

Examining the determinants of perceived advertising value and attitudes toward fast-food native advertisements

Journal of
Contemporary
Marketing Science

173

Jamil Schembri and Ivan De Battista

*Department of Marketing, Faculty of Economics, Management and Accountancy,
University of Malta, Msida, Malta*

Received 15 September 2024
Revised 16 April 2025
Accepted 2 July 2025

Abstract

Purpose – Despite the growing popularity of native advertisements among organizations and marketers, there remains limited research on the factors influencing customers' perceived value of native advertisements, particularly in the fast-food industry. Consequently, this study aims to identify the factors influencing the perceived advertising value of fast-food native advertisements and explore the relationship between advertising value and customer attitudes.

Design/methodology/approach – To address the identified research gap, a closed-ended questionnaire was employed and administered across social networking sites, and the results were analyzed using SPSS and SmartPLS.

Findings – This study revealed that informative, entertaining, personalized, interactive, credible and non-irritating fast-food native advertisements positively impact customers' perceived advertising value. Additionally, higher levels of value generated by these advertisements result in a more positive customer attitude toward them.

Originality/value – By addressing the current research gap, this study provides new theoretical insights into the literature on native advertisements, as no previous studies have collectively tested these six factors within the context of native advertisements in the fast-food industry.

Keywords Fast-food advertisements, Native advertisements, Customer attitudes, Fast-food industry, Advertising value, Social networking sites

Paper type Research article

Introduction

Imagine yourself in an Internet-free world where individuals must visit libraries to access information and interact with others through methods like postal mail, and where companies depend on traditional advertising to reach their audience. Not so long ago, this was the case.

In the latest publication of Eurostat, the data revealed that in 2023, 91% of individuals aged 16 to 74 in the EU had used the Internet within three months prior to the survey (Eurostat, 2024a). This publication highlights a 1% increase in Internet usage from 2022 (Eurostat, 2023) and a further significant increase of 24% from 2010 (Eurostat, 2024a). In 2023, 59% of internet users accessed social networking sites (SNSs) (Eurostat, 2024b), a slight increase of 0.8% from the previous year (Eurostat, 2023). This data clearly demonstrates how the proliferation of the Internet, the rise of the World Wide Web (WWW), and the emergence of SNSs have transformed daily lives for individuals and organizations alike. Given the significant growth and impact of the Internet on customers' attitudes and behaviors throughout the years, organizations had to adapt to this new advertising medium as its user base grew, resulting in organizations embracing online marketing methods (Ha, 2008; Rust and Lemon, 2001).

© Jamil Schembri and Ivan De Battista. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at [Link to the terms of the CC BY 4.0 licence](#).

Funding: This research did not receive any funding for completion.

Disclosure statement: The authors report that this research has no potential conflict of interest.



Journal of Contemporary Marketing
Science
Vol. 8 No. 2/3, 2025
pp. 173-198
Emerald Publishing Limited
e-ISSN: 2516-7499
p-ISSN: 2516-7480
DOI 10.1108/JCMARS-09-2024-0035

In 1994, a pivotal moment in the advertising industry unfolded with the introduction of the first online advertisement, bringing a revolutionary transformation to the advertising landscape and causing a shift from traditional to online advertising (Adams, 1995). Over time, various types of online advertisements have been developed, including search, display, and email advertisements (Kingsnorth, 2016).

With the rapid increase in Internet and SNS users, more organizations advertise heavily on such platforms. Consequently, an individual encounters numerous advertisements daily, which poses a greater challenge for organizations to attract the consumer's eye. To overcome this obstacle and potentially enhance their chances of capturing consumers' attention, organizations employ diverse types of online advertisements. As a result, one of the relatively new forms organizations are utilizing is native advertising, which is the main focus of this research paper.

Wojdyski (2016, p. 5) defines native advertising as "a means of presenting consumers with a commercial persuasive message that resembles the non-third-party content provided by the same publisher". Moreover, native advertisements integrate seamlessly with the media content they appear on. This ability to blend with the media, potentially minimizing interference, disruption, and intrusiveness, has resulted in native advertisements becoming highly popular among organizations and marketing professionals (Campbell and Marks, 2015; Krouwer *et al.*, 2019). Native advertising spending in the US is growing year on year, reaching approximately 87 US billion dollars in 2022. This amount accounts for more than half of the total display advertisement spending, demonstrating their prominence (eMarketer, 2023). As opposed to other advertising forms, such as banners, native advertisements are considered more effective, illustrating one of the primary reasons why more organizations are allocating a significant amount of their marketing expenditures to such advertisements (Chiang *et al.*, 2018).

The fast-food industry comprises a combination of locally owned and franchised establishments, contributing significantly to the intense competition organizations face in this industry. As a result, organizations must distinguish themselves from their competitors, and the key to doing so is through advertisements. Given this industry's competitive nature and the inability of individuals surfing SNSs to focus on every single advertisement they encounter, native advertisements may offer these organizations a way to stand out from their competitors while also being perceived as less intrusive. Therefore, an organization should consider how it can maximize the benefits that native advertisements may bring while also determining the factors that positively influence an individual to comprehend the content of a particular advertisement over another.

Several studies have investigated various factors that could potentially influence customers' perceived advertising value and their attitudes toward online advertisements. Certain factors were consistent between several studies, while others varied from one study to another. Due to this potential discrepancy between different studies, this study investigates the same six primary factors identified by a systematic literature review undertaken in this field by De Battista *et al.* (2021). Such factors were informativeness, entertainment, irritation, credibility, personalization, and interactivity, further validated by another meta-analytic research conducted by Lütjens *et al.* (2022). This study also builds on the Advertising Value Model (AVM) developed by Ducoffe (1996), serving as a fundamental basis for this study. Introduced in 1995 and applied to the WWW in 1996, the AVM aims to measure the effectiveness of advertisements and understand customers' attitudes toward advertisements, aligning with the aim of this study.

Research aim

The primary aim of this study is to address the current gap in the literature regarding the factors influencing fast-food native advertisements. Consequently, this study aims to identify the main factors influencing customers' perceived advertising value and the influence that advertising value has on customer attitudes in the fast-food industry context. Although this study will primarily focus on six influencing factors, it does not exclude the possibility of other factors

that may also play a significant role in influencing the customers' perceived advertising value. Moreover, this research aims to critically analyze how young adults aged between 18 and 54, perceive fast-food native advertisements on SNSs. It also aims to identify the factors that have a positive or negative effect on customers' perceived advertising value, as well as the impact of such value on customers' attitudes.

In light of this research aim, the study sought to address the following two research questions:

- RQ1. Which factors influence the perceived advertising value obtained by customers within the realm of fast-food native advertisements?
- RQ2. What is the relationship between advertising value and customer attitudes toward fast-food native advertisements?

Literature review

Native advertisements

Over the years, rapid technological advancements brought about the emergence of online advertising, encompassing different types in which organizations could advertise their products and services on the Internet. Native advertising has garnered substantial interest among numerous organizations and marketing experts, as well as in the academic research field (Jiang *et al.*, 2017; Schauster and Neill, 2017; Wojdyski and Evans, 2016). Indeed, more organizations are employing native advertisements to communicate their messages to their intended audience.

Native advertising is a form of paid advertising that seamlessly integrates and blends with the non-paid content of the media platform where it is displayed to try and minimize the perception that it is an advertisement (Wojdyski, 2016). The potentially deceptive nature of native advertising and its lack of transparency has given rise to numerous ethical concerns over time as businesses and marketers endeavor to deceive customers into failing to recognize that it is paid promotional content (Schauster and Neill, 2017; Schauster *et al.*, 2016; Wojdyski, 2016). To address such ethical concerns, several researchers suggested that native advertisements must be labeled as paid promotional content (IAB, 2019; Schauster and Neill, 2017).

Native advertising can be a double-edged sword (Lee *et al.*, 2016). Firstly, the seamless integration of these advertisements with the media's platform content leads to a more positive customer attitude toward them and higher sharing intentions. Customers with high levels of skepticism toward advertisements and persuasion knowledge tend to hold a negative attitude toward native advertising, raising concerns about the possibility of native advertisements being perceived as a double-edged sword (Lee *et al.*, 2016).

Several studies have demonstrated that people perceive native advertisements differently from other types of online advertising due to their unique characteristics, garnering a higher interest among scholars (Chiang *et al.*, 2018; Krouwer *et al.*, 2019; Li and Shen, 2023). Chiang *et al.* (2018) found that native advertisements on Facebook were more effective than non-native advertising formats such as banners and pop-ups, which are often considered more annoying.

Another study emphasized that native advertisements on online news sites do not always elicit negative perceptions. Approximately 50% of the participants had a neutral perception toward these advertisements, whereas 17% expressed a favorable attitude toward them even after acknowledging their persuasive goal (Jiang *et al.*, 2017). Furthermore, Li and Shen (2023) concluded that soft-text native advertising is more effective than hard-sell advertising in eliciting favorable attitudes, resulting in stronger purchase intentions.

Further research has also emphasized other benefits of native advertisements, such as increased click-through rates (Aribarg and Schwartz, 2020) and enhanced attention (Jung and Heo, 2023; Keyzer *et al.*, 2023). Consequently, the benefits that native advertisements bring

with them may be why organizations are devoting more of their marketing budgets to such advertisements over other advertising types (eMarketer, 2023).

Nevertheless, people may still perceive native advertising as intrusive because of its central position within the content feed, compelling users to view it (Huang and Yoon, 2022). Youn and Kim (2019) argued that young millennials' negative responses to native newsfeed advertising on Facebook are linked with perceived advertisement intrusiveness, leading to advertisement avoidance. However, when native advertisements are more informative and entertaining, consumer avoidance is reduced (Chung and Kim, 2021). Lastly, simply conducting native advertising does not suffice; native advertisements should also be congruent with the media context of the platform published on, positively affecting consumers' processing of an advertisement (Kim et al., 2019).

This present study focuses exclusively on native advertisements placed on SNS, including but not limited to Facebook, Instagram, and LinkedIn. Eurostat (2024c) highlighted that 58.9% of EU organizations utilized SNSs, marking a 24.8% increase from 2015, illustrating that an increasing number of organizations are using these platforms to develop their digital presence. This study also highlighted that Malta, out of all EU countries, had the highest SNS usage by organizations (Eurostat, 2024c).

Advertising value model

Researchers have developed several models that include attitudes in their framework to explore how a person's attitude influences variables such as their intentions and behaviors and what influences the person's attitude, such as their own beliefs. Examples of these models were the Theory of Reasoned Action (Fishbein and Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1991). Following these, as well as others that included attitude in their framework, such as the Technology Acceptance Model (Davis et al., 1989) and the Belief Factor Model (Pollay and Mittal, 1993), Ducoffe put forth the AVM in 1995 (Ducoffe, 1995), applying it to the WWW a year later (Ducoffe, 1996).

