"Evaluating Celebrity Endorsement's Impact on Brand love through Brand Image in the Context of Industry Diversity: Food and Beverage and Telecommunications in Egyptian Market"

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Abstract

This study aims to investigate the impact of celebrity endorsement dimensions, namely attractiveness, trustworthiness, and expertise, in social media advertisements for the food, beverages, and telecommunications sectors on brand love through brand image among students in higher education institutions in Egypt. A mixed research method was employed, utilizing online questionnaires to collect data from a convenience sample of students at Cairo and Port Said universities. 399 fully completed responses were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results showed that the positive impact of celebrity endorsement dimensions on brand image. Furthermore, the results highlighted the positive impact of brand image on brand love. Ultimately, the study emphasized the vital role of brand image as a mediating variable in the relationship between celebrity endorsement dimensions and brand love.

Keywords: Celebrity Endorsement, Brand love, Brand Image, Higher Education Institutions.
1. Introduction

Marketers employ various promotional tools to influence customers, including advertising. Advertising has historically aimed to inform and persuade consumers about products (Annissa & Paramita, 2021). The use of marketing messages dates back to ancient Egypt, where papyrus was used for posters, billboards, signage, and outdoor media (Ahmed & Ashfaq, 2013). In recent years, the marketing landscape has evolved significantly, with an increasing reliance on celebrity endorsements in advertisements (Yawar & Ghafar, 2021). Many modern marketers leverage celebrity endorsements to promote their products and services. However, selecting the right celebrity endorser presents a challenge. It is essential to choose a celebrity whose personality aligns with the brand's image to generate interest in the advertisement without overshadowing the brand itself (McCormick, 2016). The primary focus should remain on the brand, with the celebrity complementing it rather than taking center stage (Johansson & Bozan, 2017).

Celebrity endorsement is a well-established marketing and promotional strategy, defined as the collaboration between a recognizable individual (a celebrity) and an entity (e.g., a brand) to promote the entity (Park et al., 2022). Given the increasing prevalence of celebrity endorsements, this study aims to investigate their impact on a brand, particularly as brands adapt to the growing influence of social media and employ strategies like celebrity endorsements (Zhou, Mou & Wu, 2020). Marketing through celebrity endorsements has gained substantial attention in academic research, recognizing the substantial positive influence celebrities have on audiences (Rocha et al., 2020). Celebrity-endorsed sector not only enhance brand awareness and recognition but also enable companies to effectively reach their target audience (Chaudhuri & Agarwal, 2021). Consumers exposed to influencer-with-product conditions show higher corporate credibility and a more positive attitude toward brand posts compared to product-only conditions (Jin and Muqaddam, 2019). Social media, a tool widely used by marketers, significantly influences consumer behavior through social influencers (Gupta & Nair, 2021; Jun and Yi, 2020; Rocha et al., 2020; Lim et al., 2019).

Young adults find social media highly persuasive in influencing dietary behavior through various social influence pathways (Friedman et al., 2022).
On a different note, numerous studies have explored the concept of celebrity endorsement in relation to encompassing factors like brand attitude, brand equity (Muniz & Guzmán, 2021; Singh & Banerjee, 2018), brand awareness, and brand recall (Gesmundo et al., 2022), brand loyalty (Çelik, 2022), purchase intention (Abdaziz, Khalilomar & Ariffin, 2019; Johansson & Bozan, 2017), consumption behavior (Calvo et al., 2021). This study stands out by exploring the relationship between celebrities as brand ambassadors and fans brand image, analyzing how this image impacts brand love. Particularly, the focus is on brand love for the brand-supporting ambassadors, rather than the advertised brand itself (Mulyawati and Handayani, 2020). While the previous studies have explored celebrity endorsements in various global contexts, they often focus on international celebrities (Park et al., 2022; Waqas et al., 2020; Nuryati & Arfani, 2020), leaving gaps in the understanding of the impact of local celebrities, particularly in countries like Egypt.

This research addresses this gap by concentrating on local celebrities targeting higher education students at Cairo and Port Said universities in Egypt. Building on these identified gaps, the study utilizes brand image as a mediator to examine how trustworthiness, expertise, and attractiveness of celebrity endorsers predict brand love. Additionally, the study explores these dynamics in two industries: food and beverage and telecommunications services.

2. Exploratory Study Research Problem

In the exploratory study, the researcher focused on college students from two universities (Cairo and Port Said) to determine their preferred dimensions of celebrity endorsement using the TEARS Model (trustworthiness, expertise, attractiveness, respect, and similarity). The study involved in-depth interviews with 20 students (10 males, 10 females) and one focus group consisting of 5 participants. As college students are the target demographic, their ages ranged from 18 to 23. The participants were asked semi-structured questions as follows:

2.1 Are you familiar with Egyptian celebrities in social media advertisements for food and beverage and telecommunications?

2.2 Can you recall a specific celebrity-endorsed product or brand in the food and beverage or telecommunications advertisements that left a lasting impression on you?
2.3 How do a celebrity's characteristics influence your perception of a brand?

2.4 How do you rank the attributes of attractiveness, trustworthiness, expertise, respect, and similarity?

2.5 How do you perceive the relationship between celebrities and the brands they endorse on social media?

2.6 In your opinion, how important is the brand image in influencing your brand love for a product?

Results from the interviews revealed that participants are familiar with celebrity endorsements in food and beverage advertisements, where celebrities often promote products such as snacks, beverages, and restaurants. Furthermore, in telecommunications advertisements, celebrities often endorse mobile phone companies and internet service providers. Participants recalled a popular soft drink and telecommunication brand being promoted by Amr Diab, a famous Egyptian singer, and Yasmin Sabry, a famous Egyptian actress. The participants expressed that these celebrity endorsements positively influence their perceptions, making them more likely to view the brand in a favorable light and consider trying the product.

Attractiveness was deemed the most crucial attribute within the celebrity endorsement dimension for a majority of participants. It was followed by trustworthiness and celebrity expertise. Participants emphasized that a celebrity must not only be attractive but also trustworthy and knowledgeable. Consequently, attractiveness, trustworthiness, and expertise emerged as the preferred dimensions of celebrity endorsement, distinct from respect and similarity. Additionally, participants highlighted the significant influence celebrities wield on social media platforms, especially Instagram, where they perceived celebrities as endorsing the brands they genuinely use.

Trust in celebrities was deeply tied to their perceived authenticity in product usage. Participants also expressed that rumors and negative publicity about a celebrity could detrimentally impact a brand's image, demonstrating the potential for both positive and negative influences of celebrity image on brand image. Participants emphasized that celebrities encourage them to love a particular brand; thus, marketers should carefully select celebrities based on their trustworthiness, attractiveness, and expertise.
3. Research Problem

In contemporary marketing, many businesses promote their products and services using celebrity endorsements. Selecting the right celebrity endorser that aligns with the product image is a significant challenge. McCormick (2016) emphasized the criticality of choosing a suitable celebrity endorser for a successful advertising campaign, ensuring that the product remains the main focus. Egyptian students, in an exploratory study, highlighted trustworthiness, attractiveness, and expertise as the most influential dimensions in celebrity endorsement based on the TEARS model (Shimp, 2003). However, there's a dearth of recent research regarding the impact of celebrity endorsement on a company's brand image and brand love, making this an under-explored field (Byberg, Hansen & Basic, 2015; Zhou, Mou & Wu, 2020).

While celebrity endorsements can significantly enhance a company's brand image, especially with the substantial investment involved, understanding the audience's attitude is crucial. More research is needed to comprehend the influence of celebrity endorsements on brands (Luckmizankaria, 2020). Despite extensive research on celebrity endorsements globally, the focus has predominantly been on international celebrities, leaving a gap regarding the use of local celebrities (Chan et al., 2021). This study addresses this gap by concentrating on local celebrities for students in Cairo and Port Said universities, aiming to predict how celebrity endorser characteristics influence brand love with brand image acting as a mediator.

Building on the mentioned research issue, this study aims to answer the following questions:

3.1 Is there a direct positive relationship between the dimensions of celebrity endorsement and brand image?

3.2 Does brand image have a positive impact on brand love?

3.3 Does brand image mediate the relationship between celebrity endorsement dimensions and brand love?

4. Research Objectives

4.1 Assessing the Influence of Celebrity Endorsement on Brand Image.

4.2 Examining the Relationship Between Brand Image and Brand Love.
4.3 Exploring the vital role of brand image as a mediator in the relationship between celebrity endorsement dimensions and brand love.

