

**The Effect of Traditional vs. Neoteric Celebrity Sustainable Brand Messages on
Environmental Self-Identity: an Application of Self-Congruence Theory**

Master thesis

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Abstract

Climate change has been an issue for decades. Sustainability becomes unprecedentedly important. Customers and brands are eager to become more environmentally friendly. Celebrities and influencers are used to convey sustainable messages for the brands. However, do the types of celebrity impact consumer attitudes toward the brand (AttB), buying intentions (BI), and electronic word of mouth (eWOM) differently? This study examines the relationships between sustainability messages promoted by the brand only or traditional celebrities or influencers. The relationship is mediated by the perceived congruence with people's environmental self-identity (ESI) and moderated by green advertising scepticism (GAS) on the AttB, BI, and eWOM. The online survey with a single factor between-subject design received 155 valid observations. This study conducted one-way ANOVA, independent sample t-test, mediation, and moderating analyses to test the hypothesis while confirming the model assumptions. Main findings are: (a) Celebrity endorsements have a pronounced impact on BI. (b) The ESI congruence between customers and traditional celebrities leads to greater AttB and eWOM. (c) GAS does not always negatively influence AttB and BI since it could be associated with greater AttB and eWOM, demonstrating that customers are well-informed and knowledgeable about environmental statements. The outcomes complement the existing literature with a diverse understanding of celebrity endorsement, GAS, and the critical role of customers' ESI congruence with green advertising.

Keywords: sustainability, environmental self-identity, celebrity endorsement, advertising effects

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Introduction

Climate change has been an issue for decades. King (2023) provides an overview of the current global warming effect, stating that the average global temperature 2022 was approximately 1.15C higher than the 1850-1900 average, primarily due to human-caused greenhouse gas emissions. In addition to this long-existing climate issue, recent studies have found that the COVID-19 pandemic has further strengthened people's awareness of the environment, and consumers and industries worldwide are more concerned about climate change than ever (Severo et al., 2021; Statista, 2022).

Many solutions have emerged to address the pressing issue of climate change. Concepts such as sustainable production, biological products, and a green lifestyle have gained popularity among consumers in highly developed societies. In 2018, the EU released the official plastics strategy to combat the usage of single-use plastics by citizens (European Commission, n.d.). The appeal of being more sustainable has become dominant in today's society (Dunlap et al., 2000). People now strive for material desires while also wanting to care for the environment. Numerous studies have explored individuals' environmentally friendly behaviours (Kollmuss & Agyeman, 2002; Steg et al., 2005; Lindenberg & Steg, 2007; Peattie & Collins, 2009; Ibtissem, 2010; Johnstone & Lindh, 2018; Kadic-Maglajlic et al., 2019; Yang et al., 2021). Recent studies have identified environmental self-identity (ESI) as a crucial factor in driving environmentally friendly behaviours (Van der Werff et al., 2013a; Van der Werff et al., 2013b). It has been widely used in various environmental studies (Čapienė et al., 2021; Qasim et al., 2019; Trager & Drozd, 2019).

A comprehensive definition of ESI is "the extent to which you see yourself as a type of person who acts environmentally friendly" (Van der Werff et al., 2013a, p.56). It means having a solid connection to being environmentally conscious, signaling that a person

recognizes themselves as pro-environmental, encompassing their perspective and actions (Kuswati et al., 2021). Feeling responsible for acting environmentally friendly helps link a person's ESI with their pro-environmental actions (Van der Werff et al., 2013b). When consumers choose brands and products, they adopt them to portray themselves, mirror their identities, or locate their sense of belonging in modern socialization (Sirgy, 1982; Sirgy et al., 2008; Belanche et al., 2021). The self-congruence theory explains this relationship, in which consumers are more likely to choose brands and products that show strong congruence with them (Ahn et al., 2013). Consumers' self-identities and values link them to brands and products; in turn, those selected brands and products with desirable attributes also strengthen their identities and values (Cătălin & Andreea, 2014). Accordingly, a consumer with a high ESI will pay more attention to brands and products that share environmentally friendly spirits. Nevertheless, there is still a need for further exploration of knowledge regarding environmental self-identity and its connections to other constructs in environmental psychology, as highlighted by Van der Werff et al. (2013a). The recent developed scales are the revised Environmental Identity scale, which consists of 14 items to measure people's environmental identity by Clayton et al. (2021). And Kuswati et al. (2021) developed the pro-environmental self-identity scale, which has six items to study people's pro-environmental self-identity in the context of sustainable consumption behaviours. Its scope is thus closer to the study.