Through the AVM, Ducoffe (1995, 1996) identified informativeness, entertainment, and irritation as strong predictors of advertising value, affecting the customer's attitude toward an advertisement. This finding suggests that informative, entertaining, and non-irritating advertisements deliver a higher advertising value to the customers, positively affecting their attitudes toward those advertisements (Ducoffe, 1996). This model draws on the Uses and Gratification Theory, where this theory adopts the perspective of how individuals utilize the media rather than how the media affects the users (Katz, 1959). The four uses and gratification factors are cognitive, affective, social, and personal needs. Based on these, Ducoffe (1995) classified irritation and entertainment as affective and informativeness as cognitive (De Battista et al., 2021).

Additionally, the AVM centers itself around the concept of advertising value, defined as "a subjective evaluation of the relative worth or utility of advertising to consumers" (Ducoffe, 1995, p. 1). Therefore, advertising value refers to the consumers' perception of the worth/value of an advertisement they encounter, measuring the advertisement's effectiveness and the consumers' attitudes toward that advertisement. It can also serve as a measure of customer satisfaction with the organization's communication products (Ducoffe, 1995).

Figure 1 depicts the original AVM as presented by Ducoffe (1996), comprising three primary predictors of advertising value: informativeness, entertainment, and irritation. It also demonstrates that advertising value plays a significant role in shaping customer attitudes toward web advertising.

Later studies added other constructs to this model, such as credibility (Brackett and Carr, 2001). Furthermore, several scholars have applied this model to other channels besides web advertising, including smartphone advertising (Kim and Han, 2014) and social media advertising (Arora and Agarwal, 2019; Hamouda, 2018), finding that this model is a good fit for such channels.

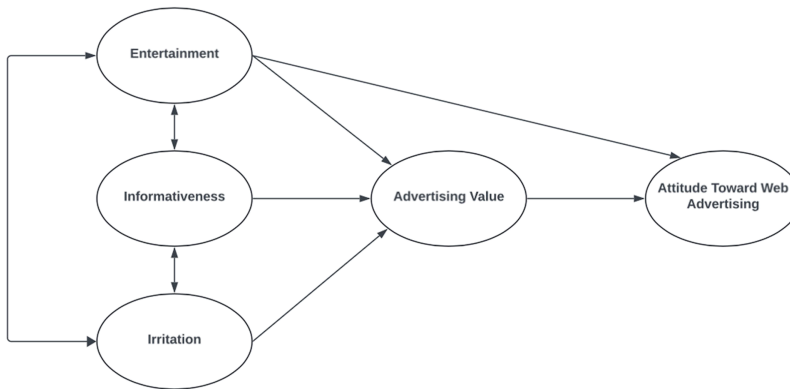


Figure 1. AVM. Source: [Ducoffe \(1996\)](#)

Influencing factors

Numerous scholars have investigated and discovered several factors that influence customers' perceived advertising value and their attitudes toward advertisements. [De Battista et al. \(2021\)](#) conducted a comprehensive systematic literature review, encompassing all prior studies conducted in this research area from Ducoffe's work until December 2020, and concluded that there are six primary factors: informativeness, entertainment, irritation, credibility, personalization, and interactivity. Informativeness, entertainment, credibility, and interactivity were defined as positively influencing customers' attitudes toward advertisements, while irritation had a negative influence. Personalization has mixed perspectives, making it difficult to conclude whether its influence is positive or negative ([De Battista et al., 2021](#)). This study will analyze the same six influencing factors within the context of native advertisements. Moreover, although the aforementioned systematic study evaluated these six factors based on their impact on customer attitudes, this paper will concentrate on the influence that these factors exert on advertising value, employing a similar approach to prior studies ([Arora and Agarwal, 2019](#); [Ducoffe, 1996](#); [Hamouda, 2018](#)).

Informativeness. The informativeness factor in an advertising context refers to the informative content part of the advertisement that aims to inform and educate individuals about the products, potentially increasing consumer satisfaction and improving the purchasing decision ([Ducoffe, 1996](#)). Consumers believe an advertisement's informativeness is a primary factor in attracting them to approve it ([Bauer and Greyser, 1968](#)).

The first study that examined the relationship between informativeness and perceived advertising value found a positive correlation ([Ducoffe, 1995](#)). As a result, the more informative the advertisement is, the higher the perceived value, positively influencing customer attitudes toward that advertisement ([Ducoffe, 1996](#)), consistent with subsequent research papers ([Gaber et al., 2019](#); [Murillo et al., 2016](#)). Based on these study findings, along with other studies that found informativeness to be a significant predictor of advertising value ([Dao et al., 2014](#); [Martins et al., 2019](#); [Logan, 2013](#)), the following hypothesis was formulated:

- H1.* There is a significant positive relationship between perceived informativeness and fast-food native advertising value.

Entertainment. Entertainment is another factor introduced by [Ducoffe \(1995\)](#), in which entertaining advertisements have the ability to fulfill the audience's needs for escapism, diversion, aesthetic enjoyment, or emotional release ([McQuail, 1983](#)). Moreover, entertaining advertisements aim to establish an emotional connection between the consumer encountering

the advertisement and the brand's target message in that advertisement (Azeem and Haq, 2012).

Ducoffe (1995) observed a significant positive correlation between the entertainment factor and the advertising value. Consequently, when consumers encounter advertisements with a certain degree of entertainment, their attitudes toward those advertisements tend to be more positive as the advertising value they obtain increases (Ducoffe, 1996; Gaber *et al.*, 2019). Other studies also identified a significant positive relationship between entertainment and advertising value (Brackett and Carr, 2001; Dao *et al.*, 2014; Logan, 2013). In line with the current literature, this study hypothesized that:

- H2. There is a significant positive relationship between perceived entertainment and fast-food native advertising value.

Irritation. In the advertising context, the irritation factor refers to those advertisements that are intrusive and comprise disorganized content, resulting in a degree of annoyance to the people exposed to them (Eighmey and McCord, 1998). This degree of intrusiveness is a consequence of the advertisement's disruption of the individual's goal-directed behavior, which is even more pronounced in online media than in other media (Li *et al.*, 2002).

Irritation is another factor introduced in Ducoffe's study, which found a significant negative correlation between irritation and advertising value (Ducoffe, 1996). Moreover, the higher the irritation in an advertisement, the lower the perceived advertising value, causing a negative influence on the customer's attitudes toward that advertisement (Ducoffe, 1996).

Subsequent studies in this field identified irritation as a significant negative predictor of advertising value (Dehghani *et al.*, 2016; Karunarathne and Thilini, 2022; Saxena and Khanna, 2013). Conversely, studies show that including factors in advertisements like entertainment can reduce customers' irritation (Dwinanda *et al.*, 2022; Kim and Han, 2014). In view of the current literature, this study developed the following hypothesis:

- H3. There is a significant negative relationship between perceived irritation and fast-food native advertising value.

Credibility. The credibility factor, first introduced as an extension of the AVM by Brackett and Carr (2001), pertains to the degree to which consumers perceive the encountered advertisement as truthful and believable (MacKenzie and Lutz, 1989). Consumers evaluate the credibility of the advertisement content at the mental perception level, determining whether or not to trust the content of that advertisement (Lee and Hsieh, 2009). Additionally, Bucy (2003) argues that the individual's age may influence their perception of the advertisement's credibility.

Brackett and Carr (2001) found a significant positive relationship between credibility and advertising value, in line with other studies in this field (Arora and Agarwal, 2019; Aktan *et al.*, 2016; Dao *et al.*, 2014; Lin and Hung, 2009; Martins *et al.*, 2019), implying that the more credible the advertisement is, the higher the advertising value obtained by the person encountering it. Based on the findings of previous studies, this study proposed the following hypothesis:

- H4. There is a significant positive relationship between perceived credibility and fast-food native advertising value.

Personalization. Personalization is the practice in which organizations send tailored advertisements to customers based on their demographic profile, purchase intentions, interests, and behaviors, offering a personalized experience (Dempster and Lee, 2015). Srinivasan *et al.* (2002) suggest that personalization plays a significant part in the success of an e-commerce organization. Providing personalized advertisements to customers according to their needs can prevent them from spending excessive time browsing through an extensive list of products to try and find one that suits their needs (Srinivasan *et al.*, 2002).

Various studies have reported different findings on the relationship between personalization and advertising value. [Dehghani et al. \(2016\)](#) analyzed this relationship in the context of YouTube advertisements and found a positive relationship between these two variables, consistent with another study's findings conducted among Instagram users in Indonesia ([Lina and Setiyanto, 2021](#)). Contrastingly, [Arora and Agarwal \(2019\)](#) found that personalization is not a significant predictor of advertising value.

Drawing on the literature that identifies personalization as a significant predictor of advertising value, along with the benefits that personalization brings to advertisers and organizations and the ongoing technological advancements that may enhance personalization in advertisements ([Winter et al., 2021](#)), this study hypothesized the following:

- H5. There is a significant positive relationship between perceived personalization and fast-food native advertising value.

Interactivity. Interactivity is a form of engagement that entices the customer to interact with the content they are exposed to, facilitating two-way communication between the consumer and the organization ([Liu, 2003](#)). In the landscape of advertisements, interactivity determines the engagement levels of an advertisement ([Florenthal and Shoham, 2010](#)), where a higher degree of interactivity enhances customers' perceptions and attitudes toward that advertisement ([Brajnik and Gabrielli, 2010](#)). [Ching et al. \(2013\)](#) highlighted that greater interactivity levels result in a more positive customer attitude toward the advertised product. This finding is consistent with other studies, which found that the interactivity factor in advertisements positively influences the customers' attitude toward that advertisement ([Ariffin et al., 2018](#); [Islam, 2017](#)).

In addition, [De Battista et al. \(2021\)](#) illustrated that culture can significantly impact the interactivity factor in advertisements. [Deraz \(2019\)](#) conducted a comparative study between different cultures and found that interactivity was less important for Swedish customers compared to its value for Indian customers. Furthermore, other studies found that interactivity is a significant predictor of advertising value ([Hermann, 2020](#); [Ho, 2022](#); [Hussain et al., 2022](#)). Consequently, this study established the following hypothesis:

- H6. There is a significant positive relationship between perceived interactivity and fast-food native advertising value.

As observed in this subsection, most studies in this field primarily focused on the platform where advertisements are placed, such as Facebook, rather than the different advertising types.

Advertising value and customer attitudes

As the advent of online advertising brought about a shift in customers' attitudes, more scholars began to conduct research to try and understand its effects on attitudes. Attitude is "a disposition to respond with some degree of favorableness or unfavorableness to a psychological object; attitudes are expected to predict and explain human behaviour" ([Ajzen and Fishbein, 2000](#), p. 16). An individual's beliefs form the cognitive foundation, influencing their attitudes ([Ajzen and Fishbein, 2000](#)). As a result, our personal beliefs and thoughts about the information we encounter shape our attitude toward something.

[Zeithaml \(1988\)](#) emphasizes that when individuals evaluate the perceived value, they often compare the benefits they perceive obtaining against the sacrifices they would have to make, resulting in the perceived value. In the context of advertisements, customer attitudes refer to how customers perceive and evaluate an advertisement after being exposed to it, determining whether they have a favorable or unfavorable view of it ([Wilkie, 1994](#)). [Mackenzie and Lutz \(1989\)](#) emphasize that individuals' attitudes toward advertising play a crucial role in influencing that individual, along with other factors such as mood, credibility, perception, and attitude toward the advertiser. Consequently, the individual attitude significantly impacts how one reacts and responds to the advertisements they come across.