4.4 Investigating Variations in Celebrity Endorsement Impact within the food and beverage and telecommunications advertisements, considering the unique characteristics and dynamics of each sector.

4.5 Identifying Optimal Celebrity Endorser Traits for Enhanced Brand Image in the Egyptian market's food and beverage and telecommunications sectors.

4.6 Proposing Recommendations for Effective Celebrity Endorsement Strategies for industry stakeholders to optimize the impact of celebrity endorsement on brand image and brand love within the diverse Egyptian market.

5. Significance of Research

More specifically, this study will focus on several important areas, providing original insights to aid marketers and advertising agencies in the food and drink sector and the telecommunications sector in making well-informed decisions when choosing celebrity endorsements as follows:

5.1 By investigating the attitudes of Generation Z (18-24 years old), representing 11.6% of the Egyptian population (Datareportal, 2023), this study seeks to shed light on the influence of celebrity endorsements on Gen Z.

5.2 By examining the potential advertising reach across Facebook, Instagram, and Messenger for Generation Z, this study sheds light on this important demographic. The findings reveal a reach of 16% for males and 12.2% for females (Datareportal, 2023), offering valuable insights for marketing strategies.

5.3 This study offers a fresh perspective on how different environments influence preferences for celebrities. Specifically, it explores how students from Cairo University, representing an urban environment, may differ in their preferences compared to those from Port Said University, representing a coastal environment. This analysis will consider factors such as common social expressions, body language, and celebrity affiliations.

5.4 The telecommunications sector is one of the most essential service sectors used in this study because it is one of the biggest sectors in
the world that provides telephonic services to its consumers. The primary goal of this sector is to assist individuals in keeping in touch with one another and to develop strong connectivity networks with people all over the world. Second, the industry sector is a significant source of employment creation and serves a vital role in economic development.

5.5 This study concentrates on the food and drink sector because it is one of the most essential industrial sectors with an ever-growing client base. Food and drink are also significant since they satisfy many of their fundamental needs and provide employment opportunities for individuals who choose to work in the industry.

5.6 This study sheds important light on social media, which has transformed from a mere trend into an indispensable tool for both individuals and organizations in today's world. Notably, social media penetration in Egypt has reached 41.4% of the total population, with an even higher rate of 60.9% among the total population over 18 years old (Datareportal, 2023).

6. Literature Review and Hypotheses Development

6.1 Celebrity Endorsement

The use of celebrities in advertising is a well-established and effective strategy, contained in the saying "Nothing sells like a celebrity" (Wang & Scheinbaum, 2018). Numerous studies consistently confirm that celebrity endorsements significantly enhance the effectiveness of advertising campaigns. Celebrity endorsement involves engaging well-known individuals like George Clooney for Nespresso or Natalie Portman for Dior to promote a brand (Schouten et al., 2020; Ambroise & Albert, 2020). In this context, "endorsement" signifies expressing approval and backing for a particular entity or individual, acting as a conduit for brand communication. Celebrities become spokespersons, using their fame, social standing, or industry expertise to authenticate the brand's claims and positioning (Al-Awadhi, 2020; Fitri, 2018).

The term "celebrity" encompasses individuals recognized for achievements beyond the product category being promoted, across various domains like acting, music, sports, and politics (Calvo-Porral et al., 2021).
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McCracken (1989) defines celebrity endorsement as utilizing the public recognition and reputation of these individuals to endorse consumer products in advertisements. Utilizing celebrities underscores their significant influence in modern society, leading marketers to increasingly leverage their appeal to capture consumer attention and boost brand recall, ultimately enhancing brand success (Calvo-Porral et al., 2021; Agnihotri & Bhattacharya, 2021; Giridhar, 2018). Research indicates that some individuals construct their self-image based on brand associations and celebrity endorsements, particularly driven by identity needs such as self-improvement (Emmadi, 2017). Local celebrities are now favored over international ones in marketing, responding to the consumer desire for more local endorsers in advertising campaigns (Schimmelpfennig, 2018). In developing countries, local celebrities are frequently used due to adaptations of worldwide formats like reality TV shows and sports (Dikčius & Ilciukiene, 2021). Local celebrities often have a better understanding of the market compared to global celebrities (Dikčius & Ilciukiene, 2021), making them more relatable to the public and researchers (Ferris, 2010).

The Source Credibility Theory and The Meaning Transfer Model provide critical insights into celebrity endorsements, exploring how credible sources impact consumer opinions and behaviors while linking celebrities' traits to brand meanings. The former emphasizes trustworthiness and expertise, supported by research by Ohanian (1990), Yang (2018), Wang et al. (2017), and Schimmelpfennig & Hunt (2020). In contrast, the latter, introduced by McCracken, delves into the interpretation of brand meanings through celebrities, as noted by Roy (2006), McCracken (1989), and Langner & Eisend (2011). These theories collectively illuminate the significant influence of celebrity endorsements on consumers and brands. Researchers have further categorized celebrity endorsement studies into credibility and image studies, employing scales like the Ohanian endorser credibility scale and the meaning transfer model, as observed in research by Park et al. (2022). Image studies highlight that celebrities embody an image based on their societal function, which is transferred to the brand and, ultimately, to the customer through advertising (Thomas & Johnson, 2019). The source-credibility and source-attractiveness models are foundational in understanding celebrity endorsements, focusing on expertise, trustworthiness, and attractiveness (Yang, 2018).
However, academic studies present varied support for these source models, and they remain crucial in evaluating celebrity and brand relationships (Malik, Sudhakar & Dutta, 2018).

6.1.1 Celebrity Trustworthiness

Trustworthiness is a fundamental concept to investigate, involve the perceived validity and honesty of a source's claims (McCracken, 1989; Wang et al., 2017). Erdogan (1999) refines trustworthiness as a consumer's perception of an endorser's integrity and belief worthiness (Punjani & Kumar, 2021). Research confirms that a trustworthy celebrity enhances consumer confidence in the endorsed brand, making the brand appear highly reliable (Gilal et al., 2020). Trustworthy celebrities are more persuasive, and their credibility is vital in influencing consumer attitudes and behavioral intentions, making them a potent social influence (Tantawi & Sadek, 2019; Punjani & Kumar, 2021). However, trust can be easily eroded if a celebrity endorser is involved in scandals or legal issues, necessitating careful selection of endorsers by companies (Adiba, Suroso & Afif, 2020; Calvo-Porral, Rivaroli & Orosa-González, 2021).

6.1.2 Celebrity Expertise

Expertise is a critical factor in celebrity endorsement, determined by how the target audience perceives the celebrity's knowledge and competence (Yang, 2018). Hovland, Janis, and Kelley (1953) define expertise as the extent to which a communicator is seen as a source of valid information (Ohanian, 1990).

Celebrities are seen as experts based on their education, skills, and performance, which qualifies them as celebrities (Alawadhi & Örs, 2020). Expertise influences consumer attitudes and generates a favorable brand image when consumers perceive celebrities as knowledgeable in their respective fields (Lomboan, 2013). Consumers value a celebrity's expertise and see them as real individuals who genuinely care about them, which impacts their attitudes and behaviors (Thomson, 2006; Zhu & Chen, 2015).

An endorser's expertise enhances a brand's believability and credibility, influencing consumer persuasiveness towards the endorsed product (Johansson & Bozan, 2017). The perceived expertise of a celebrity endorser significantly affects the persuasiveness of brand
communication, making an endorser with perceived expertise more convincing to consumers (Wang et al., 2017).

6.1.3 Celebrity attractiveness

Attractiveness is a vital aspect alongside trustworthiness and expertise in celebrity endorsement (Wang et al., 2017). It encompasses physical attractiveness and various character traits like personality and lifestyle that draw people to the endorser (Zhang & Gursoy, 2020). Attractiveness includes both physical looks and other elements like character, lifestyle, and abilities of endorsers (Adiba, Suroso & Afif, 2020). The appeal of an endorser is enhanced when they are recognized, admired, and seen as similar to consumers (Ohanian, 1990). Research demonstrates that people prefer physically attractive endorsers, and this attractiveness positively influences customer focus and product evaluation (Park et al., 2022). Marketers utilize attractive celebrities to enhance brand image and believe that beauty can boost sales (Alawadhi & Örs, 2020). The attractiveness of a celebrity endorser directly impacts the brand's image, making the endorsement more beneficial (Tantawi & Sadek, 2019).