Technological development has empowered users to access and contribute content to and from website pages, enhancing the interactivity, dynamism, and abundance of the internet (Murugesan, 2007). This advancement not only allows users to enjoy a richer and more responsive interface but also fosters connectedness, productivity, and creativity in establishing social networks through online collaboration and communication on a global scale (Murugesan, 2007; Andriole, 2010). The economic impact of the digital market in the

Netherlands is substantial. As of 2019, approximately 88 percent, or 12.8 million, of Dutch individuals aged 13 and above were active users of Facebook (Statista, 2020). Moreover, in 2022, advertisers invested over 3.5 billion euros in digital advertisements in the Netherlands (Deloitte et al. Limited, n.d.)

Due to technological developments in the 21st century, all kinds of media penetrate people's daily lives, accelerating information exchange (Genner & Süß, 2017). This transformation has also impacted how brands approach advertising, including celebrity endorsement. Brands now consider a broader spectrum of influencers beyond traditional celebrities, primarily associated with traditional media such as newspapers, magazines, radio, and television (Kowalczyk & Pounders, 2016). While traditional celebrities are still chosen as brand representatives due to their established reputation and exposure, Han and Xu (2020) argue that platform-wise, the influence of traditional media on pro-environmental persuasion is diminishing, with social media proving more effective in the contemporary media landscape. According to Kotler et al. (2016), social media serves as a source of personal entertainment within virtual communities and a valuable marketing channel for brands to connect with customers. Digital communities, defined by users themselves, are now considered marketing niches (Kotler et al., 2016). If a brand's appeal aligns with a community's preferences, it significantly reduces the barrier to connecting with customers through advertising.

Due to the convenience of creating, sharing, and interacting on social media, individuals have acquired the skills and mechanisms to form communities with like-minded users, often referred to as influencers or neoteric celebrities in this study (Jansom & Pongsakornrunsilp, 2021). Neoteric celebrities project compelling images of attractive attributes, including integrity, enthusiasm, connectivity, centrality, and lifestyle, cultivated through charisma and aesthetics (Bakshy et al., 2011). It allows them to shape audiences'

perspectives and affect their behaviours. Scholars have acknowledged the role of neoteric celebrities in digital marketing, and several environmental studies have targeted them as dominant channels of influencing audiences' behaviours (McKeown & Shearer, 2019; Wilde & Parry, 2022; Jacobson & Harrison, 2022). For practitioners, social media's richness and neoteric celebrities' influence inspire brands to prioritize human-centered advertising and marketing (Kotler et al., 2016).

Ahmadi and Ieamsom (2022) claim that neoteric celebrities are more effective on Instagram brand advertising than traditional ones. A possible explanation is that celebrities in traditional advertising are interpreted as less reliable due to people's scepticism (Obermiller & Spangenberg, 1998). Moreover, because the popularity of neoteric celebrities can be visualized with high numbers of followers on social media, they tend to be perceived as more likeable (De Veirman et al., 2017). Several studies have shown the benefits of cooperating with neoteric celebrities to persuade people (Han & Xu, 2020; Waqas et al., 2020; Belanche et al., 2021; Ahmadi & Ieamsom, 2022).

However, De Veirman et al. (2017) have concluded that collaborating with neoteric celebrities with high follower counts can threaten brands. A brand may risk losing its uniqueness and identity when neoteric celebrities collaborate with numerous other brands. Consequently, gaining a better understanding of the comparative effectiveness of traditional and neoteric celebrities in shaping people's identities in environmental messages would benefit scholars and practitioners. Despite the growing importance of ESI in consumer behaviour, the comparative influence of traditional versus neoteric celebrities in sustainable branding remains underexplored. The number of studies that try to compare or discuss traditional and neoteric celebrities is low (Han & Xu, 2020; Schouten et al., 2021; Ahmadi & Ieamsom, 2022), not to mention in the environmental research field.

In sum, this study investigates the influence of the brand-only or celebrity endorsed sustainability messages on customer's AttB, BI, and eWOM, with implications for both theory and practice. Furthermore, the results may provide practical suggestions by analyzing the differences between traditional and neoteric celebrities in advertising persuasion.

