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| International Journal of Management and Marketing Intelligence | International Journal of Management and Marketing Intelligence, 2(4), 25-36. Volume: 2 http://ijmmi.com Issue: 4 ISSN: ISSN: 3080-860X Received: Accepted: <i>Citation: Amarneh, B., & Alshurideh, M.T. (2025) The Impact of Instagram as an Advertising Tool on Healthy Food Awareness. International Journal of Management and Marketing Intelligence, 2(4), 25-36. DOI: https://doi.org/10.64251/ijmmi.100</i> |
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The Impact of Instagram as an Advertising Tool on Healthy Food Awareness

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| ARTICLE DETAILS | ABSTRACT |
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| Article History Published Online: December 2025 | The rise of social media platforms has transformed how organizations communicate health-related information to consumers. This study examines the impact of Instagram advertising characteristics on consumers' healthy food awareness in the United Arab Emirates. Specifically, the research investigates five key advertisement characteristics: informativeness, endorser credibility, entertainment, customization, and repetition, and their effects on healthy food awareness. A quantitative research design was employed, collecting survey data from 450 respondents in the UAE context. The data were analyzed using Structural Equation Modeling (SEM) with SPSS AMOS to assess the measurement and structural models. The findings revealed that all five hypotheses were supported, demonstrating that advertisement informativeness, endorser credibility, entertainment, customization, and repetition positively and significantly influence healthy food awareness. The study contributes to the literature by providing empirical evidence on the effectiveness of Instagram advertising in promoting awareness of healthy food and offering practical implications for health marketers, food companies, and policymakers seeking to leverage social media platforms for health promotion initiatives. |
| Keywords Instagram Advertising Healthy food Awareness UAE | |
| JEL Codes M31, I12, L82, M37. | |
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1. INTRODUCTION

Awareness and purchasing of healthy food are currently popular topics among consumers (Zheng et al., 2026; Alshurideh, 2025). Increased purchases of healthful foods may encourage customers to adopt healthier eating habits (Flaherty et al., 2020). Healthy food has become a trend in today's packaged food industry (Theben et al., 2020) as people have begun adjusting their eating habits to a more healthful and balanced diet, which presented a significant opportunity for many food manufacturers to adapt their business strategies to address customers' growing health concerns (Hess et al., 2016). The UAE is among the countries ramping up efforts to encourage people to eat healthier and to develop sustainable food supplies for the community. UAE initiatives include emerging organic farming (Al-Taie et al., 2015) and the introduction of nutritious alternatives to its snack market. However, "Healthy" food definitions vary; overall, nutrition guidelines emphasize that better foods would usually reduce salt, sugar, and unhealthy fat intake while boosting intake of fruits and vegetables, whole grains, and lean protein (Raine et al., 2018). The term "healthy food" was used for this study because it allows for the analysis of a broader range of foods and is widely acknowledged in the literature (Chang et al., 2020; Cuesta-Valiño et al., 2020; Kang et al., 2015). Some researchers have attempted to provide consumer perceptions of healthy food. For example, Chan et al. (2009) noted that a healthy diet involves eating regularly and following the food pyramid.

Instagram is an American picture and video-sharing social networking website created in 2010. It has led to the rise of image-intensive social media, enabling users to share their experiences through uploads of images, IGTVs, reels, and stories. Active Instagram users have grown dramatically since 2013 (Lee et al., 2015). Food is becoming one of the most popular goods marketed on Instagram (Johnson, 2015), where it may be presented in a more personable manner, reflecting a more authentic image of businesses. Furthermore, Instagram also affects how customers consume food, such as choosing "Instagrammable" foods or restaurants, or photographing their meals and sharing them on Instagram before eating them (Tandoh, 2016). Nevertheless, Adolescents have been demonstrated to respond much more positively to unhealthy food commercials than to healthy food and non-food-related adverts (Murphy et al., 2020). These young respondents commonly characterized EDNP (energy-dense, nutrient-poor) food goods, with fewer recalling commercials promoting healthier foods. On the other hand, social media extends the range of healthy meals by providing information on diets that can help address obesity (Vaterlaus et al., 2015) or by offering approaches to varied recipes (Hawks et al., 2020). Blundell & Forwood (2021) also stated that social media might help people change their eating habits and eat healthier meals. Overall, effective brand-sponsored

content on Instagram has resulted in positive customer responses such as increased brand identification, more favourable attitudes toward the company, or increased buying intention (Colliander & Marder, 2018; Evans et al., 2017; Kusumasondaja & Tjiptono, 2019). Thus, this research aims to study the effect of Instagram advertisement characteristics, namely: informativeness, endorser credibility, entertainment, repetition, and customization, on healthy food awareness.

Since the current global coronavirus outbreak, research has revealed that non-traditional media, particularly online through social networking websites, has become a prominent and widely used way to advertise. This has led to the expansion of online shopping among customers worldwide, and it has become a frequent means of buying items to maintain social distance and isolation (Wiederhold, 2020). In addition, consumer purchasing patterns have altered due to the Internet and online social media, which have given consumers new means to seek, analyze, choose, and acquire goods and services (Goldfarb, 2013; Harfoushi et al., 2013). Social media advertising enables organizations to understand better their target consumers' behavior, preferences, activities, expectations, and intentions, and to interact with their commercials (El-zoghby et al., 2021). In this regard, Instagram is one of the fastest-growing photo-sharing social networking sites, where users post photographs from their daily lives for others to see. However, academic study on this platform is scarce (Sheldon & Bryant, 2016). Instagram had over 2000 million monthly active users in December 2021 (Statista, 2022a). In the United Arab Emirates, there are 6.67 million users (Statista, 2022b). According to Weber & Schweiger (2017), consumers are influenced by effective online advertising, leading to an intent to purchase the presented product or service. Consequently, well-executed social media advertising content results in engagement, comments, virality, retweets, likes, shares, follows, and so on (Gaber et al., 2019). Previous research encourages further research on advertising content across various forms of digital advertising (Minculete & Olar, 2018).