Ducoffe (1996) emphasizes the significance of the exchange theory in laying the foundation to understand the relationship between customers' perceived advertising value and their attitudes toward advertisements. In essence, the exchange relationship is a process that takes place between two parties, where one of the entities attempts to generate value for the other entity, with this relationship breaking down when one of the parties no longer perceives it as appropriate (Houston and Gassenheimer, 1987).

In this study, the organization conducting advertisements is the entity that aims to create and deliver value to customers through advertising. If advertisements fail to provide value to the customer, the relationship between the two parties will deteriorate. Additionally, Ducoffe (1996) adopts a similar approach to Houston and Gassenheimer, assuming that the exchange can be a result of goal-seeking behavior. Furthermore, understanding whether consumers obtain what they want and expect from the advertisements they encounter can provide valuable insights into their attitudes and behaviors toward advertising. Consequently, according to Ducoffe (1996), it is likely that the greater the value the advertisement has, the more positive the customers' attitudes will be toward it, which has been supported by several studies in this field (Brackett and Carr, 2001; Ducoffe, 1996; Logan *et al.*, 2012).

Subsequent studies in this field, focusing on social media advertising, have also confirmed this finding, demonstrating a significant and positive relationship between customers' attitudes and the perceived value of advertising (Arora and Agarwal, 2019; Hamouda, 2018). Based on these findings, this study hypothesized that:

- H7. There is a significant positive relationship between perceived native advertising value and customer attitudes toward fast-food native advertising.

Conclusion

The tendency of past research to focus on the platform where advertisements are placed, together with the fact that native advertisements are relatively new compared to other forms of advertising, highlighted a gap in the literature pertaining to the factors that impact customers' perceived advertising value toward native advertisements. Indeed, only one study focused on the factors influencing customers' perceived advertising value in the context of native advertisements, that of Nienhaus and Nienhaus (2018), which analyzed four factors among millennials out of the six identified factors: informativeness, entertainment, credibility, and personalization. Despite this, there is still a lack of research on the factors influencing customers' perceived native advertising value, particularly in the Maltese fast-food industry.

After reviewing the existing models in this field, such as the Theory of Reasoned Action (Fishbein and Ajzen, 1975) and the Belief Factor Model (Pollay and Mittal, 1993), this study concluded that the most effective approach would be to focus on and adopt Ducoffe's (1995) AVM. Building on this model, Figure 2 presents the conceptual model developed for this study to explore the factors influencing native advertising value and its subsequent impact on customers' attitudes toward native advertisements.

Materials and methods

Data collection method

Based on a quantitative approach, consistent with previous research in this field (Brackett and Carr, 2001; Martins *et al.*, 2019; Murillo *et al.*, 2016), this study collected primary data through a self-administered, structured questionnaire disseminated across various SNSs. Prior to this study, no research had focused on the factors influencing the perceived advertising value and attitudes toward fast-food native advertisements among people residing in Malta. As a result, this study collected primary data using a cross-sectional approach, which involved acquiring information from participants at a specific moment in time (Creswell, 2014).

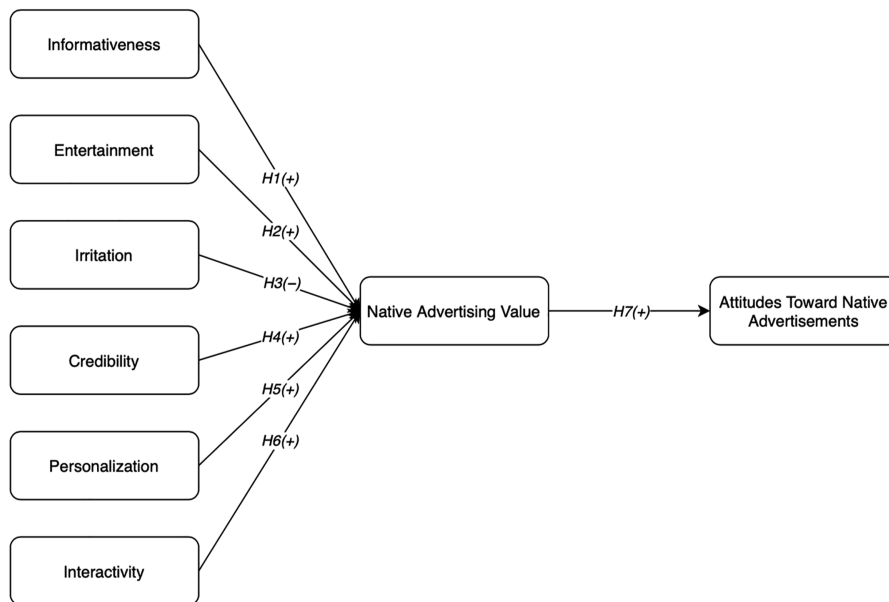


Figure 2. Conceptual model. Source: Authors' own work

The questionnaire comprised six sections. The first section gave an overview of the study's primary aim, requiring participants to consent to participate in the study. The second section focused on demographics, and the third focused on SNS usage. The fourth section revolved around fast food, while the fifth section focused on native advertisements, providing a description and illustration for clarity ([Appendix A](#)). The final section included questions related to the constructs, enabling the researcher to address this study's research questions.

Determination of sample size

This study employed three different non-probability sampling strategies, with the first being voluntary sampling, which enabled participants to decide whether they wanted to volunteer for this study ([Saunders et al., 2019](#)). The second is the snowball sampling technique, which allowed participants to distribute the questionnaire to others ([Saunders et al., 2019](#)), and the third is convenience sampling, whereby the participants selected for this study were the easiest to reach ([Andrade, 2021](#)).

A publication by the National Statistics Office ([NSO, 2023](#)) revealed that most people residing in Malta between the ages of 18 and 54 had used the Internet within three months prior to the survey, resulting in a total of 279,484. To achieve the purpose of this study, the target population consisted of individuals aged between 18 and 54 who reside in Malta and use the Internet, which makes them more prone to online advertisements. Consequently, this study's target population is 278,484.

[Hair et al. \(2017\)](#) argue that one of the better methods to calculate the sample size for PLS-SEM is through G*Power. Consequently, following the guidelines suggested by [Hair et al. \(2017\)](#) and [Memon et al. \(2020\)](#), the sample size determined for this study using the G*Power 3.1.9 analysis tool was 98 participants.

Through the dissemination of the questionnaire on SNSs, which also facilitated the satisfaction of one of the requirements that respondents had to be SNS users, this study collected 487 responses between the 22nd of July 2023 and the 18th of August 2023. Before distributing the questionnaire to the public, a pilot study was conducted with ten people whose feedback was taken into consideration to amend the questionnaire accordingly and improve its validity and reliability (Saunders *et al.*, 2019).

Table 1 presents the demographic data of the participants who completed the questionnaire. Nearly half of the participants were female (48.9%), and most of the participants fell in the 35 to 44 age group (31.6%), closely followed by the 25–34 age group (30.2%). Moreover, most participants were in full-time employment, while almost half (48.3%) had attained a postgraduate degree as their highest education.

To ensure that participants met the criteria of being SNS users and residing in Malta, they were asked specific questions about these. As a result, every participant lived in Malta and used at least one SNS.

Given this study’s focus on the fast-food industry and native advertisements, participants were asked about their fast-food consumption (Table 2) and exposure to native advertisements. The most common fast-food consumption among the participants was once a week (38%). Additionally, 93.8% of the participants expressed that they encountered native advertisements at some point, while 87.7% recalled encountering fast-food native advertisements. Interestingly, 56.5% of the respondents stated that fast-food native advertisements did not impact their purchasing behavior.

Table 1. Demographics data

Demographics data	Frequency	Percentage (%)
<i>Gender</i>		
Male	249	51.1%
Female	238	48.9%
Total	487	100%
<i>Age group</i>		
18–24	112	23%
25–34	147	30.2%
35–44	154	31.6%
45–54	74	15.2%
Total	487	100%
<i>Occupation</i>		
Full-time employed	372	76.4%
Part-time employed	18	3.7%
Full-time student	48	9.9%
Part-time student	8	1.6%
Self-employed	32	6.6%
Unemployed	9	1.8%
Total	487	100%
<i>Education</i>		
PhD level	11	2.3%
Postgraduate level	235	48.3%
Undergraduate level	129	26.5%
Post-secondary level	75	15.4%
Secondary level	37	7.6%
Total	487	100%

Source(s): Authors’ own work

Table 2. Fast-food consumption

Fast food consumption	Frequency	Percentage (%)
Most days	21	4.3%
More than once a week	103	21.1%
About once a week	185	38%
More than once a month	83	17%
Once a month	58	11.9%
More than once a year	27	5.5%
Once a year	3	0.6%
Never	7	1.4%
Total	487	100%

Source(s): Authors' own work

Scale of measurement

This questionnaire included eight constructs, each measured using a five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5), consistent with previous studies’ methodology (Brackett and Carr, 2001; Logan, 2013; Saxena and Khanna, 2013). All items for the constructs were adopted from previous research in this field and adapted accordingly to align with this study’s objectives, consistent with the approach used by De Battista (2024). Furthermore, to ensure the constructs’ reliability, each selected construct had to meet the minimum suggested Cronbach’s alpha threshold of 0.70.

All constructs except advertising value were measured using four items (Appendix B). Informativeness items were adapted from Ducoffe’s (1996) and Islam’s (2017) work, entertainment items borrowed from Ducoffe’s (1996) and Logan *et al.*’s (2012) study, irritation items adapted from Mustafi and Hosain’s (2020) research, credibility items obtained from Murillo *et al.*’s (2016) and Mustafi and Hosain’s (2020) study, personalization items adapted from Xu’s (2006) and Kim and Han’s (2014) work, and interactivity items borrowed from Arora *et al.*’s (2020) study. Furthermore, attitude items were sourced from An and Kim’s (2008) research. Lastly, advertising value was the only construct measured by a three-item scale adapted from Ducoffe’s (1996) work.

Data analysis

This study used two primary programs for data analysis, the first being Statistical Package for the Social Sciences (SPSS). This analytical program was used for data cleaning, to examine and understand the demographic characteristics of the participants, as well as to conduct factor analysis.

The second program utilized in this study was SmartPLS 4 (Ringle *et al.*, 2023), a widely recognized tool for Partial Least Squares Structural Equation Modeling (PLS-SEM). SmartPLS analysis commenced with an assessment of the constructs’ reliability, convergent and discriminant validity (Hair *et al.*, 2013). This was followed by an evaluation of the structured model using the PLS-SEM algorithm function (Hair *et al.*, 2013) and concluded with the model’s predictive power examination (Shmueli *et al.*, 2016) and hypotheses testing using bootstrapping (Hair *et al.*, 2018).