6.2 Brand Image

The notion of brand image was first introduced in 1950, with the term "brand image" coined by the renowned advertising specialist Ogilvy to encapsulate users' emotions and feelings towards a specific product. According to Mao (2010) and Al-Haddad (2019), brand image is crucial in brand development. It plays a vital role in distinguishing a brand from its competitors, serving as a reflection of the brand and facilitating the development of consumer relationships, enabling customers to evaluate the brand easily. Consequently, many businesses prioritize cultivating a positive brand image (Dam, 2020). A positive image greatly benefits a well-known brand and can influence consumer behavior towards the product (Murdiana, 2020).

"Brand image" relates to public perspectives of a company or its products, represented by mental associations formed by consumers when recalling a brand name. Specific thoughts or images associated with particular brands serve as the foundation for these associations, shaping perceptions when considering the brand (Fitriani & Achmad, 2021). A brand's image naturally evolves based on expectations and prior experiences. Customer experiences that surpass expectations are likely to form a favorable opinion of the brand, while experiences falling
short of expectations can result in a negative opinion (Jain, 2017). Consequently, many companies collaborate with celebrities to bolster their brand image, as customers seek to project a positive image by being associated with flawless brands (Min et al., 2019). Brand image, as the personification of a brand, conveys an individual's personality. Customers tend to form strong connections with brands whose image aligns with their self-concept. A positive brand image inspires consumer affection towards these brands (Islam & Rahman, 2016).

6.3 Brand Love

Although "brand love" has become a popular topic among brand managers and marketing academics, it is still a relatively recent phenomenon (Cuong, 2020; Al-Haddad, 2019; Bairrada et al., 2018; Ahuvia, Rauschnabel & Rindfleisch, 2020). It is grounded in interpersonal love theory and research, encompassing a strong brand, positive emotions, favorable assessment, a demonstration of love's intensity, loyalty, and positive word-of-mouth (Punjani & Kumar, 2021). Carroll and Ahuvia (2006) noted the close resemblance between interpersonal love and affection for an item, defining brand love as a "satisfied consumer's emotional attachment to a specific trade name," characterized by intense passion, attachment, and a profound connection between the customer and the brand.

Albert et al. (2008) expanded this definition, equating "love" for a brand with expressing commitment to the brand in the product domain. Building on these definitions, Batra et al. (2012) proposed a grounded theory framework for investigating brand love. They emphasized that brand love is a relationship rather than a fleeting emotion, comprising multiple interconnected cognitive, affective, and behavioral elements, rather than a specific, transient emotion of love. Prior research has demonstrated that consumers form strong emotional ties not only with brands and products but also with other individuals (Raposo, 2019).

In this context, businesses recognize that fostering a positive relationship with customers necessitates brand love, providing popular brands with a lasting advantage in the competitive landscape (Staa & Abbassi, 2018). Consumers who love a specific brand exhibit a willingness to invest more in its branded products, actively seek and endorse the brand and its offerings. These consumers perceive the brand as exceptional and experience a sense of lack when it is unavailable (Zhou, Mou & Wu, 2020).
Human association with brands can be influential, leading many businesses to collaborate with celebrities to reinforce a customer's sense of self-identity with the brand (Mulyawati, Handayani & Sudiartha, 2020).

6.4 The Relationship between Celebrity Endorsement and Brand Image

Celebrity endorsements are widely utilized in social media marketing in today's digital era. Currently, celebrity endorsement stands out as one of the most popular promotional methods to enhance brand image, especially in terms of recall and recognition (Ahmad et al., 2019). It is a straightforward approach to significantly boost the effectiveness of advertisements, establishing a strong connection with consumers and consequently leading to increased sales volume and building brand recall in the minds of consumers (Yawar & Ghafar, 2021). In a study conducted by Hove (2019) on the impact of celebrity endorsements on Nash Paints' brand image in Harare, Zimbabwe, it was found that certain characteristics of celebrity endorsers, such as attractiveness, trustworthiness, and expertise, positively correlate with brand image. Another study by Yoo and Jin (2013) investigated the influence of celebrity congruence on audience perceptions, particularly in terms of trustworthiness, attractiveness, and expertise. The study's results demonstrated that celebrity endorsement and goodwill have a positive impact on the organization (Chan et al., 2021).

These findings of the study align with another study by Chan et al. (2021) in Indonesia, revealing that celebrity endorsement positively affects brand image. Fitri (2018) similarly discovered that various dimensions, including trustworthiness, knowledge, physical appearance, respect, and resemblance, have a positive influence on brand image. Adiba, Suroso & Afif (2020) found a link between celebrity endorsement, focusing on trustworthiness, expertise, and attractiveness, and its impact on brand image, providing further support for the idea that celebrity endorsement influences brand image. Hawkins and Mothersbaugh (2013) asserted that brand image consists of intangible values like imagery and emotions that can be associated with customers' long-term relationships with the company. Additionally, Choi and Rifon (2012) emphasized that celebrity endorsement has become a vital component in branding and marketing that customers seek in a brand (Chan et al., 2021).
Numerous studies have corroborated a positive relationship between celebrity endorsement and brand image (Yawar & Ghafar, 2021; Waqas et al., 2020; Murdiana, 2020; Mulyawati, Handayani & Sudiartha, 2020). Based on the collective findings from previous research, the main hypothesis for this study can be proposed as follows:

6.4.1 The Relationship between Celebrity Trustworthiness and Brand Image

Trustworthiness encompasses the extent to which a celebrity is perceived by consumers as effectively communicating a message of integrity, honesty, and credibility through advertising (Kim, Choe & Petrick, 2018). Ha and Lam (2017) highlight that celebrities are commonly viewed as trustworthy, and their trustworthiness is described as a combination of shared values that impart positive traits and enhance message recognition.

A celebrity endorsement from an individual widely recognized as trustworthy and genuine can significantly enhance a company's image. Shimp (1997) in Hakimi et al. (2011) note that advertisers strategically utilize this trustworthiness aspect by selecting celebrities or endorsers known for their honesty. Research has shown that trustworthy endorsers enhance a brand's credibility, alleviate doubts, and promote financial gains (Kim, Choe & Petrick, 2018). It is crucial for a celebrity endorser to steer clear of scandals or troubles as they can detrimentally affect the brand's image; Lomboan (2013) concurs with this perspective. When consumers become aware of a celebrity endorser's involvement in a scandal, both the endorser's and the brand's image suffer. Consequently, a company must exercise careful consideration in selecting the right endorser, given their potential substantial impact on the company's image.

Therefore, the careful selection of the appropriate endorser is essential, given the potential significant influence on the brand's image. The positive impact of celebrities' trustworthiness on brand image has been confirmed by Chan et al. (2021); Von and Wiedmann (2021); Adiba, Suroso & Afif (2020); Tantawi & Sadek (2019); Zakari, Dogbe & Asante (2019); Hove (2019); Fitri (2018) and Lomboan (2013). Building upon previous research, the first hypothesis for this study is as follows:
H1: Celebrity trustworthiness has a significant positive impact on brand image.

6.4.2 The Relationship between Celebrity Attractiveness and Brand Image

An attractive celebrity significantly influences the brand they endorse, leveraging their "stardom" and physical appeal. Celebrity endorsers impact the effectiveness of persuasion as consumers aspire to emulate and identify with them. Moreover, the level of celebrity attractiveness plays a crucial role in creating a favorable impression, given people's inclination to derive information from appealing sources.

The attractiveness of a brand profoundly affects its image. Hence, a celebrity endorser's attractiveness directly impacts a brand's image. In the study by Lomboan (2013), participants stated that physically attractive celebrities had an impact on the brand image. Beyond physical appeal, a celebrity endorser affects a company's image when they can engage consumers through humor or other skills. Fitri (2018) extensively examined all facets of celebrity endorsement (credibility, attractiveness, familiarity, and match-up congruence) and found that all the tested indicators positively affect brand image. Consequently, it is crucial for a company to carefully select the appropriate celebrity, as that individual has the potential to significantly strengthen the company's brand image. Celebrity attractiveness has a favorable impact on the perceived brand image, as evident in studies conducted by Chan et al. (2021); Adiba, Suroso & Affif (2020); Faizal, Naziman & Samat (2019); Fitri (2018); Lomboan (2013) and Jayswal, Nirmal & Panchal (2013). Drawing from prior research, the following second hypothesis is proposed for this study:

H2: Celebrity attractiveness has a significant positive impact on brand image.