2. THEORETICAL FRAMEWORK

2.1. Advertisement informativeness and healthy food awareness.

Consumers in modern society now have easy access to information relevant to health concerns, thanks to the recent expansion of information technology. Consumer awareness and understanding of available brands and features grow as more information is received (Kotler, 2010), leading to a desire for healthier, higher-nutrition food items, which are essential for everyone who works for a living and must maintain good health. Healthy living entails eating nutritious foods and following suitable dietary habits regularly (Shaharudin et al., 2010a, 2010b). However, advertising informativeness refers to the capacity to communicate the qualities and benefits of alternative goods in a way that endeavors to match customer needs and expectations through increasing market efficiency (Ducoffe, 1996; Rodgers & Thorson, 2000). The exchange of information is one of the primary motives for using social media (Muntinga et al., 2011). Given the information-oriented nature of social media, finding consumers who are open to informative advertising sites is quite beneficial. As a result, customers actively seek out social media advertising because its format displays personal relationships and additional commercial information, such as specific product perks and comparable products (Dao et al., 2014). Moreover, consumers' attention might be piqued by using social media advertisements to deliver sought-after product information frequently accompanied by photos and videos, the commercial material is viral by nature (Saxena & Khanna, 2013) because it enables users to share and learn about other consumers' and followers' experiences with the product or service through comments placed beneath the adverts, which makes social media (i.e., Instagram) a suitable medium for disclosing information (Hamouda, 2018). In this regard, Logan et al. (2012) imply that social media users are more responsive to informational advertising on social media sites. Because receivers are drawn to advertising that provides incentives, information is a highly essential incentive in marketing (Varshney, 2003). One of the primary reasons people utilize social media is to look up information (Muntinga et al., 2011). Moreover, customers' reactions to social media advertising and their intention to purchase the items advertised are positively influenced by informativeness (Lee & Hong, 2016). According to Kim & Nieh (2009), the quality of information offered on a website strongly affects customers' e-loyalty intentions. Overall, the level of informativeness in social media advertising may enable customers to engage in more effective purchasing behavior. Subsequently, this enhances their intention to purchase (Alalwan, 2018). Therefore, informativeness is a key component that should be the focus for marketers using social media advertisements. Therefore, marketers must focus more on the quality and quantity of information. In every social media ad's message, comprehensive, up-to-date information covering all aspects of the items (i.e., product characteristics, price, discounts, shipping, and availability) should be included (Mohammed et al., 2003; Alalwan, 2018). Additionally, the informativeness of advertisements builds awareness toward the product and the brand. Informative advertisements are more appealing to consumers, as they give these advertisements attention to capture any information that may be of interest and benefit to them (Aaker & Norris, 1982; Efendioğlu & Durmaz, 2022). Consequently, the informativeness of advertisements helps consumers recall them (Mehta, 2000). Many studies examined the effect of the informativeness of social media advertisements on brand awareness. For example, Erkan et al. (2019) studied the relationship between user-perceived informative Facebook advertisements and brand awareness, finding a significant positive influence. Another study by Efendioğlu & Durmaz (2022) examined the effect of the informativeness of Instagram advertisements on brand awareness among participants in Generation Y. The study results showed that the informativeness of Instagram advertisements has a significant positive impact on brand awareness. These two studies' findings align with Haida & Rahim (2015), who argued that social media advertisements have a positive influence on awareness. In line with the previous literature, the effect of advertisement informativeness can be drawn as:

H1: Advertisement informativeness has a positive impact on healthy food awareness.

2.2. Endorser credibility and healthy food awareness.

One of the most prevalent promotional tactics business players employ is celebrity endorsement. The study uses the term "influencer" to fit with the Instagram context. Business leaders frequently use influencers to improve their reputations. Using influencers as endorsers will raise customer brand awareness, increase brand visibility in the advert, and make it more memorable, all of which will enhance brand recall (Nugraha et al., 2018). Some key elements that indicate compatibility between brand image and "influencers" include credibility, popularity, and physical appeal (Negi & Pabalkar, 2020). Credibility refers to how customers evaluate a particular advertisement's content for honesty, trustworthiness, and veracity (MacKenzie & Lutz, 1989). These forms of advertising reactions occur at the level of mental perception. They lead to the establishment of trust or distrust in the advertising message; generating credible commercials is critical, as the perception of untrustworthy advertisements significantly lowers advertising effectiveness. Moreover, influencer marketing is based on credibility and the establishment of trust between influencers and followers, who then pass along the influencer's expertise, experience, attitudes, ideas, and values via social media (Pilař et al., 2018; Pilař, Stanislavská, Kvasnička, et al., 2021). Food marketers have begun collaborating with well-known "social influencers" to promote (food) items or services to their following via online social media platforms (Folkvord et al., 2020). Instagram is a popular medium for 'fit influencers' to publish fitness-related photographs while advocating healthy goods. Social influencers frequently bring their followers inside their personal lives by sharing personal and intimate tales and images (Tiggemann & Zaccardo, 2018). Influencer marketing is vital in public health (Byrne et al., 2017). Famous social media influencers may easily affect children and adolescents (Coates et al., 2019). Popular influencers can encourage teenagers to have a healthy diet (De Jans et al., 2021). Still, many of them are not competent nutritionists, lack credibility, and may harm adolescents' health (Byrne et al., 2017). Also, Lou & Yuan (2019) found that influencer trustworthiness negatively affected brand awareness and purchase intentions for social media content. Even though the informative value of influencers' generated content often overlaps and increases followers' confidence in their posts, followers may harbor ambivalent or dubious attitudes toward influencers' motivations. They may discredit influencers when generating consumption-related reactions. Conversely, influencers have a significant impact on their followers' decision-making (Coates et al., 2020). They replace recognized food celebrities and famous chefs in the sphere of healthy cuisine and become the architects of healthy eating norms and informal sources of health education (Goodman & Jaworska, 2020; Pilař, Stanislavská, & Kvasnička, 2021). According to a study by Nugraha & Setyanto (2018), high levels of vlogger credibility are associated with increased brand awareness. This finding is consistent with Alsmadi's (2006) findings, which demonstrated the positive effect of endorser credibility on brand awareness. Based on what was stated above, the endorser credibility influence can be hypothesized as follows:

H2: Endorser credibility has an impact on healthy food awareness.

2.3. Advertisement entertainment and healthy food awareness.

Advertising entertainment refers to the likability of advertisements, as well as consumers' pleasure and satisfaction resulting from the Ad's ability to make people happy, have fun, and feel good (Zhou & Bao, 2002). Therefore, entertainment is considered a significant component of creating advertisements. Also, entertainment is used to grab customers' attention, since an exciting ad is more likely to be remembered than a boring one. Furthermore, it is reasonable to believe that entertainment boosts the effectiveness of advertising (Bandara, 2021). Entertainment establishes an emotional connection between the brand and the consumer's response (Wang & Sun, 2010b). In a Web 2.0-based digital social media setting, advertising will likely meet consumer hedonic needs by giving pleasure, emotional release, distraction, and amusement (Edwards et al., 2002; Muntinga et al., 2011) by enabling users to share all sorts of events, information, video clips, music, and more with their social network connections (Kim et al., 2011). To add more, social media entertainment advertisements are more interesting and attractive to users, increasing brand and product awareness (Aaker & Norris, 1982; Erkan et al., 2019; Haida & Rahim, 2015) and fostering general knowledge. Sukmawati et al. (2022) found that educational advertisements using Augmented Reality on Instagram enhanced users' enjoyment, which positively impacted their learning outcomes. The study also found that the interactivity of these advertisements triggered viewers' curiosity, thereby increasing their ability to absorb the concepts. Based on the above, it could be hypothesized that:

H3: Advertisement entertainment has an impact on healthy food awareness.