Literature Review

Celebrity Endorsement: Introduced by the Two-Step Flow Theory

The two-step flow model was first developed by Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet in the USA in the 1940s (Lazarsfeld et al., 1968). They investigated American voters' decision-making during presidential elections. Then, they noticed that some individuals who actively discussed and were involved in the issue had a notable impact on other's opinions. Those informational individuals served as message stations to people around them, so the message flow originally sent from media would pass through them and arrive at their social peers. Katz and Roper (2017) thus stated that interpersonal relations held a vital position in the communication process. The influence of these individuals is not necessarily driven by the upper echelons of the community or inherited privilege. Instead, their fundamental role as a link that connects the community is the primary reason (Nisbet & Kotcher, 2009).

Accordingly, traditional and neoteric celebrities can be seen as informational individuals when applying the two-step flow model to the current digitalized society. Their media message has a leading effect on people's opinions (Choi, 2015). Although the two-step flow model might be old, it still holds explanatory power in the social media context (Choi, 2015). Waqas et al. (2020) found a direct relationship between celebrity endorsement and green consumer buying behaviour. The findings confirm Ford's (2018) concept that celebrity endorsement can effectively increase "advertisement credibility and liking as well as brand image, awareness, and purchase behaviour" (p.1). Celebrity endorsement is often based on followers' admiration, association, and aspiration for those famous individuals (Djafarova & Trofimenko, 2019).

Consequently, followers are more likely to seek celebrity's opinions, suggestions, and recommendations during decision-making (Casaló et al., 2020; Belanche et al., 2021). In turn, opinion leaders' social impact is generated by having their messages shared and spread by others. Nowadays, brands inviting traditional and neoteric celebrities to launch advertising messages are prevalent, and users are often exposed to branding messages online. On the other hand, along with the growth of environmental claims, the tension of scepticism related to environmental claims is growing (Do Paço & Reis, 2016). Recent studies have found that people's green advertising scepticism (GAS) negatively moderates the relationship between celebrity endorsements and consumer responses, affecting the acceptance of sustainable brand messages (Sheehan & Atkinson, 2012; Huang & Darmayanti, 2014; Matthes & Wonneberger, 2014). The higher the green advertising scepticism a person has, the higher the chance to interpret environmental claims as more untrustworthy, reducing their buying intentions (De Sio et al., 2022). Hence, celebrity endorsements, particularly in environmental claims, are pivotal in shaping consumer behaviour and brand perception.

Traditional Celebrity Endorsement

Traditional celebrity means an individual initially becomes outstanding through traditional media such as TV, radio, or magazines (Bruhn et al., 2012), such as movie stars, singers, musicians, athletes, comedians, politicians, writers, and models (Djafarova & Rushworth, 2017; Hess et al., 2022). Traditional celebrities have significantly influenced pop culture and trends (Nouri, 2018). They cultivate followers' attachment through their professional talents and unique charm; simultaneously, they establish credibility in followers' opinions. Notably, the high perceived credibility in people's minds gives traditional celebrities another character to play: the reference group (Djafarova & Rushworth, 2017). Generally, a reference group is "a person or group of people that significantly influence an individual's behaviour" (Bearden & Etzel, 1982, p.182), such as individuals' purchasing

decision-making (Schiffman et al., 2013). While the reference group may lack formal expertise, the perceived skills are concrete enough for followers to recognize (Bearden & Etzel, 1982).

Consequently, these traditional celebrities attract brands to collaborate with because of their established exposure, enchantment, and opinion-leading. Through collaboration, their positive qualities can be merged and benefit the brands (Escalas & Bettman, 2017; Hess et al., 2022). Escalas and Bettman (2017) posit that consumers are motivated by their need for a sense of belonging. They create and display their self-identity by using brand associations with celebrity endorsements. Hence, traditional celebrities are considered role models to the audience and are seen as helpful brand partners.

Neoteric Celebrity Endorsement

The technical era produces a new type of celebrity called influencers, named neoteric celebrities in this study. In contrast with traditional celebrities, influencers are often seen as a new division of reference groups. Belanche et al. (2021) discern the role of influencers as "somewhere between celebrities and friends, that has emerged with the growth of social media opportunities" (p.187). Initially, influencers used to be regular social media users. Ultimately, they foster a community with other users who follow them because of their convincing story-telling skills and pleasant aesthetics in fashion, wellness, hobbies, and lifestyles (Tafesse & Wood, 2021; Jun & Yi, 2020; Baker, 2022). When influencers earn a reputation by producing personal content, they also co-create commercial advertisements with brands to generate revenue (Abidin, 2015). Jin and Muqaddam (2019) tested the effects of brand-based and influencers-featured advertisements, indicating that customers show higher credibility and positive attitudes toward influencers-featured posts than only brand-based ones. Findings of a marketing study focusing on followers' reactions to influencers' Instagram posts by Belanche et al. (2021) also suggest that influencers' featured

advertisement enhances users' motivation to search for more information about the promoted product. This new way of advertising allows influencers to embed the trend of digitalization and the spirit of human-centered marketing.