6.4.3 The Relationship between Celebrity Expertise and Brand Image

A person's perceived expertise refers to their ability to make decisions, experience, and knowledge. Expertise is associated with competence, qualifications, expert ability, mastery, and authoritativeness. A higher perceived level of expertise in a celebrity endorser in an advertisement typically leads to greater persuasiveness and effectiveness of the advertisement (Kim, Choe & Petrick, 2018). The endorser's expertise is defined by their practical knowledge, abilities,
and skills, particularly concerning the product they endorse, which they communicate to customers (Al-Awadhi, 2020).

A trustworthy celebrity or source is more believable and contributes to a better brand image. Additionally, celebrities perceived as experts in their industries may achieve higher levels of brand recognition (Adiba, Suroso & Afif, 2020). The level of a celebrity's knowledge influences the success of developing a positive brand image. The more knowledgeable a celebrity is, the more effective their recommendation becomes. Furthermore, according to Ing and Furuoka (2007), the components of celebrity expertise have a positive influence on the perceived brand image (Al-Awadhi, 2020). The expertise of a celebrity endorser can enhance a business's image and attract customers to the brand. The celebrity's level of expertise directly affects their ability to create an appealing image. Moreover, as stated by Alawadhi & Örs (2020); Adiba, Suroso & Afif (2020) and Lomboan (2013), the elements of celebrity expertise have a significant impact. Building upon previous research, the third hypothesis for this study is proposed as follows:

H3: Celebrity expertise has a significant positive impact on brand image.

6.5 The Relationship between Brand Image and Brand Love

Brand love has been recognized as a fundamental element influencing customer-brand relationships in contemporary marketing literature. In the realm of marketing, scholarly attention has been devoted to the concept of brand love (Batra, Ahuvia & Bagozzi, 2012; Carroll & Ahuvia, 2006). Customers are drawn to brands because they seek to enhance their self-image (Albert, Merunka & Vallette-Florence, 2008). According to Ahuvia (2005), consumers appreciate products that require a significant investment of time and effort for selection, demonstrating their willingness to invest these resources in choosing the best brand (Islam & Rahman, 2016). A positive brand image motivates individuals to develop affection for these brands. Ismail and Spinelli (2012) indicate a positive relationship between brand image and brand love. In the domain of brand-image literature, customers may attribute human traits to the brands they utilize, leading them to develop an emotional attachment to the brands (Islam & Rahman, 2016). In certain contexts, there exists a strong correlation between brand image and brand love.
Brand image significantly and positively impacts brand love (Fitriani & Achmad, 2021; Wardhana, 2021; Gumparthi & Patra, 2020; Dam, 2020; Cuong, 2020; Al-Haddad, 2019; Sallam, 2018; Anggraeni, 2015; Ismail & Melewar, 2015).

Brand-image literature suggests that customers may attribute human traits to the brands they use, resulting in an emotional connection with the brands (Islam & Rahman, 2016; Sallam, 2018). Based on prior research, the following fourth hypothesis is proposed:

H4: Brand image has a significant positive impact on brand love.

6.6 Mediating Role of Brand Image Between Celebrity Endorsement and Brand Love

Customers are more likely to form a favorable impression of the company when a customer's experience exceeds their expectations, and conversely (Jain, 2017). Consequently, Brand image plays an important role in brand building (Wardhana, 2021). The establishment of brand image is facilitated through the frequent and repetitive use of celebrity endorsements, creating an association between the celebrity's image and that of the brand, serving as an effective co-branding strategy (Saxena & Dhar, 2021).

Furthermore, according to brand-image literature, customers may assign human characteristics to the brands they use, leading to an emotional attachment to the brands. As a result, there is a powerful connection between brand image and brand love (Islam & Rahman, 2016; Sallam, 2018). According to previous research that brand image plays a mediating role rather than a moderating role between celebrity endorsement and brand love (Yawar & Ghafar, 2021; Chan, et al., 2021; Fitriani & Achmad, 2021; Wardhana, 2021). the following three hypotheses are proposed:

H5: Brand image mediates the positive relationship between Celebrity trustworthiness and brand love.

H6: Brand image mediates the positive relationship between Celebrity attractiveness and brand love.

H7: Brand image mediates the positive relationship between Celebrity expertise and brand love.

Based on the above discussion and hypotheses, the Research model is illustrated in Figure (1):
7. Research Methodology

7.1 Research Design

The research methodology adopted in this study comprises a mixed-method approach, integrating both qualitative and quantitative research techniques. Initially, qualitative research involves in-depth interviews and focus groups to acquire a comprehensive understanding of research phenomena. This phase followed by quantitative analysis through structured questionnaires to test the research model and hypotheses (Saunders, Lewis & Thornhill, 2020).

7.2 Population and Sampling

The target population includes Egyptian students from Generation Z (aged 18-24) in higher education institutions -Cairo University and Port Said University- due to their susceptibility to various information forms and distinct attitudes toward brands and advertisements (Anggraeni, 2015).

The choice of students as the sample is influenced by marketers recognizing their significant importance due to factors like increasing...
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purchasing power, easy access to credit cards, and a tendency to spend on apparel compared to other generations.

This has implications for targeted marketing strategies. Additionally, young consumers, characterized by heightened self-awareness, tend to select products that align with their self-image (Islam & Rahman, 2016; Chan & Luk, 2013). Furthermore, students are selected as a sample due to their admiration and enthusiasm for celebrities (Malik, Sudhakar & Dutta, 2018). To accommodate limited access to the entire population, convenience sampling, a non-probability method, is utilized. Since the non-probability sample size does not adhere to the same rules applied in probability samples, Hair et al. (2010) specify that a model comprising seven or fewer constructs should have a minimum of 300 observations.

Furthermore, some investigations employed a sample size ranging from 300 to 500 participants (e.g., Yawar & Ghafar, 2021; Zhou, Mou & Wu, 2020). In line with these prior studies, the researchers endeavored to estimate an optimal sample size and distributed the questionnaire to a larger pool of respondents. Regrettably, there was a concern that not all participants would respond accurately to the questions; hence, the questionnaire was administered to 445 participants.

7.3 Data Collection and Analysis Techniques

During the quantitative research phase, a survey was employed as the primary tool to gather essential data. These questionnaires were distributed online using Google Forms, and the survey link was shared across various social media platforms to engage with students online. The survey comprised six sections. The first section included filter questions designed to obtain the target sample and screen participants, such as the university attended (Cairo or Port Said), social media account ownership (e.g., Facebook, Instagram), and interest in following communication and food and beverage advertisements on social media. Second section focused on measuring celebrity endorsement dimensions, utilizing a set of nine items developed by (Wang & Scheinbaum, 2018).

In the third section, brand image was assessed through four items adapted from Dam (2020). The fifth section explored thoroughly brand love measurement, employing four items adapted from Carroll and Ahuvia (2006). All items were rated on a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Additionally, the sixth
section encompassed the demographic profile of the study sample, including details such as gender, age, and other relevant information.

A pilot test involving 20 respondents from Cairo and Port Said universities was carried out to check the measures’ validity. Some items were adjusted slightly due to vagueness or repetition. All items from the scales are included in the Appendix. Yasmine Sabri, Amir Karara & Wegz were selected as celebrities for this study, endorsing Chipsy and Etisalat, respectively. Additionally, Amr Diab is associated with Pepsi and Vodafone.

By the end of the data collection, 399 questionnaires were valid, making up 90% of the required 455 questionnaires. After that, the data were analyzed using (SPSS) V.27 and Structural equation modeling through Partial Least Squares (PLS-SEM) V.4 which evaluates the predictive capacity of the structural model. Additionally, the study employs the Measurement Invariance of Compositional Variables (MICOM) method and Partial Least Squares Multi-Group Analysis (PLS-MGA) to compare path significance between the food and beverage sector and the telecommunications sector.

Finally, investigating the mediating role of the brand image between celebrity endorsement dimensions and brand love in both sectors, the subsequent section explores the findings derived from this extensive data analysis.

8. Data Analysis

8.1 Descriptive Statistics of the Study Sample

The participants in this study were of different in gender, income, Employability, and university as shown in table (1).
Evaluating Celebrity Endorsement's Impact on Brand love through Brand Image …Nermeen Elsaadany; Marwa El-Araby; Sayed Sharaf.