2.4. Advertisement customization and healthy food awareness.

Customization of adverts is one of the most potent aspects influencing a customer's purchase decision. Social media sites frequently use this functionality to target specific audiences and serve customized ads based on their demographic profiles (Tam & Ho, 2006). One of the main objectives of a company is to provide a satisfying experience for its customers, which is achieved by fulfilling their needs and wants (Alshurideh et al., 2012). With customization, social media may transform how advertising is done, enabling consumer profiling and monitoring based on each user's geography and demographics (Zeng et al., 2009). Brands can reach out to their customers in a meaningful way. This feature can also help them reach a broader market, retain their customers even if they do not currently need it, and influence their customers' needs (Mangold & Faulds, 2009). Ducoffe (1996) argued that advertising is most effective when the advertiser's value is exchanged through marketed messaging. It helps to establish a strong link between the consumer and the organization and a sense of trustworthiness. This concept states that when social network advertising aligns with customers' interests, it is more attractive to them (Dehghani et al., 2016). Thus, consumers are more likely to pay attention to personalized ads while averting those labelled as less personalized (Liu et al., 2012). Also, Merriska & Purwanegara (2012) suggested tailoring TV advertisements to increase

their effectiveness. Advertisement customization can increase relevance (Ibid.) and reduce disturbance because it effectively tailors advertisements to target viewers' interests. A study by Febriyantoro (2020) showed that Social media advertisement (i.e., YouTube) variables, including customization, have a significant impact on brand awareness. Based on the above, it can be concluded that:

H4: Advertisement customization has an impact on healthy food awareness.

2.5. Advertisement repetition and healthy food awareness.

Advertisement repetition is the quantity of exposure to advertising a customer experiences. This study focuses on advertisement repetition and its impact on healthy food buying behaviour. Additionally, repetition in commercials is undoubtedly one of the most potent communication tactics businesses can employ to keep their brands in the minds of present and future customers when making purchases (Ghodeswar, 2008). The brand and product are more likely to be remembered because there are more opportunities to cognitively analyse the ad's material when repeated (Yaveroglu & Donthu, 2008). Increased message exposure due to repetitive advertising, along with message processing time, is expected to change the content of the message in the recipient's mind (Alshurideh, 2019). The longer a message is exposed to customers, the more likely they are to recall and remember it. This frequently occurs when users make communication and advertising data readily available and acquire them with little effort (Boyd, 2008). Individual followers can "share" or "repost" a product marketed on social networking platforms. By repeating the message, all the users' connections will see it, resulting in a larger audience. Word of mouth spreads through social networking sites. Because the product's content is widely disseminated and repeated, more traffic is directed to the product/company, raising awareness (Al Kurdi & Alshurideh, 2021; Da Silva et al., 2019; Otugo et al., 2015). However, the usefulness of advertisement repetition is a point of contention among scholars (Pechmann & Stewart, 1988). Repeated exposure to advertisements has been shown to boost their persuasive impact (Cacioppo, 1980). On the other hand, excessive exposure may reduce the convincing benefits, as repetition effects fade over time (Schmidt & Eisend, 2015). This implies that exposure to advertisements initially has a beneficial impact, but these advantages are not always long-lasting. According to Reinhard et al. (2014), the effectiveness of advertising increases at moderate levels of repetition but decreases as the number of repeats rises. As a result, it appears that there is an optimal level of advertisement repetition that yields favorable brand perceptions. Craig et al. (1976) found that a higher repetition rate leads to greater brand-name recall persistence. Turley & Shannon (2000) found that repeated advertising positively affects consumer buying behavior and product recall. Tsuji et al. (2009) mentioned that brand awareness of virtual advertising in sports is positively affected by repetition. In addition, repeated exposure to banner ads increased viewers' awareness levels in an online advertising scenario (Danaher & Mularkey, 2003; Drèze & Hussherr, 2003). Based on the above, the advertisement repetition influence can be hypothesized as:

H5: Advertisement repetition has an impact on healthy food awareness.

2.6. The study model.

The proposed research is shown in Figure 1.

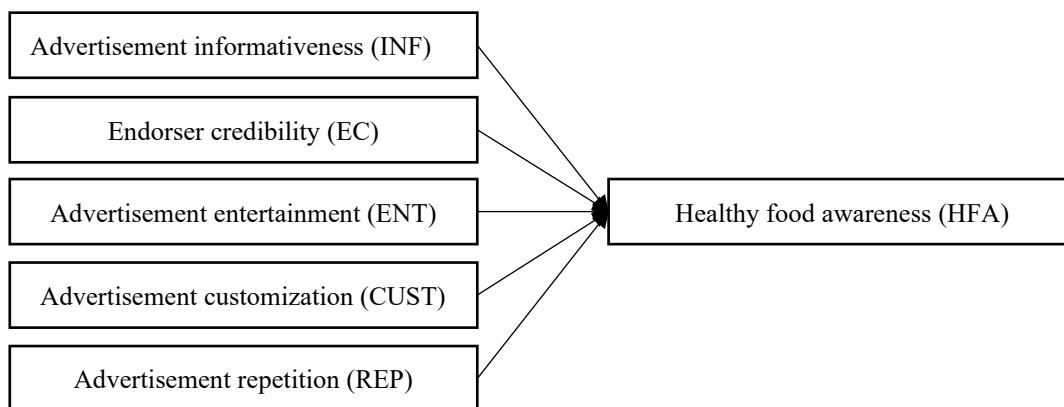


Figure 1. Theoretical framework.

3. METHODOLOGY

This study aims to examine the influence of Instagram advertising on consumers' healthy food awareness in the UAE context. The study applies a quantitative approach. Quantitative research "employs strategies of inquiry such as experimental and surveys and collects data on predetermined instruments that yield statistical data" (Creswell, 2003, p. 18). Also, quantitative research entails collecting numerical data and analyzing it, typically using mathematical models (Creswell, 2002). One of its main objectives is to create precise and reliable measurements that facilitate statistical analysis (Matthews & Ross, 2010, p. 465). Thus, this study employs quantitative research techniques because this approach best serves its objectives. The study's data were gathered from two sources: primary and secondary. The primary data were gathered through the creation of a unique survey. The secondary data was obtained by evaluating several past

research studies relevant to Instagram and social media advertising. These studies served as a basis for creating the study's model and constructing the survey's questions. SPSS (Statistical Package for Social Sciences) will be used for data analysis and interpretation. Furthermore, SEM (structural equation modelling) using SPSS AMOS will be used as the Study instrument to undertake a variety of analyses to test hypotheses and get insight into respondents' awareness and behaviors concerning Instagram advertising. Since it is a multivariate statistical approach that analyzes relations among observable and/or latent variables while accounting for potential measurement errors, it has the unique capacity to simultaneously explore complex webs of linkages between variables. It provides a more robust examination of interactions, measurement error, and many independent and dependent connections than typical multivariate approaches (Hult et al., 2006).