Results

The data collected from the questionnaire’s participants was analyzed using two programs: SPSS (IBM, 2023) and SmartPLS (Ringle *et al.*, 2023). An evaluation of the measurement

model and an assessment of the structural model, which involved hypothesis testing, were conducted to address the research questions devised for this study.

Measurement model

The measurement model evaluation commenced with factor analysis (FA) using SPSS to understand the interrelationships among variables (Pallant, 2016). Indicators exhibiting low loadings on their respective constructs or strong cross-loadings with other constructs were identified and excluded. To ensure FA adequacy, a Kaiser-Meyer-Olkin (KMO) test was undertaken to confirm a threshold value of 0.5 and Bartlett's test of sphericity significance (Hair *et al.*, 2018), confirming suitability with a KMO value of 0.896 and a significant Bartlett's test ($p < 0.001$).

Subsequently, using principal component extraction and *a priori* criterion of eight factors, seven indicators were removed from an initial set of 31, as highlighted in Table 3. This procedure resulted in a model with eight factors and 24 indicators, with no correlations in the correlation matrix exceeding the 0.9 threshold, thus avoiding singularity issues (Field, 2005). The extracted factors explained 83.3% of the total variance, surpassing the suggested 60.0% target, and all indicators had a communality over 0.5 (Hair *et al.*, 2014). Furthermore, Table 3 displays the mean values and standard deviations of each construct and their respective indicators based on participants' responses.

Table 3 also displays the indicator loadings obtained from Varimax rotation with a 0.4 suppression value. All indicators exceeded the 0.4 threshold loading on their constructs and loaded on a single component (Pituch and Stevens, 2016).

The next step of the measurement model evaluation encompassed an assessment of the construct's reliability and convergent validity using SmartPLS. Both Cronbach's alpha and composite reliability values exceeded the 0.7 threshold, highlighting satisfactory internal consistency and reliability levels (Hair *et al.*, 2013, 2018). Furthermore, all AVE values were higher than the threshold of 0.5, showcasing that all constructs had acceptable levels of convergent validity (Hair *et al.*, 2013).

The final step in assessing the measurement model was discriminant validity, which focused on how distinctive constructs are from each other to ensure no overlaps between constructs (Hair *et al.*, 2013). Tables 4 and 5 suggest that the measurement model exhibits good levels of discriminant validity, as the Fornell-Larcker test revealed that all constructs' AVE square roots are greater than their correlation with other constructs (Hair *et al.*, 2013), and the values obtained from the Heterotrait-Monotrait Ratio of Correlations test are all below 0.85 (Henseler *et al.*, 2015).

Structural model

The first step in assessing the structural model (Figure 3) is to identify whether there is any multicollinearity in the model by observing the variance inflation factor values (Hair *et al.*, 2013). A collinearity test revealed no multicollinearity issues, with values ranging from 1 to 1.749, below the recommended threshold of 5 (Hair *et al.*, 2013).

Furthermore, the explanatory power of the model was assessed through the coefficient of determination (R^2) (Hair *et al.*, 2021). Results showed that the six factors— informativeness, entertainment, irritation, credibility, personalization, and interactivity—collectively represent 44.5% of the variance in advertising value. On the other hand, the advertising value explains 53.0% of the variance in attitude.

Adhering to Cohen's (1988) guidelines, an effect size (f^2) evaluation was conducted to identify the strength of each effect, complementing hypothesis significance testing (Hair *et al.*, 2018), where values of 0.02, 0.15 and 0.35 represent small, medium, and large effects, respectively. The effect sizes for irritation and personalization were less than 0.02, indicating no effect on advertising value. Credibility, entertainment, informativeness, and interactivity effect sizes ranged from 0.03 (credibility) to 0.07 (informativeness), highlighting a small effect

Table 3. Factor analysis

Constructs	Indicators	Measurement code	Indicator's mean (standard deviation)	FL	α	CR	AVE
Informativeness (Inf) ($M = 2.835$, $SD = 0.92$)	Native advertisements provide timely information on fast food	Inf1*	3.03 (0.97)	–	0.866	0.918	0.790
	Native advertisements are a good source of fast-food information	Inf2	3.07 (1.06)	0.797			
	Native advertisements supply relevant information on fast food	Inf3	2.83 (1.04)	0.865			
	Native advertisements provide valuable information on fast food	Inf4	2.61 (1.01)	0.815			
Entertainment (Ent) ($M = 2.797$, $SD = 0.89$)	I feel that fast-food native advertisements are				0.923	0.945	0.812
	Pleasant	Ent1	2.92 (1.03)	0.813			
	Enjoyable	Ent2	2.81 (0.98)	0.853			
	Entertaining	Ent3	2.72 (0.95)	0.832			
Irritation (Irr) ($M = 3.214$, $SD = 0.94$)	Exciting	Ent4	2.73 (0.99)	0.816			
	I feel that fast-food native advertisements are				0.921	0.950	0.864
	Intrusive	Irr1	3.19 (1.01)	0.889			
	Annoying	Irr2	3.26 (1.02)	0.911			
Credibility (Cred) ($M = 2.682$, $SD = 0.84$)	Irritating	Irr3	3.19 (1.02)	0.893			
	Confusing	Irr4*	2.79 (0.98)	–			
	I feel that fast-food native advertisements are				0.875	0.923	0.800
	Convincing	Cred1*	3.14 (1.05)	–			
Personalization (Pers) ($M = 2.918$, $SD = 0.92$)	Trustworthy	Cred2	2.55 (0.89)	0.780			
	Credible	Cred3	2.65 (0.96)	0.833			
	Believable	Cred4	2.85 (0.99)	0.754			
	Fast-food native advertisements are delivered in a timely manner	Pers1*	3.19 (0.92)	–	0.903	0.940	0.838
Interactivity (Int) ($M = 2.682$, $SD = 0.89$)	Are personalized for my usage	Pers2	3.04 (1.00)	0.826			
	Contents are personalized	Pers3	2.90 (1.02)	0.903			
	Are tailored to me	Pers4	2.82 (1.01)	0.876			
	Fast-food native advertisements are effective in gathering customers' feedback	Int1*	3.00 (0.98)	–	0.879	0.926	0.806
	Make me feel like it wants to listen to its customers	Int2	2.70 (0.96)	0.738			
	Give customers the opportunity to talk back	Int3	2.66 (1.01)	0.897			
	Facilitate two-way communication between customers and companies	Int4	2.69 (0.99)	0.886			

(continued)

Table 3. Continued

Constructs	Indicators	Measurement code	Indicator's mean (standard deviation)	FL	α	CR	AVE
Advertising value (Adv) ($M = 2.589$, $SD = 0.93$) Customer attitudes (Att) ($M = 2.656$, $SD = 0.91$)	I feel that fast-food native advertisements are				0.858	0.934	0.876
	Valuable	Adv1	2.69 (0.97)	0.671			
	Useful	Adv2*	2.95 (1.03)	–			
	Important	Adv3	2.48 (1.01)	0.769			
	My general opinion of fast-food native advertisements is favorable	Att1	2.75 (0.97)	0.715	0.904	0.940	0.840
	I consider fast-food native advertisements essential	Att2*	2.30 (1.00)	–			
	Overall, I like fast-food native advertisements	Att3	2.66 (1.00)	0.754			
	Overall, I consider fast-food native advertisements a good thing	Att4	2.56 (1.00)	0.749			

Note(s): FL = Factor Loading; α = Cronbach Alpha; CR = Composite Reliability; AVE = Average Variance Extracted, Indicator was removed due to poor loading or high cross loading.

Source(s): Authors' own work

Table 4. Fornell-Larcker criterion

	Adv	Att	Cred	Ent	Inf	Int	Irr	Pers
Adv	0.936							
Att	0.728	0.916						
Cred	0.516	0.569	0.895					
Ent	0.499	0.578	0.553	0.901				
Inf	0.495	0.522	0.482	0.360	0.889			
Int	0.437	0.377	0.338	0.331	0.358	0.898		
Irr	–0.300	–0.427	–0.344	–0.375	–0.161	–0.120	0.929	
Pers	0.386	0.371	0.324	0.325	0.331	0.455	–0.100	0.916

Source(s): Authors' own work

Table 5. HTMT

	Adv	Att	Cred	Ent	Inf	Int	Irr
Att	0.823						
Cred	0.588	0.639					
Ent	0.556	0.633	0.618				
Inf	0.565	0.588	0.548	0.402			
Int	0.503	0.422	0.385	0.367	0.407		
Irr	0.334	0.464	0.381	0.404	0.180	0.133	
Pers	0.437	0.409	0.364	0.355	0.373	0.510	0.107

Source(s): Authors' own work

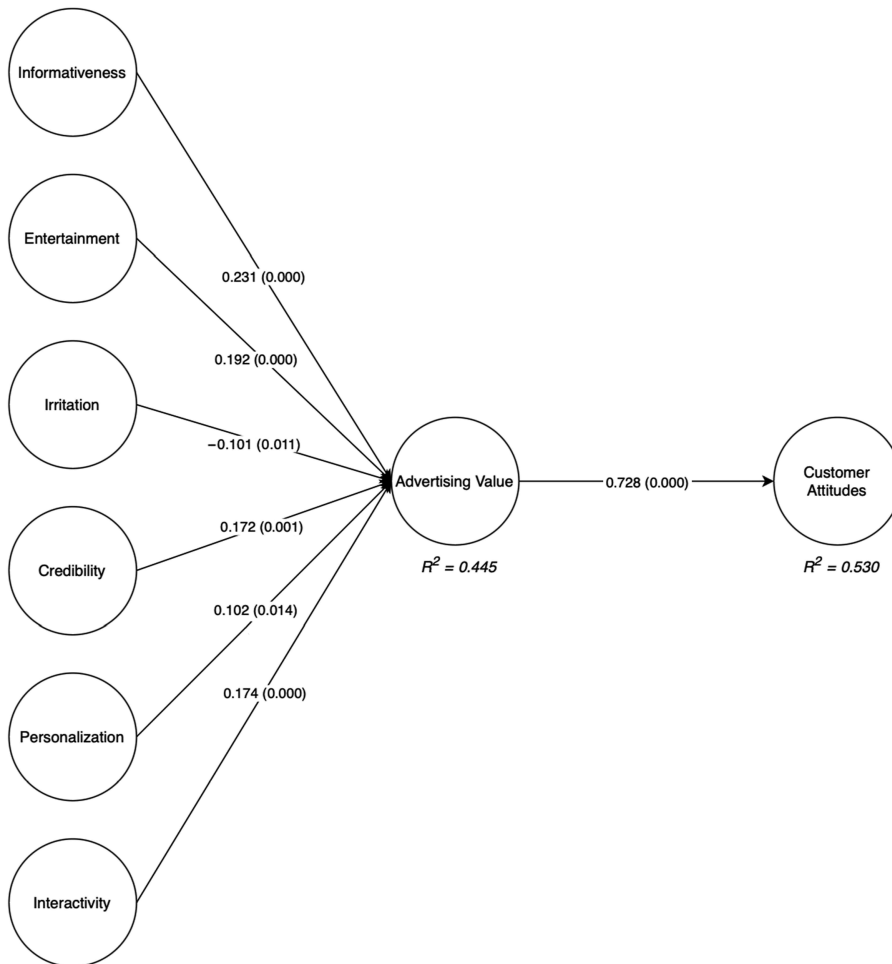


Figure 3. Structural model. Source: Authors' own work

on advertising value. Last, the advertising value effect on attitude is significant, with a reported effect size of 1.126.