Traditional vs. Neoteric Media Endorsement

Due to the transition from traditional media to social media, the influence of traditional celebrities may be somewhat diminished compared to neoteric celebrities (Han & Xu, 2020; Schouten et al., 2021; Ahmadi & Ieamsom, 2022). Regarding the media platform, in a China-based study, Han and Xu (2020) assert that the impact of traditional media on environmental persuasion is shrinking. Instead, social media takes a notable lead in pro-environmental communication. Their results show that social media has a more considerable influence on people's environmental risk perception and willingness to dedicate themselves to the environment, and traditional media barely affects people's pro-environmental behaviour. However, they also point out that even though academia has gradually acknowledged the impact of various media on ecological behaviour, few works have inspected traditional media and social media in the same context. Schouten et al. (2021) present a study comparing traditional vs. neoteric endorsements in advertising, showing that participants can identify more with neoteric celebrities than with traditional celebrities, feel more related to neoteric celebrities than to traditional celebrities, and count on neoteric celebrities more than traditional celebrities. However, they do not observe a direct positive effect between traditional or neoteric endorsements on attitudes. In other words, despite participants' purchasing intentions being stimulated more by neoteric endorsements, they do not especially fancy an advertisement with either traditional or neoteric endorsements. Ahmadi and Ieamsom (2022) investigated the impact of the congruence between traditional and neoteric celebrities endorsing products within a fashion marketing campaign on user engagement. Female participants were systematically assigned to either the traditional or

neoteric celebrity endorsement conditions. Ultimately, the results of the study revealed that users' intentions to share or like the campaign message are more determined by neoteric celebrity-product fit, not the traditional celebrity one. They claim that users feel closer and more similar to neoteric celebrities, which aligns with findings from Schouten et al. (2021) and Belanche et al. (2021).

The Role of Congruence and ESI

Based on the existing works (Bruhn et al., 2012; Schouten et al., 2021; Ahmadi & Ieamson, 2022), the study gets a broad picture that neoteric celebrity endorsement takes the lead in influencing consumer behaviours through brand advertising and traditional celebrity endorsement may seem diminished. However, studies also show that the influence of celebrity endorsements is further mediated by the consumer's congruence regarding the brand and the advertisement (Belanche et al., 2021; Xu and Pratt (2018). Hence, it is pressing and valuable to examine the relationships between different types of advertising (brand-only/traditional endorsed/neoteric endorsed) and the advertising effects via customers' congruence.

The Self-Congruence theory

Self-congruence is a further construct based on the idea of self-concept (Xu & Pratt, 2018). Epstein (1973) posited that self-concept can be better viewed as a theory. Individuals unconsciously strive to construct themselves as experts, shaping their self-concept through significant experiences gained from interacting with the world around them (Epstein, 1973; Gecas, 1982). The self-congruence theory refers to the degree of match and mismatch between the consumer's self-concept and what the brand offers (Sirgy, 1982; Plewa & Palmer, 2014). Many studies found that self-congruence is crucial in predicting consumer behaviours, such as advertising effectiveness and brand preference (Bjerke & Polegato, 2006;

Islam et al., 2019; Belanche et al., 2021). In celebrity endorsement research, Xu and Pratt (2018) examined the impact of congruence between endorsers and potential tourists to assess endorsement effectiveness using self-congruity theory. The findings indicated that alignment between neoteric celebrity endorsement and individuals' self-concept had a positive influence on their decision-making regarding the endorsed message. Therefore, this study expects that if the congruence between the individuals and the celebrity branding messages is high, individuals are more likely to be positive toward the endorsement.

Consequently, based on the findings, celebrity endorsement positively affects consumers' purchasing intentions (Casaló et al., 2020; Waqas et al., 2020; Belanche et al., 2021). In addition, the effect varies due to different types of celebrity endorsement (Han & Xu, 2020; Schouten et al., 2021; Ahmadi & Ieamsom, 2022). Moreover, consumers' congruence between their identities and the endorsers positively affects their buying intentions (Belanche et al., 2021). Therefore, this study assumes that the congruence between the participants' ESI and the assigned celebrity endorsement mediates the relationship between celebrity endorsement and AttB, BI, and eWOM.