4. DATA ANALYSIS

4.1. Demographic profile.

The respondents' demographic profiles are outlined in Table 4.1. It reports the frequency and percentage of responses by gender, age, nationality, marital status, and educational level. The gender category shows that 53.1% of respondents were female, while 46.9% were male. Regarding respondents' age, the majority were under 20 years old, accounting for 61.6%. However, the age group of 20 to 30 years old constitutes 26.4%, followed by the age group of 30 to 39 years old, which accounts for 5.6%. While 2.9% were 50 years or younger, the 40- to less than 50-year-old age group accounted for 2.2%. The over-60-year-old age group came in last with 1.3%. The nationality category indicates that 17.3% of respondents were UAE nationals, while 82.7% were non-UAE nationals. Regarding marital status, 86.0% of respondents were single, followed by 13.3% who were married. Divorced and widowed counted for 0.2% and 0.4%, respectively. In terms of educational level, 54.4% of the respondents were of a high school level. While 34.4% of respondents hold a bachelor's degree, followed by 8.4% with a master's degree, 2% with a diploma, and 0.7% with a Ph.D.

Table 1. Demographic profile.

| Characteristic | Frequency | Percentage |
|-------------------|-----------|------------|
| Female | 239 | 53.1% |
| Male | 211 | 46.9% |
| Under 20 | 277 | 61.6% |
| 20 - less than 30 | 119 | 26.4% |
| 30 - less than 40 | 25 | 5.6% |
| 40 - less than 50 | 10 | 2.2% |
| 50 - less than 60 | 13 | 2.9% |
| Over 60 | 6 | 1.3% |
| UAE national | 78 | 17.3% |
| non-UAE national | 372 | 82.7% |
| Single | 387 | 86.0% |
| Married | 60 | 13.3% |
| Divorced | 1 | 0.2% |
| Widowed | 2 | 0.4% |
| High School | 245 | 54.4% |
| Diploma (2 years) | 9 | 2.0% |
| Bachelor | 155 | 34.4% |
| Masters | 38 | 8.4% |
| PhD | 3 | 0.7% |

4.2. Descriptive statistics.

The descriptive statistics for all the main study variables and the complete sample (N=450) are provided in Table 2. Using SPSS, the mean and standard deviation statistics for each variable were calculated. The distribution of standard deviation around the mean points should be examined to assess the sample's variability. In fact, according to Hair et al. (2010), it is assumed that the respondents had consistent opinions in the survey if the standard deviation values were less than one (<1). According to this study's standard deviation values, all are less than 1. Given the respondents' apparent consistency, these values suggest that the points are closely clustered around the mean. In addition, the correlation coefficients demonstrate that INF is positively and significantly related to all the study variables. EC has a low correlation with HFA (0.180), while the other correlations are higher. All the correlation coefficients are positive and significant at the 0.01 level. Table 2 presents the correlations among all variables.

Table 2. Descriptive statistics.

| Factors | Mean | SD | INF | EC | ENT | CUST | REP | HFA |
|---------|------|------|---------|---------|---------|---------|---------|-----|
| INF | 3.44 | 0.71 | 1 | | | | | |
| EC | 3.07 | 0.73 | 0.452** | 1 | | | | |
| ENT | 3.49 | 0.68 | 0.492** | 0.418** | 1 | | | |
| CUST | 3.25 | 0.73 | 0.443** | 0.444** | 0.486** | 1 | | |
| REP | 3.41 | 0.75 | 0.469** | 0.473** | 0.470** | 0.521** | 1 | |
| HFA | 3.83 | 0.73 | 0.215** | 0.180** | 0.305** | 0.286** | 0.283** | 1 |

4.3. Factor and reliability analysis.

The Confirmatory factor loadings for the variables are shown in Table 3. Factor loadings indicate the extent to which each variable is linked to the underlying factor. According to Kline (2014), loadings close to -1 or 1 indicate that the factor has a significant impact on the variable. However, loadings that are near 0 indicate that the component has a negligible impact. Factor loadings above 0.5 often indicate that a factor extracts sufficient variance from a variable. They demonstrate that the factor's impact on the variable's variation is significant (Hair et al., 2010). Informativeness has factor loadings ranging from 0.666 to 0.700, indicating that it has an impact on the construct. While (INF5) was eliminated. The indices for endorser credibility range from 0.626 to 0.711, and (EC3) was dropped; the entertainment factor loading range is between 0.546 and 0.658, and (ENT5) was dropped. Regarding customization, factor loadings ranged from 0.592 to 0.725, and (CUST1) was eliminated. Finally, repetition loading ranged from 0.615 to 0.705, while Healthy food awareness ranged from 0.599 to 0.719, indicating a substantial impact on the construct. Also, table 3 illustrates the updated reliability by displaying the construct reliability, Cronbach's Alpha, and the Average Variance Extracted (AVE). It is generally agreed that a Cronbach Alpha value between 0.6 and 0.7 denotes an adequate level of reliability, and a value between 0.8 and larger, an excellent level (Hulin & Netemeyer, Richard Cudeck, 2001). In addition, the convergent validity test consisted of two parts: composite reliability and average variance extracted (AVE). Composite reliability, or construct reliability, indicates the internal consistency of scale items. To achieve construct reliability, a construct's composite value must be higher than the threshold of 0.7 (Brunner & Süß, 2005; Hair et al., 2010). The results show that all study variables have composite reliability values above 0.7 and Cronbach's alpha values above 0.6, indicating strong reliability for all measures, as indicated by the Average Variance Extracted (AVE). Brunner & Süß (2005) assume a benchmark of 0.5; all variables have AVEs above 0.5, indicating convergent validity of the construct.

