ali Raza. "Brand Awareness and Purchase Intention in the Age of Digital Communication: A Moderated Mediation Model of Celebrity Endorsement and Consumer Attitude." Online Journal of Communication and Media Technologies 13, no. 2 (2023). https://doi.org/10.30935/ojcmt/12876.

"IAB New Ad Portfolio: Advertising Creative Guidelines," 2017. https://www.iab.com/guidelines/iab-new-ad-portfolio/.

Kaur, Harsandaldeep, Mandakini Paruthi, Jamid Ul Islam, and Linda D. Hollebeek. "The Role of Brand Community Identification and Reward on Consumer Brand Engagement and Brand Loyalty in Virtual Brand Communities." *Telematics and Informatics* 46 (2020). https://doi.org/10.1016/j.tele.2019.101321.

Kotler, P., and K. L. Keller. *Principles Of Marketing Kotler 14th Edition Pearson*. *Pearson Education Limited*, *Essex*, *England*. Vol. 14, 2012.

Lambrecht, Anja, and Catherine Tucker. "When Does Retargeting Work? Information Specificity in Online Advertising." *Journal of Marketing Research* 50, no. 5 (2013). https://doi.org/10.1509/jmr.11.0503.

Lee, Minjung, Elena Karpova, and Fatma Baytar. "The Effects of Information on Young Consumers' Attitudes and Purchase Intentions of Fashion Products Made of Fur, Leather, and Wool." *Journal of Global Fashion Marketing* 10, no. 2 (2019). https://doi.org/10.1080/20932685.2019.1577160.

Legris, Paul, John Ingham, and Pierre Collerette. "Why Do People Use Information Technology? A Critical Review of the Technology Acceptance Model." Information and Management 40, no. 3 (2003). https://doi.org/10.1016/S0378-7206(01)00143-4.

Lin, Carolyn A., and Tonghoon Kim. "Predicting User Response to Sponsored Advertising on Social Media via the Technology Acceptance Model." *Computers in Human Behavior* 64 (2016). https://doi.org/10.1016/j.chb.2016.07.027.

Luarn, Pin, Yu Fan Lin, and Yu Ping Chiu. "Influence of Facebook Brand-Page Posts on Online Engagement." *Online Information Review* 39, no. 4 (2015). https://doi.org/10.1108/OIR-01-2015-0029.

Luna-Nevarez, Cuauhtemoc, and Ivonne M. Torres. "Consumer Attitudes Toward Social Network Advertising." *Journal of Current Issues and Research in Advertising* 36, no. 1 (2015). https://doi.org/10.10 80/10641734.2014.912595.

Mahatmavidya, P.A., and N.N.K. Yasa. "Advertising Value of Instagram Stories and the Effect on Millennial's Attitude." Russian Journal of Agricultural and Socio-Economic Sciences 3, no. 99 (March 12, 2020): 29-39. https://doi.org/10.18551/rjoas.2020-03.04.

Mathieson, Kieran. "Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior." *Information Systems Research* 2, no. 3 (1991). https://doi.org/10.1287/isre.2.3.173.

Morris, Jon D., Yunmi Choi, and Ilyoung Ju. "Are Social Marketing and Advertising Communications (SMACs) Meaningful?: A Survey of Facebook User Emotional Responses, Source Credibility, Personal Relevance, and Perceived Intrusiveness." Journal of Current Issues and Research in Advertising 37, no. 2 (2016). https://doi.org/10.1080/10641734.2016.1171182.

Mstaffa, Dr Abdulkhaliq I, and Shilan T Saeed. "The Impact of Advertising on Social Networking Sites on Consumers' Attitudes Towards the Brand." Polytechnic Journal of Humanities and Social Sciences 4 (April 2023): 475–88. https://doi.org/10.25156/ptjhss.v4n1y2023.pp475-488.

Nufoury, Majd Monzer Al. "The Impact of Consumers' Impressions of Facebook Commercial and Advertisement on Their Attitudes & Purchase Intention A Field Study Addressed at the Consumers of Ready-Made Clothes and the Flowers of Their Advertisements via Facebook from Private -Univers." Damascus University Journal for the Economic and Political Sciences 37, no. 3 (2021). https://journal.damascusuniversity.edu.sy/index.php/ecoj/article/view/1540.

Olmedilla, Daniel. "Applying Machine Learning to Ads Integrity at Facebook," 2016. https://doi.org/10.1145/2908131.2908134.

Ott, Holly K., Michail Vafeiadis, Sushma Kumble, and T. Franklin Waddell. "Effect of Message Interactivity on Product Attitudes and Purchase Intentions." *Journal of Promotion Management* 22, no. 1 (2016). https://doi.org/10.1080/10496491.2015.1107011.

Pavlenko, E. "Consumer Attitude and Purchasing Behavior Related to Native Advertising on Instagram Social Media Platform - ProQuest," 2018. https://www.proquest.com/openview/bfdc91c9f5c1afa99a 73bed62d465693/1?pq-origsite=gscholar&cbl=187 50&diss=y.

Pereira, Ana Rita. "The Impact of Sources of Credibility on Purchase Intentions of Different Beauty Product -Mediator Effect of Perceived Quality." Universidade Católica Portuguesa, 2018. https://repositorio.ucp.pt/bitstream/10400.14/25474/1/Dissertation_152115162.pdf.