Environmental Self-Identity

Studying self-identity clarifies the complexity of human behaviours (Sparks & Shepherd, 1992). An explanation by Cook et al. (2002) interprets self-identity as a label people use to describe themselves. Scholars commonly accept this explanation (Schuitema et al., 2013; Van der Werff et al., 2013a; Yazdanpanah & Forouzani, 2015; Wang et al., 2021). Self-identity in the environmental domain is often formulated as Environmental Self-Identity. A person with a high ESI will actively credit sustainable actions or products with environmental-friendliness and blend them into their self-identities and lifestyles (Dermody et al., 2018). Multitude works have proven the significance of ESI in predicting pro-

environmental behaviours (Trager & Drozd, 2019; Whitmarsh & O'Neill, 2010; Ajibade & Boateng, 2021; Bouman et al., 2021; Wang et al., 2021). Moreover, effectiveness remains independent of individual or group level (Udall et al., 2021; Arias et al., 2021).

Following Van der Werff et al. (2013a), the results of their studies consistently support that ESI mediates the relationship between values, preferences, intentions, and behaviours. For decades, identity theorists have concentrated on how identities relate to one another and how identities relate to role performance, feelings, health, self-concept, and social structure (Stets & Serpe, 2013). Kuswati et al. (2021) developed the Pro-Environmental Self-Identity scale in the context of sustainable consumer behaviour. Their study conceptualizes pro-environmental self-Identity as "a unique eco-friendly self-concept, symbolically expressed and shaped by sociocultural forces as the main dimension" (p.176). Their finding shows strong validity and reliability to all the indicators for measuring pro-environmental self-identity. In addition, pro-environmental self-identity is close to ESI. Hence, the scale implies to be a proper measurement to use for this study.

Environmental Self-identity and Digital Brand Marketing/Advertising

Kotler et al. (2016) announced the concept of Marketing 4.0 to respond to the digital economy in which customers become mobile and connected. Marketing 4.0 emphasizes integrating online and off-line interplay between brands and customers, manifesting the brand's substance, character, and vision to gain customer engagement (Kotler et al., 2016).

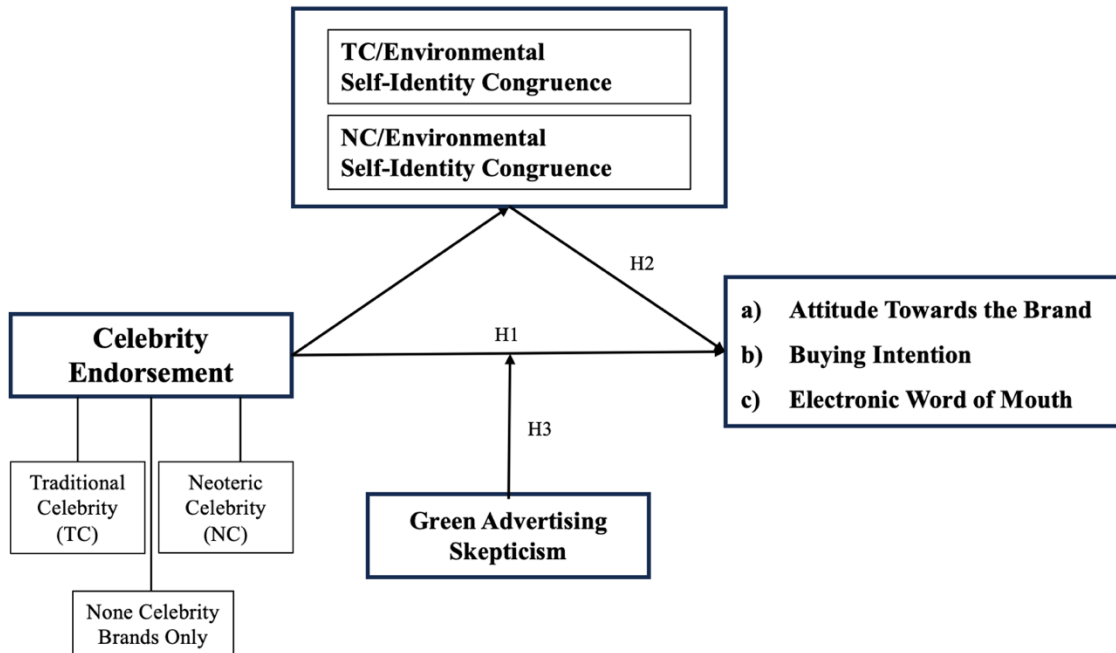
The interplay between ESI and digital brand marketing is a key to sustainable consumer behaviours, as shown by multiple studies (Khare, 2015; Soron, 2010; Confente et al., 2020). Khare (2015) proposes that green self-identity significantly influences consumers' intentions to buy green products. She suggests that a green branding strategy should focus on building connections with consumers' environmental identities, values, and beliefs. Brands