Table 3. Measurement model.

| Variables | Items | Loadings | CA | CR | AVE |
|--|-------|----------|-------|-------|-------|
| Advertisement informativeness (INF) | INF1 | 0.681 | 0.779 | 0.852 | 0.591 |
| | INF2 | 0.700 | | | |
| | INF3 | 0.666 | | | |
| | INF4 | 0.696 | | | |
| Endorser credibility (EC) | EC1 | 0.626 | 0.771 | 0.849 | 0.585 |
| | EC2 | 0.668 | | | |
| | EC4 | 0.711 | | | |
| | EC5 | 0.707 | | | |
| | ENT1 | 0.546 | | | |
| Advertisement entertainment (ENT) | ENT2 | 0.642 | 0.712 | 0.824 | 0.540 |
| | ENT3 | 0.651 | | | |
| | ENT4 | 0.658 | | | |
| | ENT5 | | | | |
| Advertisement customization (CUST) | CUST2 | 0.667 | 0.69 | 0.831 | 0.622 |
| | CUST3 | 0.725 | | | |
| | CUST4 | 0.592 | | | |
| Advertisement repetition (REP) | REP1 | 0.626 | 0.784 | 0.851 | 0.534 |
| | REP2 | 0.645 | | | |
| | REP3 | 0.705 | | | |
| | REP4 | 0.660 | | | |
| | REP5 | 0.615 | | | |
| Healthy food awareness (HFA) | HFA1 | 0.657 | 0.804 | 0.865 | 0.562 |
| | HFA2 | 0.688 | | | |
| | HFA3 | 0.719 | | | |
| | HFA4 | 0.706 | | | |
| | HFA5 | 0.599 | | | |

4.4. Structural model.

To assess the structural model and test the hypotheses, AMOS was utilized. To identify the significance of the relationship, results should be within the accepted range ($p < 0.05$). β signifies the direction of the relationship. The results illustrated that Informativeness positively impacts Healthy food Awareness ($\beta=0.002$, $p=0.000$); hence, H1 was supported. The impact of endorser credibility on Healthy food awareness was weak and positive ($\beta=0.005$, $p=0.001$), supporting H2. On the other hand, the relationship between entertainment and Healthy food awareness was positive and significant ($\beta=0.257$, $p=0.002$), supporting H3. Customization impact on Healthy food awareness was positive and significant ($\beta=0.056$, $p=0.006$), and H4 was supported. H5 has been accepted as a significant positive relationship between repetition and healthy food awareness ($\beta=0.183$, $p=0.025$). Healthy food awareness indicates that INF, EC, ENT, CUST, and REP accounted for 22.7% of the variance. Table 4 exhibits the results of the Hypotheses.

Table 4. Hypotheses testing.

| Hypotheses | Results |
|--|-----------|
| H1: Advertisement informativeness has a positive effect on Healthy food awareness | Supported |
| H2: Advertisement Endorsers' credibility has a positive effect on Healthy food awareness | Supported |
| H3: Advertisement entertainment has a positive effect on Healthy food awareness | Supported |
| H4: Advertisement customization has a positive effect on Healthy food awareness | Supported |
| H5: Advertisement repetition has a positive effect on Healthy food awareness | Supported |

5. DISCUSSION

This study aimed to examine the impact of Instagram advertising characteristics on consumers' healthy food awareness in the UAE. Specifically, the research investigated five advertisement characteristics: informativeness, endorser credibility, entertainment, customization, and repetition, and their effects on healthy food awareness. The first hypothesis (H1) posited that advertisement informativeness positively affects healthy food awareness. The findings supported this hypothesis, indicating a positive and significant relationship. This result is consistent with the literature review findings from Erkan et al. (2019) and Efendioğlu & Durmaz (2022), who demonstrated that informative advertisements on social media platforms significantly enhance brand awareness by providing consumers with valuable product information. The second hypothesis (H2) examined whether endorser credibility positively affects healthy food awareness. The results showed weak but positive support for this hypothesis. This finding aligns with Nugraha & Setyanto (2018) and Alsmadi (2006), who found that high levels of endorser credibility are associated with increased brand awareness. However, the weak effect may reflect the mixed nature of influencer credibility in health-related content as noted by Lou & Yuan (2019). The third hypothesis (H3) posited that advertisement entertainment has a positive effect on healthy food awareness. This hypothesis was strongly supported, showing a positive and significant relationship. This result confirms the findings of Erkan et al. (2019) and Haida & Rahim (2015), who emphasized that entertaining advertisements on social media are more interesting and attractive to users, thereby increasing brand and product awareness. The fourth hypothesis (H4) proposed that advertisement customization has a positive effect on healthy food awareness. The findings supported this hypothesis, demonstrating a positive and significant impact. This outcome is consistent with Febriyantoro (2020), who found that customization in social media advertisements significantly impacts brand awareness by tailoring content to viewers' interests and reducing advertising disturbance. The fifth hypothesis (H5) examined whether advertisement repetition positively affects healthy food awareness. This hypothesis was supported, with a significant positive relationship observed. This finding aligned with Tsuji et al. (2009) and Danaher & Mularkey (2003), who demonstrated that repeated exposure to advertisements positively affects brand awareness and recall. However, the moderate effect size may reflect the diminishing returns of excessive repetition noted by Schmidt & Eisend (2015).

6. CONCLUSION

This study examined the impact of Instagram advertising characteristics on consumers' healthy food awareness in the UAE. The findings revealed that all five examined characteristics, informativeness, endorser credibility, entertainment, customization, and repetition, positively and significantly influence healthy food awareness. Entertainment emerged as the strongest predictor, followed by repetition and customization, while informativeness and endorser credibility showed weaker but significant effects. These results demonstrate that Instagram is an effective platform for promoting healthy food awareness, particularly when advertisements are engaging, repeatedly exposed, and tailored to target audiences. The study contributes to the literature by providing empirical evidence on the role of social media advertising in health promotion in the UAE. Organizations and health marketers can leverage these insights to design more effective Instagram advertising campaigns that enhance consumer awareness of healthy food options. The findings emphasize the importance of creating engaging, informative, and personalized content that resonates with target audiences while utilizing credible endorsers and strategic repetition to maximize awareness outcomes.

6.1. Policy implications.

Based on the study findings, the following policy implications are recommended for health marketers, food companies, and policymakers in the UAE. Health marketers and food companies should prioritize providing comprehensive, accurate information about healthy food products in Instagram advertisements, including nutritional content, health benefits, ingredients, and preparation methods, to help consumers make informed dietary choices. Organizations should collaborate with credible influencers who possess expertise in nutrition, health, or fitness to promote healthy food products on Instagram, ensuring that endorsers have legitimate credentials and authentic connections to healthy living to enhance trust and awareness among consumers. Marketers should develop creative, engaging Instagram content that captures consumer attention through compelling visuals, interactive elements, storytelling, and enjoyable formats, making healthy food advertisements more appealing and memorable than purely informational ones. Health promotion campaigns should utilize Instagram's targeting capabilities to deliver personalized advertisements based on users' demographics, interests, and behaviors, ensuring that healthy food messages are relevant and tailored to specific audience segments for maximum impact. Organizations should strategically repeat healthy food advertisements on Instagram through consistent posting schedules and retargeting campaigns, while avoiding excessive exposure that could lead to advertising fatigue, to maintain brand recall and reinforce health messages effectively.

6.2. Limitations and future studies.

This study is unique in that it incorporated several advertising characteristics. However, it is limited because it was applied only in the UAE context. More research on this topic could broaden the current work to incorporate MENA or GCC countries. For future research, other variables can be studied, including Body image dissatisfaction and its effect on the purchase of Healthy food products. Despite the prevalence of media messages, little research has examined the impact of body image on food purchasing and related behaviors. Moreover, an experimental approach could be used in future research to yield more reliable results than self-reported survey questions.