### Table (1): Descriptive Statistics of the Study Sample

<table>
<thead>
<tr>
<th>Data</th>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>161</td>
<td>40.4%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>238</td>
<td>59.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>399</td>
<td>100.0%</td>
</tr>
<tr>
<td>Average monthly Income</td>
<td>Less than 1000</td>
<td>184</td>
<td>46.1%</td>
</tr>
<tr>
<td></td>
<td>1000-4000 EGP</td>
<td>196</td>
<td>49.1%</td>
</tr>
<tr>
<td></td>
<td>More than 4000</td>
<td>19</td>
<td>4.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>399</td>
<td>100%</td>
</tr>
<tr>
<td>Affiliated university</td>
<td>Port Said</td>
<td>201</td>
<td>50.4%</td>
</tr>
<tr>
<td></td>
<td>Cairo University</td>
<td>198</td>
<td>49.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>399</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### 8.2 Data Normality and Common Method Bias (CMB)

Before getting deeply into the analysis, it's important to assess the normality of the collected data. The reported skewness coefficients, ranging from -3 to +3, and kurtosis coefficients, ranging from -10 to +10, reveal that the violation of the normal distribution assumption has a minor influence on the subsequent analysis results. Because the ongoing research data were collected from a single unit of observation at a single time and with a single instrument (i.e., a structured questionnaire), there is a possibility of shared variance between the measurement items in this questionnaire (Jordan & Troth, 2020; Podsakoff et al., 2003). As a result, before proceeding to inferential statistics, it's essential to check for common method bias (CMB) to ensure that there is no shared variance between the study variables. The CMB can be tested using the full collinearity assessment approach (Kock, 2015). Table (2) demonstrates that the VIFs are less than 3.3 and range between 1.422 and 2.516. As a result, the current dataset does not exhibit any common method bias (CMB) problems. This means that the data is free of CMB and thus suitable for further data analysis.
Table (2): VIF results of the CMB across Food and beverage and telecommunications sectors

<table>
<thead>
<tr>
<th></th>
<th>Attractiveness</th>
<th>Expertise</th>
<th>Image</th>
<th>Love</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractiveness</td>
<td>1.538</td>
<td>1.52</td>
<td>1.433</td>
<td>1.422</td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>1.666</td>
<td>1.529</td>
<td>1.598</td>
<td>1.626</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>1.872</td>
<td>1.726</td>
<td>1.689</td>
<td>1.84</td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td>1.718</td>
<td>1.774</td>
<td>1.641</td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>1.496</td>
<td>1.555</td>
<td>1.578</td>
<td>1.614</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecommunications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractiveness</td>
<td>1.957</td>
<td>1.818</td>
<td>1.84</td>
<td>1.938</td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>1.595</td>
<td>1.596</td>
<td>1.579</td>
<td>1.465</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>2.264</td>
<td>2.423</td>
<td>2.024</td>
<td>2.362</td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td>2.393</td>
<td>2.516</td>
<td>2.126</td>
<td>2.444</td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>1.945</td>
<td>1.806</td>
<td>1.914</td>
<td>1.883</td>
<td></td>
</tr>
</tbody>
</table>

8.3 Structural Equation Modelling (SEM)

Structural Equation Modeling (SEM) is a statistical technique that allows for the simultaneous examination of multiple relationships. Two main methods can be utilized within SEM: covariance-based (CB-SEM) and Partial Least Squares (PLS-SEM) (Hair, Ringle & Sarstedt, 2011). Several factors determine the choice of a specific technique. For instance, when the research aims to expand prior theory by testing new relationships that maximize the variance of the dependent variable, PLS-SEM is preferred. Additionally, PLS-SEM is more suitable when research interactions are complicated (e.g., mediated relationships). PLS-SEM is implemented in two steps to achieve this. The first step involves building the measurement model through reliability and validity tests, while the second step focuses on testing the structural model and its predictive abilities (Sarstedt & Cheah, 2019; Hair et al., 2019; Hair et al., 2017).
8.3.1 Building the Measurement Model

The Confirmatory Composite Analysis (CCA) stages are used to build the measurement model. It begins with item reliability and progresses to construct reliability and validity tests (Hair, 2020; Hair et al., 2020).

Item reliability is the extent to which each item relates to its own construct. If the item loading is at least 0.708, it must be retained. An item with a loading between 0.4 and 0.708 is considered for deletion only if the other items within the same construct cannot compensate for its fall from 0.708; otherwise, it is a contender for retention (Hair et al., 2014). As demonstrated in Figures 2 and 3, all measurement items have loadings on their constructs that surpass 0.708.

Table (3): Construct reliability

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Food and beverage</th>
<th></th>
<th>Telecommunications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cronbach's alpha</td>
<td>Composite reliability</td>
<td>Cronbach's alpha</td>
<td>Composite reliability</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>0.700</td>
<td>0.833</td>
<td>0.791</td>
<td>0.878</td>
</tr>
<tr>
<td>Expertise</td>
<td>0.710</td>
<td>0.837</td>
<td>0.819</td>
<td>0.891</td>
</tr>
<tr>
<td>Image</td>
<td>0.802</td>
<td>0.871</td>
<td>0.859</td>
<td>0.904</td>
</tr>
<tr>
<td>Love</td>
<td>0.844</td>
<td>0.896</td>
<td>0.879</td>
<td>0.917</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.760</td>
<td>0.862</td>
<td>0.873</td>
<td>0.922</td>
</tr>
</tbody>
</table>

Consequently, all measuring items were reliable and can be used to assess the construct's reliability and validity. Construct reliability can be evaluated using Cronbach's alpha and Composite Reliability (CR). Values of Cronbach's alpha and CR greater than 0.7 indicate internal reliability and consistency of the construct (Hair et al., 2014).

Table (3) demonstrates that construct reliability is greater than the minimum, ranging between 0.7 and 0.922. Consequently, the research construct's reliability is confirmed. Construct validity is divided into two categories: convergent validity and discriminant validity. Convergent validity is the extent to which all measurement items are interconnected to measure their respective constructs. The Average Variance Extracted (AVE) can be used to calculate it. An AVE of at least 0.5 indicates that convergent validity has been established. Table (4) demonstrates the convergent validity of the study constructs.
Table (4): Construct convergent validity results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Food and beverage</th>
<th>Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Variance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extracted (AVE)</td>
<td>Extracted (AVE)</td>
</tr>
<tr>
<td>Attractive</td>
<td>0.625</td>
<td>0.705</td>
</tr>
<tr>
<td>Expertise</td>
<td>0.632</td>
<td>0.733</td>
</tr>
<tr>
<td>Image</td>
<td>0.628</td>
<td>0.702</td>
</tr>
<tr>
<td>Love</td>
<td>0.682</td>
<td>0.734</td>
</tr>
<tr>
<td>Trust</td>
<td>0.675</td>
<td>0.797</td>
</tr>
</tbody>
</table>

Table (4) shows that the Average Variance Extracted (AVE) for each construct is greater than 0.5 in both industries, confirming convergent validity. Discriminant validity assesses how effectively valid and reliable measurement items distinguish their construct from all other constructs in the same model (Hair et al., 2014). The Heterotrait-Monotrait (HTMT) correlation ratio can be used to confirm this. An HTMT value smaller than 0.85 indicates discriminant validity (Henseler, Ringle & Sarstedt, 2015). The results of discriminant validity for each construct using HTMT across the two industries are presented in Table (5).

According to Table (5), the (HTMT) ratio of correlations between each pair of constructs in the same model ranges from 0.542 to 0.743 in the food and beverage industry and from 0.574 to 0.821 in the telecommunications industry.