need to concretize the bonds with consumers by conveying shared spirits. Similarly, Soron (2010) claims that advertising no longer mainly emphasizes the product itself, instead adding more human and social qualities to visualize the "extended selves" of consumers (p.179). Several sustainable attributes, such as connectedness to nature and pro-environmental engagement, have become popular appeals in brandings. Confente et al. (2020) also discovered that together, a high green self-identity and personal values lead to higher behavioural intentions to buy green products. However, the level of green advertising scepticism could also negatively moderate the relationship between green advertising and AttB, BI, and eWOM.

Framework and Hypothesis Listing

Figure 1

Theoretical Framework



Hypothesis

H1a. A sustainability brand message endorsed by a celebrity will have a stronger positive direct effect on people's attitude towards the brand, buying intentions, and electronic word-of-mouth, compared to a brand-only sustainability message.

H1b. A sustainability brand message endorsed by a neoteric celebrity will have a stronger positive direct effect on people's attitude towards the brand, buying intentions, and electronic word-of-mouth, compared to a brand sustainability message endorsed by a traditional celebrity.

H2a. Celebrity-endorsed sustainability brand messages will lead to a stronger positive mediation effect on people's attitude towards the brand, buying intentions, and electronic word-of-mouth, by the perceived congruence with people's Environmental Self-Identity than a sustainability brand message promoted by the brand only.

H2b. A sustainability brand message endorsed by a neoteric celebrity is expected to have a more pronounced positive mediation effect on people's attitudes toward the brand, buying intentions, and electronic word-of-mouth. This effect is attributed to the higher perceived congruence with individuals' Environmental Self-Identity, in contrast to a sustainability brand message endorsed by a traditional celebrity.

H3. A stronger level of green advertising scepticism will negatively affect brand sustainability messages to people's attitudes towards the brand, buying intentions, and electronic word-of-mouth.

Method

Research Design

This quantitative research aims to test the impact of sustainable brand messages from different types of celebrities (traditional vs. neoteric) by studying the congruence between people's ESI and the assigned celebrity. Therefore, the study created an experiment with a single factor between-subject design. Each participant received only one treatment. The study randomly assigned people to different groups to compare how those in one group behaved with everyone else in another group. This helps the study figure out cause-and-effect relationships (Charness & Kuhn, 2012). The experiment featured three distinct groups: those exposed to traditional celebrity endorsements, neoteric celebrity endorsements, and a control group with brand-only messaging. The experiment was mainly conducted at the University of Twente in the Netherlands.

Pre-tests were conducted to select representative celebrities and to refine the clarity and impact of the sustainable branding messages. Eventually, Taylor Swift was chosen to represent the traditional celebrity, and MrBeast represented the neoteric celebrity (see the ranking results in Appendix A). The green advertisement from HEINZ, the American food processing company, was chosen. Some minor adjustments were made to fit the study context.

Firstly, the study presented a brief introduction about ESI to participants. Hence, they had a basic understanding of ESI. Then, the Pro-Environmental Self-Identity scale, consisting of six items developed by Kuswati et al. (2021), was used to measure participants' ESI. After the ESI construct, participants were randomly assigned to one of the three groups to control for order bias because randomizing the order of the items could prevent order bias from occurring (Bhat, n.d.). To measure the congruence, the study asked the participants to what

extent the message aligned with their ESI in the two celebrity-endorsed groups. Moreover, how much do they feel identified with the endorser? Lastly, the study inquired participants about their AttB, BI, and eWOM after reading the brand message in three groups.

Pre-test

To adopt a between-subject design, different treatment for groups is needed (Charness & Kuhn, 2012). In this study, treatments are the three brand advertising messages with the traditional or neoteric celebrity or brands-only. To ensure the validity of the experiment, which celebrities the study chose mattered. Therefore, the study conducted pre-tests before the official investigation. Furthermore, to ensure the participants could clearly recognize the sustainable branding message, the design of the brand messages was also examined in the pre-test.