REFERENCES

Aaker, D. A., & Norris, D. (1982). Characteristics of TV commercials perceived as informative. *Journal of advertising research*, 22(2), 61-70.

Al-Taie, W. A., Rahal, M. K., AL-Sudani, A. S., & AL-Farsi, K. A. (2015). Exploring the consumption of organic foods in the United Arab Emirates. *Sage Open*, 5(2), 1-12.

Al Kurdi, B. H., & Alshurideh, M. T. (2021). Facebook Advertising as a Marketing Tool. *International Journal of Online Marketing*, 11(2), 52-74.

Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65-77.

Alshurideh, D. M. (2019). Do electronic loyalty programs still drive customer choice and repeat purchase behaviour? *Int. J. Electronic Customer Relationship Management*, 12(1), 40-57.

Alshurideh, M. T. (2025) Factors Affecting Buying Local Food Products: A UAE Perspective. In book: *Ethnocentrism and Country of Origin Effects The Asian Consumers Perspective*. Publisher: Qatar University Press. 693-707.

Alshurideh, M., Masa'deh, R. M. d. T., & Alkurdi, B. (2012). The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation. *European Journal of Economics, Finance and Administrative Sciences*, 47, 69-78.

Alsmadi, S. (2006). The Power of Celebrity Endorsement in Brand Choice Behavior : An Empirical Study of Consumer Attitudes in Jordan. *Journal of Accounting, Business & Management*, 13, 69-84.

Bandara, D. M. D. (2021). Impact of Social Media Advertising on Consumer Buying Behaviour: With Special Reference to Fast Fashion Industry. *Sri Lanka Journal of Marketing*, 7(2), 80-103.

Blundell, K.-L., & Forwood, S. (2021). Using a social media app, Instagram, to affect what undergraduate university students choose to eat. *Appetite*, 157, 104887.

Boyd, D. (2008). Facebook's privacy trainwreck: Exposure, invasion, and social convergence. *Convergence*, 14(1), 13-20.

Brunner, M., & Süß, H. M. (2005). Analyzing the reliability of multidimensional measures: An example from intelligence research. *Educational and psychological measurement*, 65(2), 227-240.

Byrne, E., Kearney, J., & MacEvilly, C. (2017). The Role of Influencer Marketing and Social Influencers in Public Health. *Proceedings of the Nutrition Society*, 76(OCE3), 103. Irish Section Meeting, 21-23 June 2017, What governs what we eat?, 1-1.

Cacioppo, J. T. (1980). Persuasiveness of communications is affected by exposure frequency and message quality: A theoretical and empirical analysis of persisting attitude change. *Current Issues and Research in Advertising*, 3(1), 97-122.

Chan, K., Prendergast, G., Grønhøj, A., & Bech-Larsen, T. (2009). Communicating healthy eating to adolescents. *Journal of Consumer Marketing*, 26(1), 6-14.

Chang, H. P., Ma, C. C., & Chen, H. S. (2020). The impacts of young consumers' health values on functional beverages purchase intentions. *International journal of environmental research and public health*, 17(10), 1-12.

Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P., & Boyland, E. J. (2019). Social media influencer marketing and children's food intake: A randomized trial. *Pediatrics*, 143(4), 1-9.

Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P., & Boyland, E. J. (2020). "It's just addictive people that make addictive videos": children's understanding of and attitudes towards influencer marketing of food and beverages by YouTube video bloggers. *International journal of environmental research and public health*, 17(2), 1-18.

Colliander, J., & Marder, B. (2018). 'Snap happy' brands: Increasing publicity effectiveness through a snapshot aesthetic when marketing a brand on Instagram. *Computers in Human Behavior*, 78, 34-43.

Craig, C. S., Sternthal, B., & Leavitt, C. (1976). Advertising Wearout: An Experimental Analysis. *Journal of Marketing Research*, 13(4), 365-372.

Creswell, J. W. (2002). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Prentice hall.

Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. In Research design: Qualitative, quantitative, and mixed methods approaches (2 ed). Sage.

Cuesta-Valiño, P., Rodríguez, P. G., & Núñez-Barriopedro, E. (2020). Perception of advertisements for healthy food on social media: Effect of attitude on consumers' response. *International Journal of Environmental Research and Public Health*, 17(18), 1-20.

Da Silva, T. S., Perin, M. G., Wagner, R. L., & Basso, K. (2019). The influence of advertisement repetition on price image in the context of higher education services. *Journal of Revenue and Pricing Management*, 18(4), 342-352.

Danaher, P. J., & Mullarkey, G. W. (2003). Factors affecting online advertising recall: A study of students. *Journal of Advertising Research*, 43(3), 252-266.

Dao, W., Nhat Hanh Le, A., Ming-Sung Cheng, J., & Chao Chen, D. (2014). Social media advertising value. *International Journal of Advertising*, 33(2), 271-294.

De Jans, S., Spielvogel, I., Naderer, B., & Hudders, L. (2021). Digital food marketing to children: How an influencer's lifestyle can stimulate healthy food choices among children. *Appetite*, 162, 105182.

Dehghani, M., Niaki, M. K., Ramezani, I., & Sali, R. (2016). Evaluating the influence of YouTube advertising for attraction of young customers. *Computers in Human Behavior*, 59, 165-172.

Drèze, X., & Hussherr, F. X. (2003). Internet advertising: Is anybody watching? *Journal of Interactive Marketing*, 17(4), 8-23.

Ducoffe, R. H. (1996). *Advertising value and advertising on the web*. Journal of advertising research, 36(5), 21-35.

Edwards, S. M., Li, H., & Lee, J. H. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, 31(3), 83-95.

Efendioğlu, İ. H., & Durmaz, Y. (2022). The Impact of Perceptions of Social Media Advertisements on Advertising Value, Brand Awareness and Brand Associations: Research on Generation Y Instagram Users. *Transnational Marketing Journal*, 10(2), 251-275.

El-zoghby, N., Elsamadicy, A., & Negm, E. (2021). Measuring the Impact of Social Media Advertising Content on Consumers' Purchasing Intention towards Health and Beauty Products Online. *مجلة جامعة الأسكندرية للعلوم الإدارية*, 58(2), 159-192.

Erkan, I., Gokerik, M., & Acikgoz, F. (2021). The impacts of facebook ads on brand image, brand awareness, and brand equity. In *Research Anthology on Strategies for Using Social Media as a Service and Tool in Business* (pp. 647-667). IGI Global.

Evans, N. J., Phua, J., Lim, J., & Jun, H. (2017). Disclosing Instagram influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent. *Journal of interactive advertising*, 17(2), 138-149.