This validates the determination of discriminant validity. It is important to highlight that the measurement items gathered from the literature review were found to be both reliable and valid for assessing their respective constructs in both industries, and no eliminations were made to enhance the measurement model. Consequently, these measurements can be used in testing the structural model.
Table (5): Discriminant validity assessment results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Attractiveness</th>
<th>Expertise</th>
<th>Image</th>
<th>Love</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>0.542</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>0.586</td>
<td>0.743</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td>0.655</td>
<td>0.661</td>
<td>0.721</td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.683</td>
<td>0.657</td>
<td>0.636</td>
<td>0.582</td>
</tr>
</tbody>
</table>

8.3.2 Testing the Structural Model

The structural model can be tested in three steps. First, investigate multicollinearity among the exogenous factors. Then, examine the structural relationship among the variables in the study. Third, evaluate the model's predictive ability (Sarstedt et al., 2022). The multicollinearity problem arises from high correlations between exogenous variables, which undermine the independence assumption (Hair et al., 2014). The Variance Inflation Factor (VIF) between the exogenous variables is used to determine the presence of multicollinearity. A VIF of less than 3 for each pair of exogenous variables indicates the absence of a multicollinearity problem. Table 6 displays the VIF results for the two industries. According to Table (6), the Variance Inflation Factor (VIF) ranges from 1.358 to 1.537 in the food and beverage industry and from 1.497 to 1.709 in the telecommunications industry. It's worth emphasizing that brand love has only one predictor in both industries: image. As a result, its VIF is equal to 1.
Table (6): Multicollinearity Assessment

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Food and beverage</th>
<th>Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Image</td>
<td>Love</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>1.370</td>
<td>Love</td>
</tr>
<tr>
<td>Expertise</td>
<td>1.358</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>1.537</td>
<td></td>
</tr>
</tbody>
</table>

According to Garson and Kline, SEM with a single measure (observed variable) is also considered path analysis (Jenatabadi, 2015). Path analysis attempts to quantify the magnitude and importance of hypothesized relationships between sets of variables represented by path diagrams (Lleras, 2005).

![Diagram](image)

**Figure (2): Results for the food and beverage industry**
Evaluating Celebrity Endorsement's Impact on Brand love through Brand Image …Nermeen Elsaadany; Marwa El-Araby; Sayed Sharaf.

Figure (3): Results for the telecommunication industry

A path diagram is a diagram in which variables are identified, and arrows are drawn from one variable to another to imply theoretically based causal relationships (Stage, Carter & Nora, 2004). All parameters are calculated concurrently (David, 2018). Therefore, the path coefficients can be used to test the structural relationships in the conceptual model (Hair et al., 2014). Consequently, as shown in figure 2,3 and Table (7), the path coefficient result can be derived using a bootstrapping technique with 10,000 subsamples in each industry.

Table (7): Path coefficient results

<table>
<thead>
<tr>
<th>Path</th>
<th>β (beta)</th>
<th>T statistics</th>
<th>P values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1 Trustworthiness -&gt; Image</td>
<td>0.217</td>
<td>4.658</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H2 Attractiveness -&gt; Image</td>
<td>0.188</td>
<td>3.903</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H3 Expertise -&gt; Image</td>
<td>0.386</td>
<td>8.612</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H4 Image -&gt; Love</td>
<td>0.598</td>
<td>15.716</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>Telecommunications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1 Trustworthiness -&gt; Image</td>
<td>0.291</td>
<td>5.777</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H2 Attractiveness -&gt; Image</td>
<td>0.409</td>
<td>7.714</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H3 Expertise -&gt; Image</td>
<td>0.148</td>
<td>2.916</td>
<td>0.002</td>
<td>Support**</td>
</tr>
<tr>
<td>H4 Image -&gt; Love</td>
<td>0.722</td>
<td>24.496</td>
<td>0.000</td>
<td>Support***</td>
</tr>
</tbody>
</table>

*** Significance level 99.9%, p < 0.001. ** Significance level 99%, p < 0.01.
The results of hypothesis testing for the structural model are presented in Table (7). With a sample size of $N = 399$, the hypothesis testing results for the structural model support all four hypothesized relationships. The findings from hypothesis testing demonstrated a significant direct influence of celebrity endorsement trustworthiness, attractiveness, and expertise on brand image in both industries, as well as the direct impact of brand image on brand love in both industries.

### 8.3.3 Comparison Between the Food and Beverage Industry and the Telecommunication Industry

It is crucial to investigate the variations described above in both sets of data. The Measurement Invariance of Compositional Variables (MICOM) method is employed to examine the differences in paths between the two sectors, enabling the application of Partial Least Squares Multi-Group Analysis (PLS-MGA). The MICOM process comprises three steps, employing the permutation method with a sample size of 10,000 (Cheah et al., 2020; Henseler, Ringle & Marko, 2016). The first step establishes configurational invariance by ensuring minimal differences in each measurement item across both sectors, ensuring that all constructs use the same measurement items. The second step uncovers compositional invariance in the scores of the latent variables, except for a partial invariance related to celebrity endorsement expertise. Finally, the third step highlights potential significant differences in path coefficients between the two samples, as illustrated in Table (8).

#### Table (8): Path coefficient differences in PLS-MGA

<table>
<thead>
<tr>
<th>Path</th>
<th>Food group</th>
<th>Telecom group</th>
<th>Permutation results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Path difference 2.5% 97.5%</td>
</tr>
<tr>
<td>H1 Trustworthiness-&gt; Image</td>
<td>0.217</td>
<td>0.291</td>
<td>-0.074</td>
</tr>
<tr>
<td>H2 Attractiveness -&gt; Image</td>
<td>0.188</td>
<td>0.409</td>
<td>-0.220</td>
</tr>
<tr>
<td>H3 Expertise -&gt; Image</td>
<td>0.386</td>
<td>0.148</td>
<td>0.238</td>
</tr>
<tr>
<td>H4 Image -&gt; Love</td>
<td>0.598</td>
<td>0.722</td>
<td>-0.125</td>
</tr>
</tbody>
</table>

As shown in Table (8), the Trustworthiness impact of celebrity endorsement on brand image is similar in both telecommunications and food and beverage sectors at 95% confidence.
At 99% confidence, the attractiveness effect on brand image is significantly higher in telecom. Conversely, expertise effect on brand image is significantly lower in telecom at 99% confidence. Brand image's effect on brand love is notably higher in telecom at 95% confidence. This analysis assesses the model's overall predictive ability.

The general predictive ability of the model is evaluated using the coefficient of determination ($R^2$) (Hair et al., 2014) and confirmed using the PLS prediction approach (Hair, 2020; Shmueli et al., 2019). The coefficient of determination in this context signifies the change in the dependent variable when all of the independent variables change by one unit. An explanation factor of 0.25, 0.5, or 0.75 suggests weak, moderate, or strong predictive power, respectively (Hair et al., 2014).

Table (9): Predictive ability assessment

<table>
<thead>
<tr>
<th></th>
<th>Food &amp; beverage</th>
<th>Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td><strong>Measurement items</strong></td>
<td><strong>PLS-SEM_MAE</strong></td>
</tr>
<tr>
<td><strong>Brand image</strong></td>
<td>Image1</td>
<td>0.767</td>
</tr>
<tr>
<td>$R^2 = 0.409$</td>
<td>Image2</td>
<td>0.765</td>
</tr>
<tr>
<td></td>
<td>Image3</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>Image4</td>
<td>0.758</td>
</tr>
<tr>
<td><strong>Brand love</strong></td>
<td>Love1</td>
<td>0.691</td>
</tr>
<tr>
<td>$R^2 = 0.357$</td>
<td>Love2</td>
<td>0.821</td>
</tr>
<tr>
<td></td>
<td>Love3</td>
<td>0.725</td>
</tr>
<tr>
<td></td>
<td>Love4</td>
<td>0.8</td>
</tr>
</tbody>
</table>

**Telecommunications**

| **Brand image**     | Image1           | 0.676             | 0.657      | 0.019      | Partially confirm the moderate predictive power |
| $R^2 = 0.507$       | Image2           | 0.626             | 0.614      | 0.013      |            |
|                     | Image3           | 0.694             | 0.711      | -0.017     |            |
|                     | Image4           | 0.692             | 0.695      | -0.004     |            |
| **Brand love**      | Love1            | 0.652             | 0.636      | 0.016      | Moderate predictive power is not confirmed |
| $R^2 = 0.522$       | Love2            | 0.72              | 0.692      | 0.027      |            |
|                     | Love3            | 0.689             | 0.662      | 0.026      |            |
|                     | Love4            | 0.727             | 0.692      | 0.034      |            |
Additionally, the PLS prediction method was recently developed to confirm the predictive power of the PLS-SEM and Linear Regression Modelling by focusing on the Mean Absolute Errors (MAE) (LM). Therefore, when the MAE in PLS-SEM is lower than the LM in all main and minor items, the predictive capacity can be fully, partially, or weakly validated (Shmueli et al., 2019). Table (9) presents the structural model's predictive ability in both industries using 10 folds and 10 repetitions, respectively. Finally, as demonstrated in Table (9), the model can explain the change in brand image by 40.9% and 50.7% in the food and beverage and telecommunications industries, respectively. This moderate predictive power is somewhat confirmed by the PLS prediction approach. Similarly, in the food and beverage and telecommunications industries, 35.7% and 52.2% of brand love can be explained, respectively. These coefficients of moderate predictive power have been validated in the food and beverage industry but not in the telecommunications industry.