The model's predictive power, Q^2 test, was conducted using PLSPredict (Shmueli *et al.*, 2019). The Q^2 values for advertising value and attitude were 0.43 and 0.45, respectively, both falling within the range of 0.25 and 0.50, suggesting medium predictive relevance (Hair *et al.*, 2019).

Hypotheses testing

A bootstrapping exercise with a resampling size of 5,000 was conducted to test the hypothesized relationships by observing the p -values, t -values, path coefficients, and confidence intervals (Hair *et al.*, 2013).

The results revealed that informativeness ($\beta = 0.231$, $t = 5.246$, $p = 0.000$), entertainment ($\beta = 0.192$, $t = 3.808$, $p = 0.000$), credibility ($\beta = 0.172$, $t = 3.303$, $p = 0.001$), personalization ($\beta = 0.102$, $t = 2.455$, $p = 0.014$), and interactivity ($\beta = 0.174$, $t = 3.988$,

$p = 0.000$) had a significant and positive relationship with advertising value. Thus, [H1](#), [H2](#), [H4](#), [H5](#), and [H6](#) are supported. Furthermore, the relationship between advertising value and customers' attitudes ($\beta = 0.728$, $t = 32.424$, $p = 0.000$) was both significant and positive, providing empirical support for [H7](#). Lastly, irritation had a significant and negative relationship with advertising value ($\beta = -0.101$, $t = 2.541$, $p = 0.011$), thus supporting [H3](#).

Furthermore, no bootstrap confidence intervals crossed the 0 mark, providing additional evidence that all relationships are significant ([Hair et al., 2013](#)).

Discussion

As SNSs become an integral part of our daily lives and users encounter multiple advertisements daily, organizations opt for different forms of online advertising, including native advertisements, to grab the individual's attention. This study explores the factors affecting the value individuals obtain from fast-food native advertisements and their subsequent effects on their attitudes, addressing the current gap in the literature.

The findings revealed that all six factors tested in this study affected how customers perceive the advertising value of fast-food native advertisements. Despite this, the results further highlighted that not all factors had the same influence on the perceived native advertising value, with informativeness emerging as the factor with the most influence, followed by entertainment, interactivity, and credibility. On the other hand, personalization and irritation factors influenced the perceived advertising value of fast-food native advertisements the least. Further, the participant's average responses to the construct's questions reveal that they perceive fast-food native advertisements as irritating and lacking information, entertainment, credibility, personalization, and interactivity.

Informativeness emerged as the most significant determinant of perceived advertising value among all the factors evaluated. This finding indicates that the more native advertisements provide timely and meaningful information about fast food, the higher the value individuals obtain from them. Indeed, this is consistent with previous studies that found informativeness to be a significant predictor of advertising value ([Dao et al., 2014](#); [Ducoffe, 1996](#); [Martins et al., 2019](#)). This finding is particularly significant given the general public's concerns about the nutritional content of fast food. Having more informative native advertisements in the fast-food industry could address these concerns effectively ([Anderson et al., 2011](#); [Fuhrman, 2018](#); [Majabadi et al., 2016](#); [WHO, 2022](#)). These concerns may also explain why informativeness had the most significant impact on perceived advertising value, as customers increasingly seek transparency, particularly regarding nutritional information, while valuing other details such as offers, pricing and location.

As hypothesized, entertainment is a significant predictor of advertising value, in line with previous studies in this field ([Brackett and Carr, 2001](#); [Dao et al., 2014](#); [Ducoffe, 1996](#); [Logan, 2013](#)). This finding indicates that the more pleasing, enjoyable, entertaining, and exciting fast-food native advertisements are, the higher the customer's perceived advertising value. Among the six factors tested, entertainment demonstrated a notable influence on perceived advertising value. In a digital environment saturated with advertisements, entertaining advertisements may help break through the clutter, capturing customers' interest while enhancing brand affinity. Additionally, such advertisements also help create an emotional connection with the individuals encountering them, potentially enhancing brand recall. Results further revealed that participants perceived current fast-food native advertisements as lacking in entertainment ($M = 2.797$, $SD = 0.89$), potentially contributing to why participants felt that these advertisements were not personalized. [Kim and Han \(2014\)](#) discovered that tailoring advertisements according to the target audience's interests may lead to people perceiving them as more entertaining.

Similar to previous findings in this field ([Ho, 2022](#); [Hussain et al., 2022](#)), interactivity emerged as a significant predictor of advertising value, implying that fast-food native

advertisements that are interactive and facilitate two-way communication will increase the advertising value obtained. Notably, interactivity exhibited the third-highest influence among the six factors tested in this study. As fast-food organizations rely on mass advertising, interactivity can drive customers to explore more due to engagement, capturing their attention and ultimately delivering higher value. [Alalwan \(2018\)](#) also suggested that higher levels of interactivity in advertisements may lead to customers perceiving them as more entertaining and useful.

The author's prediction of credibility being a significant predictor of advertising value was supported, suggesting that the more credible, trustworthy, and believable fast-food native advertisements are, the greater the value they deliver to customers. The seamless integration of native advertisements with non-paid content, minimizing the perception of being an advertisement, can lead customers to view them as more trustworthy, potentially explaining why credibility had a low impact compared to factors like entertainment and informativeness. Previous studies have also identified a significant positive relationship between credibility and advertising value ([Arora and Agarwal, 2019](#); [Brackett and Carr, 2001](#); [Lin and Hung, 2009](#); [Martins et al., 2019](#)). Given the generally negative perceptions individuals hold toward advertisements ([Bell et al., 2021](#)), it remains essential for organizations, particularly fast-food organizations, to ensure their advertisements are credible in order to mitigate such negative perceptions and, at the same time, enhance the value they deliver.

As hypothesized, the personalization factor has a significant and positive influence on advertising value, implying that the more personalized fast-food native advertisements are, the higher the perceived advertising value by the respondents. This finding aligns with the findings of [Dehghani et al. \(2016\)](#) and [Lina and Setiyanto \(2021\)](#), yet it stands in contrast to [Arora and Agarwal's \(2019\)](#) research study, which concluded that personalization does not significantly predict advertising value among Indian social media users. Indeed, [De Battista et al. \(2021\)](#) emphasized that the personalization factor may differ between different studies. Studies have also argued that making advertisements more tailored may lead to other benefits, such as reducing advertisement irritation while potentially reducing advertisement avoidance as well ([Baek and Morimoto, 2012](#); [Kim and Han, 2014](#)). In this study, personalization's lower influence on perceived advertising value may be attributed to the nature of the product—fast food. Since fast food is a low-involvement product ([Akram et al., 2020](#)), it typically requires less personalized messages compared to high-involvement products ([Keyzer et al., 2015](#)), given the low risk and minimal decision-making effort.

Irritation, the last factor tested in this study, negatively influences the advertising value, implying that the more irritating, intrusive, and annoying fast-food native advertisements are, the lower the advertising value generated. This aligns with previous studies, which have also identified a significant and negative relationship between irritation and advertising value ([Dehghani et al., 2016](#); [Ducoffe, 1996](#); [Karunaratne and Thilini, 2022](#); [Saxenna and Khanna, 2013](#)). As previously stated, a potential reason why respondents found fast-food native advertisements irritating is because they found the other factors lacking. In fact, previous research in this field highlighted that advertisements that entail higher levels of personalization and entertainment are seen as less irritating ([Dwinanda et al., 2022](#); [Kim and Han, 2014](#)). Additionally, while the seamless integration of native advertisements may have played a pivotal role in why the irritation factor had the least influence out of the six factors, it could also be that consumers became accustomed to viewing advertisements on SNSs. Consequently, they may prioritize aspects such as informativeness and interactivity over how irritating the advertisements are.

Lastly, another intriguing finding is the significant relationship between advertising value and customer attitudes, which exhibits the largest path coefficient among all the hypothesized relationships. This finding also corroborates with other studies in this field ([Arora and Agarwal, 2019](#); [Brackett and Carr, 2001](#); [Ducoffe, 1996](#); [Logan et al., 2012](#)), implying that higher levels of advertising value result in more positive attitudes toward that advertisement. Similarly to the factors, the mean values of advertising value ($M = 2.589$, $SD = 0.93$) and

customer attitudes ($M = 2.656$, $SD = 0.91$) show that the respondents perceived current fast-food native advertisements as lacking in advertising value, resulting in a negative attitude toward them. Taking this relationship and the relationship between the six factors and advertising value into account, a possible reason why respondents held this perception is that they perceived the six factors as lacking in fast-food native advertisements, resulting in a lower generated value and a negative attitude toward them.

Implications

The findings of this study provide both practical and theoretical implications. From a practical perspective, this study offers valuable insights regarding the factors that marketers and organizations should consider when creating and designing fast-food native advertisements aimed at SNS users residing in Malta aged between 18 and 54. By including these factors in their fast-food native advertisements, the advertising value generated will increase, stimulating positive attitudes in the people encountering them.

The study's findings also reveal that participants perceive current fast-food native advertisements as irritating and lacking in entertainment, informativeness, credibility, personalization, and interactivity. This demonstrates that although fast-food native advertisements have the potential to deliver a much higher advertising value, fast-food organizations are failing to do so, which is even more concerning given the relatively high number of advertisements a person encounters daily and the competition between organizations to grab their customers' attention through advertisements.

In order to maximize the advertising value generated, this study suggests that fast-food native advertisements should not be irritating and should provide higher levels of informativeness, entertainment, interactivity, credibility, and personalization. Although all the factors tested in this study were significant, not all had the same impact on advertising value. Therefore, when organizations and advertisers cannot include all of these factors in their advertisements, they should prioritize them according to their influence on native advertising value, as demonstrated by the path coefficient values outlined in this study.

From a theoretical perspective, this study extends the current literature on native advertisements. Although several studies have applied [Ducoffe's \(1996\)](#) AVM across various contexts, none has collectively tested the six identified factors in this study within the realm of native advertisements, specifically in the fast-food industry. As a result, this study addressed the current gap in the literature, offering theoretical insights into the factors influencing perceived advertising value and its impact on customer attitudes toward fast-food native advertisements.

In addition, this study proved that all factors had a significant relationship with advertising value, followed by a significant and positive relationship between advertising value and customer attitudes. Consequently, this research provides a foundation for future studies interested in exploring the factors influencing native advertising value and the resulting impact of advertising value on customer attitudes. This study focused on only six factors tested among people residing in Malta who use SNS, aged between 18 and 54. In view of this, further research should investigate additional factors that may have a higher significance than the ones tested in this study and whether their significance changes between different industries and demographics.