Febriyantoro, M. T. (2020). Exploring YouTube Marketing Communication: Brand awareness, brand image and purchase intention in the millennial generation. *Cogent Business & Management*, 7(1), 1-17.

Flaherty, S. J., McCarthy, M. B., Collins, A. M., McCafferty, C., & McAuliffe, F. M. (2020). A phenomenological exploration of change towards healthier food purchasing behaviour in women from a lower socioeconomic background using a health app. *Appetite*, 147, 1-11.

Folkvord, F., Roes, E., & Bevelander, K. (2020). Promoting healthy foods in the new digital era on Instagram: an experimental study on the effect of a popular real versus fictitious fit influencer on brand attitude and purchase intentions. *BMC Public Health*, 20(1), 1-9.

Gaber, H. R., Wright, L. T., & Kooli, K. (2019). Consumer attitudes towards Instagram advertisements in Egypt: The role of the perceived advertising value and personalization. *Cogent Business & Management*, 6(1), 1-13.

Ghodeswar, B. M. (2008). Building brand identity in competitive markets: A conceptual model. *Journal of Product & Brand Management*, 17(1), 4-12.

Goldfarb, A. (2014). What is different about online advertising?. *Review of Industrial Organization*, 44(2), 115-129.

Goodman, M. K., & Jaworska, S. (2020). Mapping digital foodscapes: Digital food influencers and the grammars of good food. *Geoforum*, 117, 183-193.

Haida, A., & Rahim, H. L. (2015). Social media advertising value: A Study on consumer's perception. *International Academic Research Journal of Business and Technology*, 1(1), 1-8.

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis* (7e ed.). Pearson Prentice Hall.

Hamouda, M. (2018). Understanding social media advertising effect on consumers' responses: An empirical investigation of tourism advertising on Facebook. *Journal of Enterprise Information Management*, 31(3), 426–445.

Harfoushi, O., Alfawwaz, B., Obeidat, B., Obiedat, R., Faris, H., Harfoushi, O., Alfawwaz, B., Obeidat, B., Obiedat, R., & Faris, H. (2013). Impact of Internet Advertisement and Its Features on E-Commerce Retail Sales: Evidence from Europe. *Journal of Software Engineering and Applications*, 6(11), 564–570.

Hawks, J. R., Madanat, H., Walsh-Buhi, E. R., Hartman, S., Nara, A., Strong, D., & Anderson, C. (2020). Narrative review of social media as a research tool for diet and weight loss. *Computers in Human Behavior*, 111, 1-13.

Hess, J. M., Jonnalagadda, S. S., & Slavin, J. L. (2016). What Is a Snack, Why Do We Snack, and How Can We Choose Better Snacks? A Review of the Definitions of Snacking, Motivations to Snack, Contributions to Dietary Intake, and Recommendations for Improvement. *Advances in Nutrition*, 7(3), 466–475.

Hulin, C., & Netemeyer, Richard Cudeck, R. (2001). Can a Reliability Coefficient Be Too High? *Journal of Consumer Psychology*, 10, 55–58.

Hult, G. T. M., Ketchen, D. J., Cui, A. S., Prud'homme, A. M., Seggie, S. H., Stanko, M. A., Xu, A. S., & Cavusgil, S. T. (2006). An Assessment of the Use of Structural Equation Modeling in International Business Research. *Research Methodology in Strategy and Management*, 385-415. Emerald Group Publishing Limited.

Johnson, L. (2015). *How Food Brands Can Nail Instagram*.

Kang, J., Jun, J., & Arendt, S. W. (2015). Understanding customers' healthy food choices at casual dining restaurants: Using the Value-Attitude-Behavior model. *International Journal of Hospitality Management*, 48, 12–21.

Kim, H., & Niehm, L. S. (2009). The Impact of Website Quality on Information Quality, Value, and Loyalty Intentions in Apparel Retailing. *Journal of Interactive Marketing*, 23(3), 221–233.

Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior*, 27(1), 365–372.

Kline, P. (2014). *An Easy Guide to Factor Analysis*. In *An Easy Guide to Factor Analysis*. Routledge.

Kusumasondaja, S., & Tjiptono, F. (2019). Endorsement and visual complexity in food advertising on Instagram. *Internet Research*, 29(4), 659–687.

Lee, E., Lee, J. A., Moon, J. H., & Sung, Y. (2015). Pictures Speak Louder than Words: Motivations for Using Instagram. *Cyberpsychology, Behavior and Social Networking*, 18(9), 552–556.

Lee, J., & Hong, I. B. (2016). Predicting positive user responses to social media advertising: The roles of emotional appeal, informativeness, and creativity. *International Journal of Information Management*, 36(3), 360–373.

Liu, F., Li, J., Mizerski, D., & Soh, H. (2012). Self-congruity, brand attitude, and brand loyalty: A study on luxury brands. *European Journal of Marketing*, 46(7), 922–937.

Logan, K., Dix, S., Ferguson, G., Bright, L. F., & Gangadharbatla, H. (2012). Facebook versus television: Advertising value perceptions among females. *Journal of Research in Interactive Marketing*, 6(3), 164–179.

Lou, C., & Yuan, S. (2019). Influencer Marketing: How Message Value and Credibility Affect Consumer Trust of Branded Content on Social Media. *Journal of Interactive Advertising*, 19(1), 58–73.

MacKenzie, S. B., & Lutz, R. J. (1989). An Empirical Examination of the Structural Antecedents of Attitude toward the Ad in an Advertising Pretesting Context. *Journal of Marketing*, 53(2), 48–65.

Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357–365.

Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the Social Sciences*. Pearson Education.

Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40(3), 67–72.

Merriska, A., & Purwanegara, M. S. (2012). the Relationship Between Tv Advertising Cost and Brand Awareness for Food Product Category in Indonesia(FEBRUARY 2010). *Journal of Business and Management*, 1(1), 90–94.

Minculete, G., & Olar, P. (2018). Approaches to the Modern Concept of Digital Marketing. *International Conference knowledge-based organization*, 24(2), 63–69.

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for Brand-Related social media use. *International Journal of Advertising*, 30(1), 13-46.

Murphy, G., Corcoran, C., Tatlow-Golden, M., Boyland, E., & Rooney, B. (2020). See, Like, Share, Remember: Adolescents' Responses to Unhealthy-, Healthy- and Non-Food Advertising in Social Media. *International Journal of Environmental Research and Public Health*, 17(7), 1-25.

Negi, N., & Pabalkar, V. (2020). Impact of Instagram and Instagram Influencers in Purchase Consideration in India. *European Journal of Molecular & Clinical Medicine*, 7(11), 68-86.

Nugraha, A., & Setyanto, R. P. (2018). The Effects of Vlogger Credibility as Marketing Media on Brand Awareness to Customer Purchase Intention. *Journal of Research in Management*, 1(2), 1-10.