8.3.4 The Mediating Effect of Brand Image

The results of the mediating effect of brand image between celebrity endorsement dimensions and brand love in the two industries are presented in Table (10). The hypothesis testing of the structural model via partial least squares (PLS-SEM) results demonstrates support for all three hypothesized associations.

Table (10): Mediation results

<table>
<thead>
<tr>
<th>Path</th>
<th>βeta</th>
<th>T statistics</th>
<th>P values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5  Trust -&gt; Image -&gt; Love</td>
<td>0.030</td>
<td>4.396</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H6  Attractive -&gt; Image -&gt; Love</td>
<td>0.031</td>
<td>3.617</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H7  Expertise -&gt; Image -&gt; Love</td>
<td>0.032</td>
<td>7.245</td>
<td>0.000</td>
<td>Support***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Path</th>
<th>βeta</th>
<th>T statistics</th>
<th>P values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5  Trust -&gt; Image -&gt; Love</td>
<td>0.041</td>
<td>7.181</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H6  Attractive -&gt; Image -&gt; Love</td>
<td>0.038</td>
<td>5.528</td>
<td>0.000</td>
<td>Support***</td>
</tr>
<tr>
<td>H7  Expertise -&gt; Image -&gt; Love</td>
<td>0.038</td>
<td>2.852</td>
<td>0.002</td>
<td>Support**</td>
</tr>
</tbody>
</table>

*** Significance level 99.9%, p < 0.001. ** Significance level 99%, p < 0.01.
Utilizing brand image as a mediator, the findings of hypothesis testing indicate a significant indirect influence of celebrity endorsement trust, attractiveness, and expertise on brand love in both industries. Mediation can be either full or partial (Von Eye, Mun & Mair, 2009). According to Baron and Kenny (1986), full mediation (i.e., indirect-only mediation) is strongest when there is an indirect effect but no direct effect. Partial mediation occurs when there are both indirect and direct effects (Zhao, Lynch & Chen, 2010). Partial mediation can be either complementary or competitive. The indirect and direct effects of complementary mediation are both significant and point in the same direction. The indirect and direct effects of competitive mediation are both significant but point in opposite directions (Hair et al., 2021). Table 11 illustrates the type of brand image mediation role.

Table (11): Type of the mediation

<table>
<thead>
<tr>
<th>Path</th>
<th>indirect</th>
<th>direct</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food &amp; beverage sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5 Trust -&gt; Image -&gt; Love</td>
<td>0.167 (0.000) ***</td>
<td>0.223 (0.000) ***</td>
<td>Complementary partial mediation</td>
</tr>
<tr>
<td>H6 Attractive -&gt; Image -&gt; Love</td>
<td>0.119 (0.000) ***</td>
<td>0.191 (0.000) ***</td>
<td>Complementary partial mediation</td>
</tr>
<tr>
<td>H7 Expertise -&gt; Image -&gt; Love</td>
<td>0.060 (0.005) **</td>
<td>0.110 (0.012) ***</td>
<td>Complementary partial mediation</td>
</tr>
<tr>
<td><strong>Telecommunications sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5 Trust -&gt; Image -&gt; Love</td>
<td>0.074 (0.000) ***</td>
<td>0.241 (0.000) ***</td>
<td>Complementary partial mediation</td>
</tr>
<tr>
<td>H6 Attractive -&gt; Image -&gt; Love</td>
<td>0.063 (0.001) ***</td>
<td>0.086 (0.041) *</td>
<td>Complementary partial mediation</td>
</tr>
<tr>
<td>H7 Expertise -&gt; Image -&gt; Love</td>
<td>0.129 (0.000) ***</td>
<td>0.194 (0.000) ***</td>
<td>Complementary partial mediation</td>
</tr>
</tbody>
</table>

*** Significance level 99.9%, p < 0.001. ** Significance level 99%, p < 0.01.
*Significance level 95%, p < 0.05.
The brand image exhibits a significant complementary partial mediation effect on the relationship between trust and brand love, as shown in Table 11. Thus, both industries support this relationship (H5). Furthermore, brand image has a significant complementary partial mediation impact on attractiveness and brand love, indicating that this relationship (H6) is supported in both industries. Similarly, the brand image demonstrates a significant complementary partial mediation impact on the relationship between expertise and brand love, suggesting that this relationship (H7) is supported in both industries.

Since brand image serves as a partial mediator between celebrity endorsement dimensions and brand love. Consequently, the hypotheses (H5, H6, H7) are supported.

9. Discussion

The first finding of this study is that a celebrity endorser's trustworthiness has a positive impact on brand image. This implies that the higher the level of trustworthiness attributed to a celebrity endorser, the higher resulting brand image observed in advertisements for both food and beverage sector and telecommunications sector. Additionally, the findings highlight that the trustworthiness of celebrity endorsers exerts a more substantial influence on brand image within the telecommunications sector compared to the food and beverage sector. This can be justified as the trustworthiness of celebrity endorsers is critical in the telecommunications industry due to the complex nature of the services (Grove & Baumann, 2012), which consumers may rely on more with trustworthy endorsements. In addition, the telecom industry is often associated with sensitive information and data privacy. Trustworthy celebrity endorsers can assure consumers about the security and reliability of the services. So, students categorized celebrity endorsements as reliable, reputable, and desirable sources of information. This finding aligns with previous studies by Mettenheim and Wiedmann (2021) and Zakari, Dogbe & Asante (2019).

The second finding of this study is that the attractiveness of a celebrity endorser has a positive effect on brand image. This indicates that the higher the level of attractiveness of a celebrity endorser, the higher the level of brand image grows. The findings also highlight that the attractiveness of celebrity endorsers has a significantly greater impact on brand image in the telecommunications sector than in the food and beverage sector.
This suggests a preference among the students involved in this study for attractive celebrity endorsers in the telecommunications sector as opposed to the food and beverage sector. This implies that students believe a physically attractive, beautiful, elegant, and classy endorser is a key characteristic of a celebrity in the telecom sector. This preference may be due to the nature of products and services that are often associated with connectivity, communication, and being involved with the world. An attractive celebrity endorser may symbolize connectivity and social engagement, influencing brand image more profoundly in this sector. This finding is similar to prior research by Chan et al. (2021); Adiba, Suroso & Afif (2020); and Faizal, Naziman & Samat (2019).

The third finding of this study is that a celebrity endorser's expertise has a positive impact on brand image. It indicates that the more students perceive a celebrity as having experience as an endorser, the higher the level of brand image in both industries. The results reveal that most respondents believe that celebrity endorsers' expertise significantly influences brand image in the food and beverage sector more than in the telecommunications sector. The explanation for this result may be attributed to celebrity expertise in this area, such as nutrition skills or gourmet knowledge. It may be perceived as directly influencing the quality, taste, or healthiness of the products. Furthermore, considering that food is a fundamental aspect of daily life, this expertise could have a more pronounced effect on brand image.

It's worth noting that studies focusing on celebrity endorsement marketing campaigns that promote healthy dietary habits, like the consumption of vegetables, fruits, or water, especially targeting young consumers. They suggest that celebrity endorsement expertise can impact consumer behavior and attitudes, leading students to trust endorsers who are not only knowledgeable but also attractive. The current study's findings align with previous research by Chan et al., (2021); Adiba, Suroso, and Afif (2020); Alawadhi and Örs (2020). So, based on the previous results, this study demonstrates that celebrity endorsement dimensions have a positive impact on brand image in both sectors. These findings are consistent with Chan et al. (2021); Alawadhi, and Örs (2020); and Fitri (2018).