The First Pre-test: Selections of the Celebrity, Items and Advertisement

In the beginning, the researcher came up with a list of eight celebrities regarding the researcher's experiences and the number of followers of the celebrities on Instagram. Instagram is considered one of the most suitable platforms for digital marketing (Haenlein et al., 2020). Also, its users were reported to have higher social interaction motives and connectivity than users on text-based platforms by Blight et al. (2017). Therefore, the number of followers on Instagram could be a valuable indicator of celebrities' popularity (De Veirman et al., 2017).

To prevent gender bias from occurring, the proposed celebrities of both types had an equal number of males and females. In the traditional celebrity type, a male American actor named Leonardo Wilhelm DiCaprio, a male Portuguese professional footballer named Cristiano Ronaldo, and two female American singers named Selena Gomez and Taylor Alison Swift were chosen. On the other hand, for the neoteric celebrity, a male American

YouTuber called MrBeast, a male Swedish YouTuber called PewDiePie, a female English entrepreneur/YouTuber called Zoella, and an Italian entrepreneur/fashion influencer named Chiara Ferragni were chosen. Using the pre-test could help us target which two celebrities represent the traditional and neoteric celebrities in the official experiment.

Meanwhile, the choice of advertisement was embedded in the pre-test, too. The study asked whether the advertisement from HEINZ conveys a clear sustainability message and is easy to read and whether they consider HEINZ a good brand. Also, the celebrity-endorsed version was shown. Participants were asked to answer whether the design felt natural and credible.

Results

The research had 12 valid observations in the pre-test. Firstly, they ranked the proposed celebrities based on perceived popularity. Then, participants were asked to read this description: People with a strong environmental self-identity perceive themselves as being environmentally friendly. They actively associate sustainable actions or products with being eco-friendly and integrate them into their identities and lifestyles. Participants then answered whether this description was easy to understand in a 7-point Likert scale. The mean score was 5.9, indicating the ease of reading. The study also examined the original ESI scale by Kuswati et al. (2021) to ensure the ease of comprehending the items. The mean score was 6.1, showing the simplicity of understanding the scale. However, the study received some textual feedback about how to improve the wording. Therefore, some minor wording adjustments were made.

As for the advertisement part, the mean score for ease of reading and comprehension is around 4.9 to 5.4 out of seven, which is satisfactory. However, the design of the endorsed

version could have been better. The mean scores were around 2.3 to 3 out of seven, indicating a concern. Therefore, the researcher picked another HEINZ advertisement and changed the design based on the textual feedback from the pre-test (see pre-test materials in Appendix B).

The Second Pre-test: the Celebrity Endorsed Design

After the first pre-test, the study tried to improve our visualization of the treatment. When selecting the brand message template, the main concern was to keep it simple and easy to comprehend. Hence, participants could follow the survey without needing clarification on the instructions. The researcher found another advertisement template initially released by HEINZ, using the keyword sustainable advertising. The research changed the design based on the textual feedback from the pre-test.

Figure 2

The original advertisement



Notes. Waite, J. (2019). Heinz Ad Project [Image]. JAKE WAITE CREATIVE.

<https://jacobwaite.com/heinz-ad-project>

Figure 3

The traditional celebrity-endorsed design

PLANT ONE ON EVERY TABLE



Introducing Heinz® Ketchup in new PlantBottle™ packaging.

Heinz is striving to innovate sustainable packaging and contribute to the goal of achieving 100% sustainable packaging by 2025. Now you can enjoy the Ketchup you love in a bottle that's made from up to 30% renewable plant material and is still 100% recyclable. Together, let's build a brighter future for our planet!



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Notes. This virtual advertisement was made for the research purpose only.

Figure 4

The neoteric celebrity-endorsed design

PLANT ONE ON EVERY TABLE



Introducing Heinz® Ketchup in new PlantBottle™ packaging.

Heinz is striving to innovate sustainable packaging and contribute to the goal of achieving 100% sustainable packaging by 2025. Now you can enjoy the Ketchup you love in a bottle that's made from up to 30% renewable plant material and is still 100% recyclable. Together, let's build a brighter future for our planet!



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Notes. This virtual advertisement was made for the research purpose only.

Although the original design was straightforward, the study adjusted the text to be more customer-oriented. The study maintained the original design for the celebrity-endorsed versions as much as possible. Only the positions of elements changed to have a clearer image.

The participants tested the modified brand message in the second pre-test to see whether the modification was sufficient.

Results

Compared to the poor mean score the first time, the results of the celebrity-endorsed design had a mean score of 5.8, showing an improvement in the second pre-test. Therefore, the researcher officially regarded these visualizations as the final treatments.