Limitations and future research

While this study presents valuable practical and theoretical implications, it is not without limitations, which future studies should aim to address. The use of non-probability sampling may have introduced the potential for sampling bias, whereby certain members of the population had a higher likelihood of being selected than others ([Creswell, 2014](#)). Consequently, this could limit the generalizability of the findings, suggesting that the results may not fully represent the entire population of interest but rather reflect the views of

the respondents who participated in the study. Therefore, future studies should employ probability sampling to ensure a more representative sample of the entire population and reduce the likelihood of sampling bias.

Secondly, this study only tested six factors, explaining collectively 44.5% of the variance in advertising value. By focusing on this set of influencing factors, this study may have overlooked other factors that could have had a more significant impact on customers' perceived advertising value than those tested. Consequently, future studies should explore additional factors, such as incentives, that could increase the explained variance and exert a more substantial influence.

This study focused on a particular target population: those residing in Malta, aged between 18 and 54, who use SNSs. Future research can focus on a different target population and compare how different demographics perceive the advertising value of fast-food native advertisements and the resulting attitudes toward them differently.

Furthermore, this study primarily focused on native advertisements across all SNSs without accounting for potential variations between different SNSs or other platforms that display native advertisements. Future studies could focus on a specific SNS, like Facebook, or other platforms where native advertisements have gained attention, such as online magazine sites. Additionally, future research can concentrate on different products and industries, drawing comparisons of whether the same factors influencing the perceived advertising value of fast-food native advertisements are relevant for other products.

Finally, since this study employed a quantitative approach, it does not capture the participants' in-depth experiences and perspectives on fast-food native advertisements. To address this, future investigations should adopt qualitative methods, such as focus groups, to gain a deeper understanding and more insights into how the factors influence customers' perceived advertising value and their resulting attitudes toward such advertisements.

Conclusion

This study aimed to identify which factors influenced the perceived advertising value obtained by customers within the realm of fast-food native advertisements, as well as the relationship between advertising value and customer attitudes toward fast-food native advertisements.

Firstly, this study has identified informativeness, entertainment, interactivity, credibility, personalization, and irritation as significant factors influencing the perceived advertising value of fast-food native advertisements among SNS users residing in Malta aged between 18 and 54. Furthermore, the factors are listed in descending order based on their influence on advertising value. Informativeness, entertainment, interactivity, credibility, and personalization positively influenced the advertising value of fast-food native advertisements, whereas irritation had a negative influence.

Lastly, the relationship between advertising value and customer attitudes toward fast-food native advertisements is significant and positive. Therefore, this study identifies a link between the factors, advertising value and customer attitudes, highlighting that when fast-food native advertisements are more credible, personalized, interactive, informative, entertaining, and less irritating, the advertising value increases, resulting in a more positive attitude among the customers encountering them.

About the authors

Jamil Schembri is an MSc Graduate in Strategic Management and Digital Marketing from the University of Malta. His research interests include advertising and digital marketing, as well as consumer behavior and attitudes.

Ivan De Battista, Ph.D., is a Visiting Lecturer at the University of Malta and a Senior Lecturer at the Malta College of Arts, Science, and Technology. His research interests focus on consumer behavior, particularly among young people, as well as digital marketing at the intersection of AI and marketing.

Acknowledgments

The authors would like to thank the editor of the Journal of Contemporary Marketing Science for the valuable feedback and guidance provided on this article. We also extend our sincere gratitude to the participants who completed the questionnaire, whose responses offered valuable insights for this research.

Supplementary material

The supplementary material for this article can be found online.

References

- Adams, M. (1995), "Brands of gold", *Mediaweek*, Vol. 5 No. 43, pp. 30-32.
- Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211, doi: [10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Ajzen, I. and Fishbein, M. (2000), "Attitudes and the attitude-behavior relation: reasoned and automatic processes", *European Review of Social Psychology*, Vol. 11 No. 1, pp. 1-33, doi: [10.1080/14792779943000116](https://doi.org/10.1080/14792779943000116).
- Akram, U., Ansar, A.R., Fu, G. and Junaid, M. (2020), "Feeling hungry? Let's order through mobile! Examining the fast food mobile commerce in China", *Journal of Retailing and Consumer Services*, Vol. 56, 102142, doi: [10.1016/j.jretconser.2020.102142](https://doi.org/10.1016/j.jretconser.2020.102142).
- Aktan, M., Aydogan, S. and Aysuna, C. (2016), "Web advertising value and students' attitude towards web advertising", *European Journal of Business and Management*, Vol. 8 No. 9, pp. 86-97.
- Alalwan, A.A. (2018), "Investigating the impact of social media advertising features on customer purchase intention", *International Journal of Information Management*, Vol. 42, pp. 65-77, doi: [10.1016/j.ijinfomgt.2018.06.001](https://doi.org/10.1016/j.ijinfomgt.2018.06.001).
- An, D. and Kim, S.H. (2008), "A first investigation into the cross-cultural perceptions of internet advertising", *Journal of International Consumer Marketing*, Vol. 20 No. 2, pp. 49-65, doi: [10.1300/J046v20n02_05](https://doi.org/10.1300/J046v20n02_05).
- Anderson, B., Rafferty, A.P., Lyon-Callo, S., Fussman, C. and Imes, G. (2011), "Fast-food consumption and obesity among Michigan adults", *Preventing Chronic Disease*, Vol. 8 No. 4, p. A71.
- Andrade, C. (2021), "The inconvenient truth about convenience and purposive samples", *Indian Journal of Psychological Medicine*, Vol. 43 No. 1, pp. 86-88, doi: [10.1177/0253717620977000](https://doi.org/10.1177/0253717620977000).
- Aribarg, A. and Schwartz, E.M. (2020), "Native advertising in online news: trade-offs among clicks, brand recognition, and website trustworthiness", *Journal of Marketing Research*, Vol. 57 No. 1, pp. 20-34, doi: [10.1177/0022243719879711](https://doi.org/10.1177/0022243719879711).
- Ariffin, S.K., Aun, T.L. and Salamzadeh, Y. (2018), "How personal beliefs influence consumer attitude towards online advertising in Malaysia: to trust or not to trust?", *Global Business and Management Research: An International Journal*, Vol. 10 No. 1, pp. 30-47.
- Arora, T. and Agarwal, B. (2019), "Empirical study on perceived value and attitude of millennials towards social media advertising: a structural equation modelling approach", *Vision the Journal of Business Perspective*, Vol. 23 No. 1, pp. 56-69, doi: [10.1177/0972262918821248](https://doi.org/10.1177/0972262918821248).
- Arora, T., Kumar, A.K. and Agarwal, B. (2020), "Impact of social media advertising on millennials buying behaviour", *International Journal of Intelligent Enterprise*, Vol. 7 No. 4, pp. 481-500, doi: [10.1504/IJIE.2020.10027855](https://doi.org/10.1504/IJIE.2020.10027855).
- Azeem, A. and Haq, Z.U. (2012), "Perception towards internet advertising: a study with reference to three different demographic groups", *Global Business and Management Research: An International Journal*, Vol. 4 No. 1, pp. 28-45.
- Baek, T.H. and Morimoto, M. (2012), "Stay away from me: examining the determinants of consumer avoidance of personalized advertising", *Journal of Advertising*, Vol. 41 No. 1, pp. 59-76, doi: [10.2753/JOA0091-3367410105](https://doi.org/10.2753/JOA0091-3367410105).

- Bauer, R.A. and Greyser, S.A. (1968), "Advertising in America: the consumer view", *Michigan Law Review*, Vol. 67 No. 4, pp. 874-880.
- Bell, R., Mieth, L. and Buchner, A. (2021), "Source memory for advertisements: the role of advertising message credibility", *Memory and Cognition*, Vol. 49 No. 1, pp. 32-45, doi: [10.3758/s13421-020-01075-9](https://doi.org/10.3758/s13421-020-01075-9).
- Brackett, L.K. and Carr, B.N. (2001), "Cyberspace advertising vs. other media: consumer vs. mature student attitudes", *Journal of Advertising Research*, Vol. 41 No. 5, pp. 23-32, doi: [10.2501/JAR-41-5-23-32](https://doi.org/10.2501/JAR-41-5-23-32).
- Brajnik, G. and Gabrielli, S. (2010), "A review of online advertising effects on the user experience", *International Journal of Human-Computer Interaction*, Vol. 26 No. 10, pp. 971-997, doi: [10.1080/10447318.2010.502100](https://doi.org/10.1080/10447318.2010.502100).
- Bucy, E.P. (2003), "Media credibility reconsidered: synergy between on-air and online news", *Journalism and Mass Communication Quarterly*, Vol. 80 No. 2, pp. 247-264, doi: [10.1177/107769900308000202](https://doi.org/10.1177/107769900308000202).
- Campbell, C. and Marks, L.J. (2015), "Good native advertising isn't a secret", *Business Horizons*, Vol. 58 No. 6, pp. 599-606, doi: [10.1016/j.bushor.2015.06.003](https://doi.org/10.1016/j.bushor.2015.06.003).
- Chiang, I.-P., Chuang, C.-C. and Lin, P.-W. (2018), "Do native advertisements attract more attention from Facebook users", *International Journal of Electronic Commerce Studies*, Vol. 9 No. 2, pp. 191-207, doi: [10.7903/ijecs.1560](https://doi.org/10.7903/ijecs.1560).
- Ching, R.K., Tong, P., Chen, J.-S. and Chen, H.-Y. (2013), "Narrative online advertising: identification and its effects on attitude toward a product", *Internet Research*, Vol. 23 No. 4, pp. 414-438, doi: [10.1108/IntR-04-2012-0077](https://doi.org/10.1108/IntR-04-2012-0077).
- Chung, Y.J. and Kim, E. (2021), "Predicting consumer avoidance of native advertising on social networking sites: a survey of Facebook users", *Journal of Promotion Management*, Vol. 27 No. 1, pp. 1-26, doi: [10.1080/10496491.2020.1809590](https://doi.org/10.1080/10496491.2020.1809590).
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, Lawrence Erlbaum Associates, Hillsdale.
- Creswell, J.W. (2014), *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, SAGE Publications, Thousand Oaks.
- Dao, W.V.T., Le, A.N.H., Cheng, J.M.S. and Chen, D.C. (2014), "Social media advertising value: the case of transitional economies in Southeast Asia", *International Journal of Advertising*, Vol. 33 No. 2, pp. 271-294, doi: [10.2501/IJA-33-2-271-294](https://doi.org/10.2501/IJA-33-2-271-294).
- Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989), "User acceptance of Computer Technology: a comparison of two theoretical models", *Management Science*, Vol. 35 No. 8, pp. 982-1003, doi: [10.1287/mnsc.35.8.982](https://doi.org/10.1287/mnsc.35.8.982).
- De Battista, I. (2024), "The influence of retargeted advertisements and FoMO on young people", Doctoral Dissertation, University of Malta, Malta, available at: https://www.um.edu.mt/library/oar/bitstream/123456789/124731/1/2401EMAMRK600005066702_1.PDF
- De Battista, I., Curmi, F. and Said, E. (2021), "Influencing factors affecting young people's attitude towards online advertising: a systematic literature review", *International Review of Management and Marketing*, Vol. 11 No. 3, pp. 58-72, doi: [10.32479/irmm.11398](https://doi.org/10.32479/irmm.11398).
- Dehghani, M., Niaki, M.K., Ramezani, I. and Sali, R. (2016), "Evaluating the influence of YouTube advertising for attraction of young customers", *Computers in Human Behavior*, Vol. 59, pp. 165-172, doi: [10.1016/j.chb.2016.01.037](https://doi.org/10.1016/j.chb.2016.01.037).
- Dempster, C. and Lee, J. (2015), *The Rise of the Platform Marketer: Performance Marketing with Google, Facebook, and Twitter, Plus the Latest High-Growth Digital Advertising Platforms*, John Wiley & Sons, Hoboken.
- Deraz, H. (2019), "Factors contributing to consumers' assessment of advertisement value on social networking sites: a cross-cultural focus group study", *International Review of Management and Marketing*, Vol. 9 No. 1, pp. 13-25.