The fourth finding of this study indicates the positive impact of brand image on brand love in social media ads for both sectors. This suggests that a more favorable product image positively correlates with increased student's affection for the brand. Moreover, the study highlights that the impact of brand image on brand love is significantly
stronger in the telecommunications sector compared to the food and beverage sector. This could be due to the telecommunications industry being known for rapid technological innovation. A positive brand image can signify cutting-edge technology, leading to student's admiration and brand love. In contrast, the food and beverage industry may not be as closely associated with technological advancements. This indicates that, among the students in this study, the telecommunications industry holds greater importance in the development of brand love. These findings align with previous research by Wardhana (2021) and Cuong (2020), all of whom have identified a positive influence of brand image on brand love.

Additionally, this research identifies the vital role of brand image as a mediator between celebrity endorsement dimensions and brand love in both sectors, this aligns with (Yawar & Ghafar, 2021; Chan et al., 2021; Fitriani & Achmad, 2021; Wardhana, 2021). In the food and beverage sector, expertise is the most significant factor in the mediation effect of Brand Image, followed by attractiveness and trustworthiness. This suggests that students prefer celebrities with expertise in this industry due to health-related considerations, followed by those with attractive qualities, and they value the honesty of celebrities endorsing the brand. In contrast, in the telecommunications industry, trustworthiness emerges as the most significant factor in the mediation effect of brand image, followed by attractiveness and expertise. This reflects a preference for trustworthy celebrities in this sector, followed by those with attractive qualities, and consideration of the celebrity's qualifications when endorsing a brand.

10. Research Implications
10.1 Theoretical Implications

The findings of the study carry substantial theoretical implications, notably within the framework of comprehending brand image and brand love when viewed through the viewpoint of celebrity endorsement dimensions, where brand image serves as a mediator. Brand love has evolved into a central focus for marketing researchers and brand managers (Cuong, 2020), and this study enriches our understanding of how celebrity endorsement dimensions can exert influence in this domain. Additionally, the theoretical implications of this study are multifaceted. Firstly, it offers an enhanced understanding of celebrity endorsement dimensions that have been prevalent in recent years.
It introduces a novel model, crafted from the researcher's perspective, to establish connections between two variables. This innovative approach provides a new perspective for examining the complex relationship between celebrity endorsement dimensions and brand love. Additionally, the study contributes to the validation of Celebrity Endorsement Theories. By empirically testing and confirming the applicability of these theories in the contemporary landscape, it adds a layer of support and credibility to existing conceptual frameworks.

10.2 Empirical Implications

The study's findings provide valuable managerial insights applicable to companies, marketers, and higher education institutions. By shedding light on the positive influence of various dimensions of celebrity endorsers on brand image in social media advertisements related to the food and beverage and telecommunications industry, businesses hold to make informed decisions when selecting celebrity attributes for their campaigns. Key dimensions, such as trustworthiness, attractiveness, and expertise, become key points for companies operating in these sectors, enabling the formulation of industry-specific marketing strategies that align seamlessly with the preferences and perceptions of their target audience. Furthermore, companies can explore collaborations with local celebrities who possess the ability to shape the perceptions of young consumers, thereby influencing their emotions toward brands. It is crucial to acknowledge that the significance of specific celebrity characteristics may vary between industries, prompting marketers to prioritize attributes that carry the most value within each sector. Finally, This study not only provides valuable insights for developing marketing strategies but also offers practical guidance for executing social media campaigns. By understanding how to enhance customer perceptions (brand image) and inspire emotions (brand love), marketers and practitioners can optimize their approaches for greater impact in the dynamic landscape of social media.

11. Recommendations

Based on the information provided earlier, it is evident that students from Cairo and Port Said universities are influenced by celebrity endorsements in advertisements, and this can have a positive impact on brand image and brand love.
However, as the market becomes more saturated with celebrity endorsement advertising, it is important for businesses to explore new strategies to maintain and enhance their brand image and brand love. Here are some recommendations for marketers to consider:

11.1 The research findings highlight the significance of celebrity endorsements in advertising. Therefore, organizations should continue to leverage celebrity endorsements in their advertising campaigns.

11.2 To maximize the credibility and effectiveness of advertisements, marketers should carefully select celebrity endorsers whose public image aligns with the attributes of the endorsed product. These celebrities should be perceived as experts, attractive, and trustworthy users of the product by the target consumers.

11.3 Marketers should make strategic decisions when choosing celebrities to endorse their brands. The selected celebrity should not only possess trustworthiness, attractiveness, and expertise but also have a deep understanding of the preferences and cultures of student consumers.

11.4 It is crucial for marketers to ensure that the chosen celebrity is not only well-educated but also perceived as attractive and trustworthy with regard to the endorsed product. This consistency will boost the credibility of the advertisements. The study’s findings emphasize the significant impact of celebrity trustworthiness, attractiveness, and expertise on student consumers.

11.5 Selecting the right celebrity for brand endorsements can provide businesses with a significant advantage in the competitive market. Marketers should invest time and resources in identifying the perfect celebrity who can effectively Transmit the brand message and connect with the target audience.

12. Limitations & Future Research

This study has certain limitations that should be considered as valuable recommendations for future research. Firstly, the sample size for this study is limited to students in higher education institutions. It is advisable to conduct additional research involving different consumer groups, such as teenagers, to gain a broader perspective.
Secondly, the study focuses on two specific industries: food and beverage, and telecommunications. It is recommended to apply the study model to other sectors to assess its applicability. Thirdly, this study relies on a non-probability convenience sample; therefore, the results cannot be generalized. It is recommended to use a probability sample to enhance the generalizability of the findings. Fourthly, this study uses the brand image as a mediation variable. It is suggested to explore the use of other variables, such as emotional appeal, credibility, social influence, and celebrity-brand congruence, to provide a more comprehensive understanding of the celebrity endorsement's impact. Finally, this study was conducted at Port Said and Cairo universities. It is advisable to replicate the study model in other universities to assess the consistency and validity of the findings in different educational settings.
13. References:


Evaluating Celebrity Endorsement's Impact on Brand love through Brand Image …Nermeen Elsaadany; Marwa El-Araby; Sayed Sharaf.


Evaluating Celebrity Endorsement's Impact on Brand love through Brand Image …Nermeen Elsaadany; Marwa El-Araby; Sayed Sharaf.


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global brand equity. *Journal of Retailing and Consumer Services, 54*, 102012.

### Appendix:

**Table AI. Scale items**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trustworthiness</strong></td>
<td>I think the advertisement with a trustworthy celebrity endorser receives less negative recalls.</td>
</tr>
<tr>
<td></td>
<td>I feel that an advertisement with a trustworthy endorser pushes me to remember that advertisement and the product that is being endorsed.</td>
</tr>
<tr>
<td></td>
<td>I think that a brand endorsed by a trustworthy celebrity is more respectable and desirable.</td>
</tr>
<tr>
<td><strong>Attractiveness</strong></td>
<td>I prefer to watch advertisements with a physically attractive (beautiful, elegant, classy) endorser sector.</td>
</tr>
<tr>
<td></td>
<td>I think that attractiveness is an important characteristic for celebrity endorser.</td>
</tr>
<tr>
<td></td>
<td>I remember a brand that is endorsed by an attractive celebrity more especially in the context of Food &amp; beverage and Telecommunications.</td>
</tr>
<tr>
<td><strong>Expertise</strong></td>
<td>I think an advertisement with a celebrity endorser who has expertise (skilled, qualified, knowledgeable, experienced) is more respectable.</td>
</tr>
<tr>
<td></td>
<td>I pay more attention to advertisements using a celebrity with expertise.</td>
</tr>
<tr>
<td></td>
<td>I think a brand being endorsed by a celebrity with expertise is more trustworthy.</td>
</tr>
<tr>
<td><strong>Brand image</strong></td>
<td>A celebrity-endorsed brand is reliable.</td>
</tr>
<tr>
<td></td>
<td>A celebrity-endorsed brand is attractive.</td>
</tr>
<tr>
<td></td>
<td>A celebrity-endorsed brand is pleasing.</td>
</tr>
<tr>
<td></td>
<td>A celebrity-endorsed brand has a good reputation.</td>
</tr>
<tr>
<td><strong>Brand love</strong></td>
<td>A celebrity-endorsed brand is totally awesome.</td>
</tr>
<tr>
<td></td>
<td>I’m very attached to a celebrity-endorsed brand.</td>
</tr>
<tr>
<td></td>
<td>I love a celebrity-endorsed brand.</td>
</tr>
<tr>
<td></td>
<td>I am passionate about a celebrity-endorsed brand.</td>
</tr>
</tbody>
</table>