Petrescu, Maria, Pradeep Korgaonkar, and John Gironda. "Viral Advertising: A Field Experiment on Viral Intentions and Purchase Intentions." *Journal of Internet Commerce* 14, no. 3 (2015). https://doi.org/10.108 0/15332861.2015.1080057.

Qazi, Tayyab Yaqoob. "Impact of Facebook Advertisements on Purchase Intentions of Mobile Facebook Users: Investigating the Moderating Role of Brand Origin and Perceived Product Value." Doctoral dissertation, Tohoku University, 2018. https://tohoku.repo.nii.ac.jp/record/125130/files/180327-QAZI-123-1.pdf.

Rehman, Fazal, Muhammad Ilyas, Tariq Nawaz, and Shabir Hyder. "How Facebook Advertising Affects Buying Behavior of Young Consumers: The Moderating Role of Gender." *Academic Research International* 5, no. July (2014).

Saltaly, Nermeen El. The Impact of Internet Networks on Youth Attitudes in the Era of Globalization. 1st ed. Cairo: Bplomania for publishing and distributing, 2019.

Sanne, Petra N.C., and Melanie Wiese. "The Theory of Planned Behaviour and User Engagement Applied to Facebook Advertising." SA Journal of Information Management 20, no. 1 (2018). https://doi.org/10.4102/sajim.v20i1.915.

Saura, José Ramón, Daniel Palacios-Marqués, and Agustín Iturricha-Fernández. "Ethical Design in Social Media: Assessing the Main Performance Measurements of User Online Behavior Modification." *Journal of Business Research* 129 (2021). https://doi.org/10.1016/j.jbusres.2021.03.001.

Semeradova, Tereza, and Petr Weinlich. "Computer Estimation of Customer Similarity with Facebook Lookalikes: Advantages and Disadvantages of Hyper-Targeting." *IEEE Access* 7 (2019). https://doi.org/10.1109/ACCESS.2019.2948401.

Suarsa, Senny, Ratih Hurriyati, Vanessa Gaffar, Muhammad Hestisugesti, and Munawar. "The Role of Advertising Value in Influencing Consumer Attitudes towards Instagram Advertising in Indonesia." *DLSU Business & Economic Review* 29, no. 3 (2020).https://dlsuber.com/wp-content/uploads/2020/12/4.pdf.

Tariq, Maryam, Abbas Tanveer, Muhammad Abrar, and Asif Iqbal. "EWOM and Brand Awareness Impact on Consumer Purchase Intention: Mediating Role of Brand Image." Pakistan Administrative Review 1, no. 1 (2017).

Tayie, Sami. "Research Methods and Writing Research Proposals, Center for Advancement of Post Graduate Studies and Research in Engineering Sciences." Cairo University, 2005.

Toor, Areeba, Mudassir Husnain, and Talha Hussain. "The Impact of Social Network Marketing on Consumer Purchase Intention in Pakistan: Consumer Engagement as a Mediator." Asian Journal of Business and Accounting 10, no. 1 (2017).

Venkatadri, Giridhari, Athanasios Andreou, Yabing Liu, Alan Mislove, Krishna P. Gummadi, Patrick Loiseau, and Oana Goga. "Privacy Risks with Facebook's Pll-

Based Targeting: Auditing a Data Broker's Advertising Interface." In *Proceedings - IEEE Symposium on Security and Privacy*, Vol. 2018-May, 2018. https://doi.org/10.1109/SP.2018.00014.

Windels, Kasey, Jun Heo, Yongick Jeong, Lance Porter, A. Reum Jung, and Rui Wang. "My Friend Likes This Brand: Do Ads with Social Context Attract More Attention on Social Networking Sites?" Computers in Human Behavior 84 (2018). https://doi.org/10.1016/j.chb.2018.02.036.

Youn, Seounmi, and Seunghyun Kim. "Newsfeed Native Advertising on Facebook: Young Millennials' Knowledge, Pet Peeves, Reactance and Ad Avoidance." International Journal of Advertising 38, no. 5 (2019). https://doi.org/10.1080/02650487.2 019.1575109.

Zāhir, Manār Ṣābir, and Amīr ʿAlī al-Mursī Shūshah. "Dawr Dāfiʿīat Tullāb Al-Jāmiʿāt Almsrīyah Wa-

Ittijāhātuhum Naḥwá al-Iʿlānāt ʿabrá al-Hātif al-Maḥmūl Fī al-ʿalāqah Bayna Khaṣāʾiṣ al-Risālah Alʾʿlānīyah Wa-Nīyath al-Shirāʾ." Al-Majallah al- ʻllmīyah Lil-Dirāsāt Wa-al-Buḥūth al-Mālīyah Wa-al-Tijārīyah 4, no. 1 (January 1, 2023): 1553-81. https://doi.org/10.21608/cfdj.2023.260003.

Zhang, Sixuan, Robin Wakefield, Jinsong Huang, and Xi Li. "Exploring Determinants of Consumers' Attitudes toward Real-Time Bidding (RTB) Advertising." Information Technology and People 34, no. 2 (2021). https://doi.org/10.1108/ITP-09-2019-0480.

Zhao, Jie, and Jianfei Wang. "Health Advertising on Short-Video Social Media: A Study on User Attitudes Based on the Extended Technology Acceptance Model." International Journal of Environmental Research and Public Health 17, no. 5 (2020). https://doi.org/10.3390/ijerph17051501.