- Ducoffe, R.H. (1995), "How consumers assess the value of advertising", *Journal of Current Issues and Research in Advertising*, Vol. 17 No. 1, pp. 1-18, doi: [10.1080/10641734.1995.10505022](https://doi.org/10.1080/10641734.1995.10505022).
- Ducoffe, R.H. (1996), "Advertising value and advertising on the Web", *Journal of Advertising Research*, Vol. 36 No. 5, pp. 21-35, doi: [10.1080/00218499.1996.12466626](https://doi.org/10.1080/00218499.1996.12466626).
- Dwinanda, B., Syaripuddin, F.A., Hudaifi and Hendriana, E. (2022), "Examining the extended advertising value model: a case of TikTok short video ads", *Mediterranean Journal of Social and Behavioral Research*, Vol. 6 No. 2, pp. 35-44, doi: [10.30935/mjosbr/11820](https://doi.org/10.30935/mjosbr/11820).
- Eighmey, J. and McCord, L. (1998), "Adding value in the information age: uses and gratifications of sites on the world wide web", *Journal of Business Research*, Vol. 41 No. 3, pp. 187-194, doi: [10.1016/s0148-2963\(97\)00061-1](https://doi.org/10.1016/s0148-2963(97)00061-1).
- EMarketer (2023), "US Native Ad Spending, 2019-2023 (billions, % change, and % of total display ad spending)", available at: <https://www.emarketer.com/chart/261233/us-native-ad-spending-2019-2023-billions-change-of-total-display-ad-spending> (accessed 29 March 2024).
- Eurostat (2023), "Key figures on Europe – 2023 edition", available at: <https://ec.europa.eu/eurostat/documents/15216629/17177791/KS-EI-23-001-EN-N.pdf/5df7a393-8461-9270-7eaa-91a4b1c2acc6?version=2.0&t=1689583429855> (accessed 23 March 2024).
- Eurostat (2024a), "Digital economy and society statistics – households and individuals", available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Digital_economy_and_society_statistics_-_households_and_individuals#Internet_access_of_individuals.2C_2010_and_2023 (accessed 23 March 2024).
- Eurostat (2024b), "59% of EU individuals using social networks in 2023", available at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240319-1> (accessed 23 March 2024).
- Eurostat (2024c), "Social media – statistics on the use by enterprises", available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Social_media_-_statistics_on_the_use_by_enterprises#Social_media.2C_a_business_paradigm_shift (accessed 16 July 2024).
- Field, A. (2005), *Discovering Statistics Using SPSS (Introducing Statistical Methods)*, SAGE Publications, London.
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley Publishing Company, Reading, MA.
- Florenthal, B. and Shoham, A. (2010), "Four-mode channel interactivity concept and channel preferences", *Journal of Services Marketing*, Vol. 24 No. 1, pp. 29-41, doi: [10.1108/08876041011017871](https://doi.org/10.1108/08876041011017871).
- Fuhrman, J. (2018), "The hidden dangers of fast and processed food", *American Journal of Lifestyle*, Vol. 12 No. 5, pp. 375-381, doi: [10.1177/1559827618766483](https://doi.org/10.1177/1559827618766483).
- Gaber, H.R., Wright, L.T. and Kooli, K. (2019), "Consumer attitudes towards Instagram advertisements in Egypt: the role of the perceived advertising value and personalization", *Cogent Business and Management*, Vol. 6 No. 1, pp. 1-13, doi: [10.1080/23311975.2019.1618431](https://doi.org/10.1080/23311975.2019.1618431).
- Ha, L. (2008), "Online advertising research in advertising journals: a review", *Journal of Current Issues and Research in Advertising*, Vol. 30 No. 1, pp. 31-48, doi: [10.1080/10641734.2008.10505236](https://doi.org/10.1080/10641734.2008.10505236).
- Hair, J.F., Hult, T.M., Ringle, C.M. and Sarstedt, M. (2013), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE Publications, Thousand Oaks.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2014), *Multivariate Data Analysis*, Pearson Education, Edinburgh.
- Hair, J.F., Hult, T.M., Ringle, C.M. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE Publications, Los Angeles.
- Hair, J.F., Babin, B.J., Anderson, R.E. and Black, W.C. (2018), *Multivariate Data Analysis*, Cengage Learning EMEA, Hampshire.

- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24, doi: [10.1108/eb-11-2018-0203](https://doi.org/10.1108/eb-11-2018-0203).
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P. and Ray, S. (2021), *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*, Springer Nature, Cham, doi: [10.1007/978-3-030-80519-7](https://doi.org/10.1007/978-3-030-80519-7).
- Hamouda, M. (2018), "Understanding social media advertising effect on consumers' responses", *Journal of Enterprise Information Management*, Vol. 31 No. 3, pp. 426-445, doi: [10.1108/JEIM-07-2017-0101](https://doi.org/10.1108/JEIM-07-2017-0101).
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: [10.1007/s11747-014-0403-8](https://doi.org/10.1007/s11747-014-0403-8).
- Hermann, R. (2020), "Consumers' perception of online video advertising", M.A. Dissertation, Germany: Universität Leipzig, doi: [10.13140/RG.2.2.21754.11203](https://doi.org/10.13140/RG.2.2.21754.11203), available at: https://www.researchgate.net/publication/344452139_Consumers%27_Perception_of_Online_Video_Advertising
- Ho, V.T. (2022), "Factors affecting the value of online advertising among Vietnamese youths", *Independent Journal of Management and Production*, Vol. 13 No. 5, pp. 1216-1234, doi: [10.14807/ijmp.v13i5.1694](https://doi.org/10.14807/ijmp.v13i5.1694).
- Houston, F.S. and Gassenheimer, J.B. (1987), "Marketing and exchange", *Journal of Marketing*, Vol. 51 No. 4, pp. 3-18, doi: [10.1177/002224298705100402](https://doi.org/10.1177/002224298705100402).
- Huang, Y. and Yoon, H.J. (2022), "Prosocial native advertising on social media: effects of ad-context congruence, ad position and ad type", *Journal of Social Marketing*, Vol. 12 No. 2, pp. 105-123, doi: [10.1108/JSOCM-05-2021-0105](https://doi.org/10.1108/JSOCM-05-2021-0105).
- Hussain, A., Ting, D.H. and Mazhar, M. (2022), "Driving consumer value co-creation and purchase intention by social media advertising value", *Frontiers in Psychology*, Vol. 13, 800206, doi: [10.3389/fpsyg.2022.800206](https://doi.org/10.3389/fpsyg.2022.800206).
- IAB (2019), "Native advertising Playbook 2.0", available at: https://www.iab.com/wp-content/uploads/2019/05/IAB-Native-Advertising-Playbook-2_0_Final.pdf (accessed 21 April 2024).
- IBM Corp (2023), *IBM SPSS Statistics for MAC Version 29.0.1.0*, IBM Corp, Armonk, NY.
- Islam, M. (2017), "Capturing consumer attitude toward mobile advertising: an empirical investigation among different national cultures", *Journal of Internet Banking and Commerce*, Vol. 22 No. 3, pp. 1-22.
- Jiang, M., McKay, B.A., Richards, J.I. and Snyder, W. (2017), "Now you see me, but you don't know: consumer processing of native advertisements in online news sites", *Journal of Interactive Advertising*, Vol. 17 No. 2, pp. 92-108, doi: [10.1080/15252019.2017.1399839](https://doi.org/10.1080/15252019.2017.1399839).
- Jung, A.-R. and Heo, J. (2023), "Attentional benefits of native ads from the difficulty of recognition", *International Journal of Human-Computer Interaction*, Vol. 40 No. 19, pp. 1-8, doi: [10.1080/10447318.2023.2247556](https://doi.org/10.1080/10447318.2023.2247556).
- Karunaratne, E.A.C.P. and Thilini, W.A. (2022), "Advertising value constructs' implication on purchase intention: social media advertising", *Management Dynamics in the Knowledge Economy*, Vol. 10 No. 3, pp. 287-303, doi: [10.2478/mdke-2022-0019](https://doi.org/10.2478/mdke-2022-0019).
- Katz, E. (1959), "Mass communications research and the study of popular culture: an editorial note on a possible future for this journal", *Studies in Public Communication*, Vol. 2, pp. 1-6.
- Keyzer, F.D., Dens, N. and Pelsmacker, P.D. (2015), "Is this for me? How consumers respond to personalized advertising on social network sites", *Journal of Interactive Advertising*, Vol. 15 No. 2, pp. 124-134, doi: [10.1080/15252019.2015.1082450](https://doi.org/10.1080/15252019.2015.1082450).
- Keyzer, F.D., Dens, N. and Pelsmacker, P.D. (2023), "The processing of native advertising compared to banner advertising: an eye-tracking experiment", *Electronic Commerce Research*, Vol. 23 No. 3, pp. 1921-1940, doi: [10.1007/s10660-021-09523-7](https://doi.org/10.1007/s10660-021-09523-7).