Nugraha, R., Kusumawardani, K. A., & Octavianie, V. (2018). The Influence of Celebrity Endorsement in Instagram towards Customer Behavior and Purchase Intention in Healthy Food Diet Business. *Firm Journal of Management Studies*, 3(2), 1–24.

Otugo, N. E., Uzuegbunam, C. E., & Obikeze, C. O. (2015, May). Social media advertising/marketing: A study of awareness, attitude and responsiveness by Nigerian youths. In *International Conference on Communication, Media, Technology and Design* (Vol. 1, No. 2, pp. 1-17).

Pechmann, C., & Stewart, D. W. (1988). Advertising repetition: A critical review of wearin and wearout. *Current Issues and Research in Advertising*, 11(1–2), 285–329.

Pilař, L., Stanislavská, L. K., & Kvasnička, R. (2021). Healthy food on the twitter social network: Vegan, homemade, and organic food. *International Journal of Environmental Research and Public Health*, 18(7), 1-25.

Pilař, L., Stanislavská, L. K., Kvasnička, R., Hartman, R., & Tichá, I. (2021). Healthy food on instagram social network: Vegan, homemade and clean eating. *Nutrients*, 13(6), 1-19.

Pilař, L., Stanislavská, L. K., Rojík, S., Kvasnička, R., Poláková, J., & Gresham, G. (2018). Customer experience with organic food: Global view. *Emirates Journal of Food and Agriculture*, 30(11), 918–926.

Raine, K. D., Atkey, K., Olstad, D. L., Ferdinand, A. R., Beaulieu, D., Buhler, S., Campbell, N., Cook, B., L'Abbé, M., Lederer, A., Mowat, D., Maharaj, J., Nykiforuk, C., Shelley, J., & Street, J. (2018). Healthy food procurement and nutrition standards in public facilities: Evidence synthesis and consensus policy recommendations. *Health Promotion and Chronic Disease Prevention in Canada*, 38(1), 6–17.

Reinhard, M. A., Schindler, S., Raabe, V., Stahlberg, D., & Messner, M. (2014). Less is sometimes more: How repetition of an antismoking advertisement affects attitudes toward smoking and source credibility. *Social Influence*, 9(2), 116-132.

Rodgers, S., & Thorson, E. (2000). The Interactive Advertising Model. *Journal of Interactive Advertising*, 1(1), 41–60.

Saxena, A., & Khanna, U. (2013). Advertising on social network sites: A structural equation modelling approach. *Vision*, 17(1), 17-25.

Schmidt, S., & Eisend, M. (2015). Advertising repetition: A meta-analysis on effective frequency in advertising. *Journal of Advertising*, 44(4), 415-428.

Shaharudin, M. R., Pani, J., Mansor, S., & Elias, S. (2010a). Factors Affecting Purchase Intention of Organic Food in Malaysia's Kedah State. *Cross-Cultural Communication*, 6(2), 105–116.

Shaharudin, M. R., Pani, J., Mansor, S., & Elias, S. (2010b). Purchase Intention of Organic Food; Perceived Value Overview. *Canadian Social Science*, 6(1), 70–79.

Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89–97.

Statista. (2022a). Instagram monthly active users | Statista. Available at: <https://www.statista.com/topics/1882/instagram/?srsltid=AfmBOoqnjb2dqgAGldk4mkBF4MXMs-HkpSafJ78-zt3kl0KCm4riWNch>. Access: 15/January/2026.

Statista. (2022b). UAE: number of social network users by platform 2021 | Statista. Available at: <https://www.statista.com/statistics/1318197/uae-most-used-social-media-platforms-by-share-of-users/?srsltid=AfmBOopElJkqaAavNL1ocnaLtGnHu7UnjNnigrImU2mtrr6Z7lwvLy7l>. Access: 13/January/2026.

Sukmawati, I., Purnomo, C. A., Moniaga, C., & Ardianto, P. (2022). Augmented Reality in Instagram Story Filter for Increasing Awareness through Learning Interactivity and Enjoyment. *Proceedings of the 4th International Conference on Arts and Design Education (ICADE 2021)*, 665(August 2016), 229–233.

Tam, K. Y., & Ho, S. Y. (2006). Understanding the impact of Web personalization on user information processing and decision outcomes. *MIS Quarterly: Management Information Systems*, 30(4), 865–890.

Tandoh, R. (2016). Click plate: how Instagram is changing the way we eat. The Guardian, 2. Available at: <https://www.theguardian.com/lifeandstyle/2016/nov/02/click-plate-how-instagram-changing-way-we-eat-food>. Accessed 2 January 2024.

Theben, A., Gerards, M., & Folkvord, F. (2020). The effect of packaging color and health claims on product attitude and buying intention. *International journal of environmental research and public health*, 17(6), 1-11.

Tiggemann, M., & Zaccardo, M. (2018). “Strong is the new skinny”: A content analysis of #fitspiration images on Instagram. *Journal of Health Psychology*, 23(8), 1003–1011.

Tsuji, Y., Bennett, G., & Leigh, J. H. (2009). Investigating factors affecting brand awareness of virtual advertising. *Journal of Sport Management*, 23(4), 511–544.

Turley, L. W., & Shannon, J. R. (2000). The impact and effectiveness of advertisements in a sports arena. *Journal of Services Marketing*, 14(4), 323–336.

Varshney, U. (2003). Location management for mobile commerce applications in wireless Internet environment. *ACM Transactions on Internet Technology (TOIT)*, 3(3), 236–255.

Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2015). #Gettinghealthy: The perceived influence of social media on young adult health behaviors. *Computers in Human Behavior*, 45, 151–157.

Wang, Y., & Sun, S. (2010). Assessing beliefs, attitudes, and behavioral responses toward online advertising in three countries. *International Business Review*, 19(4), 333–344.

Weber, P., & Schweiger, W. (2017). Content Effects: Advertising and Marketing. *The International Encyclopedia of Media Effects*, 1–13.

Wiederhold, B. K. (2020). Using social media to our advantage: alleviating anxiety during a pandemic. *Cyberpsychology, Behavior & Social Networking*, 23(4), 197–198.

Yaveroglu, I., & Donthu, N. (2008). Advertising repetition and placement issues in on-line environments. *Journal of Advertising*, 37(2), 31–44.

Zeng, F., Huang, L., & Dou, W. (2009). Social Factors in User Perceptions and Responses to Advertising in Online Social Networking Communities. *Journal of Interactive Advertising*, 10(1), 1–13.

Zheng, J., Shen, L., Li, Y., Hu, L., & Sun, H. (2026). Advertising message design and healthy food purchase intention: the interactive effect of temporal distance and message framing. *British Food Journal*, 128(1), 105-135.

Zhou, Z., & Bao, Y. (2002). Users' Attitudes toward Web Advertising: Effects of Internet Motivation and Internet Ability. *Advances in consumer research*, 29(1), 71-78.