- Kim, Y.J. and Han, J. (2014), "Why smartphone advertising attracts customers: a model of Web advertising, flow, and personalization", *Computers in Human Behavior*, Vol. 33, pp. 256-269, doi: [10.1016/j.chb.2014.01.015](https://doi.org/10.1016/j.chb.2014.01.015).
- Kim, S., Youn, S. and Yoon, D. (2019), "Consumers' responses to native vs. banner advertising: moderation of persuasion knowledge on interaction effects of ad type and placement type", *International Journal of Advertising*, Vol. 38 No. 2, pp. 207-236, doi: [10.1080/02650487.2018.1451208](https://doi.org/10.1080/02650487.2018.1451208).
- Kingsnorth, S. (2016), *Digital Marketing Strategy: An Integrated Approach to Online Marketing*, Kogan Page, London.
- Krouwer, S., Poels, K. and Paulussen, S. (2019), "Exploring readers' evaluations of native advertisements in a mobile news app", *Journal of Media Business Studies*, Vol. 16 No. 2, pp. 77-94, doi: [10.1080/16522354.2019.1573396](https://doi.org/10.1080/16522354.2019.1573396).
- Lee, C.-C. and Hsieh, M.-C. (2009), "The influence of mobile self-efficacy on attitude towards mobile advertising", *2009 International Conference on New Trends in Information and Service Science*, pp. 1231-1236, doi: [10.1109/NISS.2009.91](https://doi.org/10.1109/NISS.2009.91).
- Lee, J., Kim, S. and Ham, C.-D. (2016), "A double-edged sword? Predicting consumers' attitudes toward and sharing intention of native advertising on social media", *American Behavioral Scientist*, Vol. 60 No. 12, pp. 1425-1441, doi: [10.1177/0002764216660137](https://doi.org/10.1177/0002764216660137).
- Li, L. and Shen, F. (2023), "Irritating or enjoyable? Exploring the effects of soft-text native advertising and social media engagement metrics", *Journal of Promotion Management*, Vol. 29 No. 1, pp. 1-23, doi: [10.1080/10496491.2023.2168325](https://doi.org/10.1080/10496491.2023.2168325).
- Li, H., Edwards, S.M. and Lee, J.-H. (2002), "Measuring the intrusiveness of advertisements: scale development and validation", *Journal of Advertising*, Vol. 31 No. 2, pp. 37-47, doi: [10.1080/00913367.2002.10673665](https://doi.org/10.1080/00913367.2002.10673665).
- Lin, F.-H. and Hung, Y.-F. (2009), "The value of and attitude toward sponsored links for internet information searchers", *Journal of Electronic Commerce Research*, Vol. 10 No. 4, pp. 235-251.
- Lina, L.F. and Setiyanto, A. (2021), "Privacy concerns in personalized advertising effectiveness on social media", *Sriwijaya International Journal of Dynamic Economics and Business*, Vol. 5 No. 2, pp. 147-156, doi: [10.29259/sijdeb.v1i2.147-156](https://doi.org/10.29259/sijdeb.v1i2.147-156).
- Liu, Y. (2003), "Developing a scale to measure the interactivity of websites", *Journal of Advertising Research*, Vol. 43 No. 2, pp. 207-216, doi: [10.1017/S0021849903030204](https://doi.org/10.1017/S0021849903030204).
- Logan, K. (2013), "And now a word from our sponsor: do consumers perceive advertising on traditional television and online streaming video differently?", *Journal of Marketing Communications*, Vol. 19 No. 4, pp. 258-276, doi: [10.1080/13527266.2011.631568](https://doi.org/10.1080/13527266.2011.631568).
- Logan, K., Bright, L.F. and Gangadharbatla, H. (2012), "Facebook versus television: advertising value perceptions among females", *Journal of Research in Interactive Marketing*, Vol. 6 No. 3, pp. 164-179, doi: [10.1108/17505931211274651](https://doi.org/10.1108/17505931211274651).
- Lütjens, H., Eisenbeiss, M., Fiedler, M. and Bijmolt, T. (2022), "Determinants of consumers' attitudes towards digital advertising – a meta-analytic comparison across time and touchpoints", *Journal of Business Research*, Vol. 153, pp. 445-466, doi: [10.1016/j.jbusres.2022.07.039](https://doi.org/10.1016/j.jbusres.2022.07.039).
- MacKenzie, S.B. and Lutz, R.J. (1989), "An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context", *Journal of Marketing*, Vol. 53 No. 2, pp. 48-65, doi: [10.1177/002224298905300204](https://doi.org/10.1177/002224298905300204).
- Majabadi, H.A., Solhi, M., Montazeri, A., Shojaeizadeh, D., Nejat, S., Khalajabadi Farahani, F. and Djazayeri, A. (2016), "Factors influencing fast-food consumption among adolescents in Tehran: a qualitative study", *Iranian Red Crescent Medical Journal*, Vol. 18 No. 3, 23890, doi: [10.5812/ircmj.23890](https://doi.org/10.5812/ircmj.23890).
- Martins, J., Costa, C., Oliveira, T., Gonçalves, R. and Branco, F. (2019), "How smartphone advertising influences consumers' purchase intention", *Journal of Business Research*, Vol. 94, pp. 378-387, doi: [10.1016/j.jbusres.2017.12.047](https://doi.org/10.1016/j.jbusres.2017.12.047).
- McQuail, D. (1983), *Mass Communication Theory: An Introduction*, SAGE Publications, London.

- Memon, M.A., Ting, H., Cheah, J.H., Thursamy, R., Chuah, F. and Cham, T.H. (2020), "Sample size for survey research: review and recommendations", *Journal of Applied Structural Equation Modeling*, Vol. 4 No. 2, pp. 1-20, doi: [10.47263/JASEM.4\(2\)01](https://doi.org/10.47263/JASEM.4(2)01).
- Murillo, E., Merino, M. and Núñez, A. (2016), "The advertising value of Twitter ads: a study among Mexican Millennials", *Review of Business Management*, Vol. 18 No. 61, pp. 436-456, doi: [10.7819/rbgn.v18i61.2471](https://doi.org/10.7819/rbgn.v18i61.2471).
- Mustafi, M.A.A. and Hosain, M.S. (2020), "The role of online advertising on purchase intention of smartphones: mediating effects of flow experience and advertising value", *Journal of Contemporary Marketing Science*, Vol. 3 No. 3, pp. 385-410, doi: [10.1108/JCMARS-05-2020-0024](https://doi.org/10.1108/JCMARS-05-2020-0024).
- Nienhaus, A. and Nienhaus, V. (2018), "Native advertising on social media: an empirical study among millennials", M.A. Dissertation, Denmark: Copenhagen Business School, available at: https://research-api.cbs.dk/ws/portalfiles/portal/59775313/458763_Native_Advertising_on_Social_Media_An_empirical_analysis_among_millennials.pdf
- NSO (2023), "ICT usage by households: 2022", available at: <https://nso.gov.mt/information-and-communications/ict-usage-by-households-2022/> (accessed 5 June 2024).
- Pallant, J. (2016), *SPSS Survival Manual A Step by Step Guide to Data Analysis Using IBM SPSS*, Open University Press, Maidenhead.
- Pituch, K.A. and Stevens, J.P. (2016), *Applied Multivariate Statistics for the Social Sciences*, Routledge, New York.
- Pollay, R.W. and Mittal, B. (1993), "Here's the beef: factors, determinants, and segments in consumer criticism of advertising", *Journal of Marketing*, Vol. 57 No. 3, pp. 99-114, doi: [10.1177/00224299305700307](https://doi.org/10.1177/00224299305700307).
- Ringle, C.M., Wende, S. and Becker, J.-M. (2023), *SmartPLS Version 4.0.9.5*, SmartPLS, Oststeinbek.
- Rust, R.T. and Lemon, K.N. (2001), "E-service and the consumer", *International Journal of Electronic Commerce*, Vol. 5 No. 3, pp. 85-101, doi: [10.1080/10864415.2001.11044216](https://doi.org/10.1080/10864415.2001.11044216).
- Saunders, M.N., Lewis, P. and Thornhill, A. (2019), *Research Methods for Business Students*, Pearson Education, New York.
- Saxena, A. and Khanna, U. (2013), "Advertising on social network sites: a structural equation modelling approach", *Vision*, Vol. 17 No. 1, pp. 17-25, doi: [10.1177/0972262912469560](https://doi.org/10.1177/0972262912469560).
- Schauster, E. and Neill, M.S. (2017), "Have the ethics changed? An examination of ethics in advertising and public relations agencies", *Journal of Media Ethics*, Vol. 32 No. 1, pp. 45-60, doi: [10.1080/23736992.2016.1258993](https://doi.org/10.1080/23736992.2016.1258993).
- Schauster, E.E., Ferrucci, P. and Neill, M.S. (2016), "Native advertising is the new journalism: how deception affects social responsibility", *American Behavioral Scientist*, Vol. 60 No. 12, pp. 1408-1424, doi: [10.1177/0002764216660135](https://doi.org/10.1177/0002764216660135).
- Shmueli, G., Ray, S., Estrada, J.M.V. and Chatla, S.B. (2016), "The elephant in the room: predictive performance of PLS models", *Journal of Business Research*, Vol. 69 No. 10, pp. 4552-4564, doi: [10.1016/j.jbusres.2016.03.049](https://doi.org/10.1016/j.jbusres.2016.03.049).
- Shmueli, G., Sarstedt, M., Hair, J.F., Cheah, J.H., Ting, H., Vaithilingam, S. and Ringle, C.M. (2019), "Predictive model assessment in PLS-SEM: guidelines for using PLSpredict", *European Journal of Marketing*, Vol. 53 No. 11, pp. 2322-2347, doi: [10.1108/EJM-02-2019-0189](https://doi.org/10.1108/EJM-02-2019-0189).
- Srinivasan, S.S., Anderson, R. and Ponnnavolu, K. (2002), "Customer loyalty in e-commerce: an exploration of its antecedents and consequences", *Journal of Retailing*, Vol. 78 No. 1, pp. 41-50, doi: [10.1016/S0022-4359\(01\)00065-3](https://doi.org/10.1016/S0022-4359(01)00065-3).
- WHO (2022), "Food marketing exposure and power and their associations with food related attitudes, beliefs, and behaviours: a narrative review [World Health Organization]", available at: <https://www.who.int/publications/i/item/9789240041783> (accessed 16 July 2024).
- Wilkie, W.L. (1994), *Consumer Behaviour*, John Wiley & Sons, New York.

- Winter, S., Maslowska, E. and Vos, A.L. (2021), "The effects of trait-based personalization in social media advertising", *Computers in Human Behavior*, Vol. 114, 106525, doi: [10.1016/j.chb.2020.106525](https://doi.org/10.1016/j.chb.2020.106525).
- Wojdyski, B.W. (2016), "Native advertising: engagement, deception, and implications for theory", in Brown, R., Jones, V. and Wang, B.M. (Eds), *The New Advertising: Branding, Content and Consumer Relationships in the Data-Driven Social Media Era*, Praeger, Santa Barbara, pp. 203-236.
- Wojdyski, B.W. and Evans, N.J. (2016), "Going native: effects of disclosure position and language on the recognition and evaluation of online native advertising", *Journal of Advertising*, Vol. 45 No. 2, pp. 157-168, doi: [10.1080/00913367.2015.1115380](https://doi.org/10.1080/00913367.2015.1115380).
- Xu, D.J. (2006), "The influence of personalization in affecting consumer attitudes toward mobile advertising in China", *Journal of Computer Information Systems*, Vol. 47 No. 2, pp. 9-19, doi: [10.1080/08874417.2007.11645949](https://doi.org/10.1080/08874417.2007.11645949).
- Youn, S. and Kim, S. (2019), "Newsfeed native advertising on Facebook: young millennials' knowledge, pet peeves, reactance and ad avoidance", *International Journal of Advertising*, Vol. 38 No. 5, pp. 651-683, doi: [10.1080/02650487.2019.1575109](https://doi.org/10.1080/02650487.2019.1575109).
- Zeithaml, V.A. (1988), "Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52 No. 3, pp. 2-22, doi: [10.1177/002224298805200302](https://doi.org/10.1177/002224298805200302).

Corresponding author

Jamil Schembri can be contacted at: schembrijamil@gmail.com