Design of Measurement Instrument

In this survey, a 5-point Likert scale was used. The meaning primarily associated with one to five demonstrated the participants strongly disagreed to agree strongly.

ESI

The Pro-Environmental Self-Identity scale published by Kuswati et al. (2021) was applied for its validated reliability in previous studies ($\alpha = .86$). Initially, the scale was made with six items. After the first pre-test, some items were adjusted based on wording feedback. For instance, the first item, I consider myself as part of the organic consumer, was changed to “I consider myself a green consumer who cares about the environment and sustainability.” With another question of whether the ESI description accurately described the participants, the ESI subscale includes seven items ($\alpha = .89$).

Self-Congruence

For measuring the degree of congruence between people’s ESI and the assigned celebrity endorsement message, the scale organized by Belanche et al. (2021) was used. The study selected three items from the original scale, and the wording had small changes. For instance, the original question was I feel identified with the celebrity. The study modified it

as I strongly identify with the celebrity in this ad. The traditional celebrity subscale consists of three items ($\alpha = .81$). The neoteric celebrity subscale has three items ($\alpha = .68$).

AttB

The study then moves on to measure participants' attitudes toward HEINZ. The scale was adapted from an environmental tourism management study by Han et al. (2019). For example, an item was shown: "For me, buying products from an environmentally responsible brand like HEINZ is good." The AttB subscale is with three items ($\alpha = .88$).

BI

The items of studying people's buying intentions were also modified from the study by Han et al. (2019). The original items were reshaped in the current study context. For instance, I would like to purchase this product from HEINZ. The BI subscale was made by three items ($\alpha = .77$).

eWOM

The items of studying electronic word of mouth were again modified from the study by Han et al. (2019). The original items were reconstructed in the current study context. For example, I will say positive things about an environmentally responsible brand like HEINZ. The eWOM subscale came with three items ($\alpha = .84$).

GAS

The items of studying green advertising scepticism were adjusted from the scale proposed by Mohr and Ellen (1998). Although the scale was made decades ago, it is one of a few scales focusing specifically on the scepticism toward environmental claims. To ensure

the wording follows the times, the structure of the items was examined in the first pre-test. The research then adjusted the original items based on the feedback. In addition, the last three items were conversely coded based on optimism toward the advertising. The GAS subscale covers four items ($\alpha = .60$).

Sampling and Procedure

To ensure a diverse participant pool representative of the study's target demographic, a combination of convenience and snowball sampling methods was employed. Convenience sampling, involving the invitation of individuals in the vicinity to participate based on self-interest (Stratton, 2021), enhances accessibility for researchers. While convenient, this method is relatively passive. To address this limitation, snowball sampling was also utilized. Snowball sampling entails leveraging the existing social networks of initial participants to identify additional participants who might not be easily reached through other means (Parker et al., 2019).

Participants

At the end of the data collection, the study had 159 cases in total. Two responses were deleted because those were the results of testing beforehand. The purpose was only to examine the quality and flow of the final survey, not the actual data. Furthermore, three observations chose not to consent, and one participant answered 99 years of age. Therefore, these four cases were left out. Eventually, there were 155 valid observations, and the demographic outcome is presented in Table 1.

Table 1

Demographic outcome

	Brand-only	Traditional celebrity	Neoteric celebrity
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	Mean	SD	Mean	SD	Mean	SD
Age	26.40	7.50	25.63	5.44	27.76	12.02
Educational level	3.94	1.26	4.18	1.21	3.51	1.32
Annual Income	1.34	0.62	1.32	0.60	1.38	0.81

	N	%	N	%	N	%
Gender						
Male	19	35.8	12	21.1	18	40
Female	34	64.2	45	78.9	27	60
Educational level ^a						
Preliminary	10	18.9	8	14.0	14	31.1
Medium	21	39.6	20	35.1	18	40.0
Advanced	22	41.5	29	50.9	13	28.9

Notes. ^a Educational level is categorized into three levels. Participants who have completed education up to 8th grade or have a high school diploma belong to the preliminary level. Participants with either an applied science university bachelor's degree or a research university bachelor's degree belong to the medium level. Participants who obtain master's diplomas or Ph.D. or even higher degrees belong to the advanced group.

Results

Descriptive Overview of the Data

The descriptive statistics of each construct for the three groups are given in Table 2. Each dependable variable is shown as a scale by calculating its means. There are blanks because the ESI celebrity congruence is for celebrity-endorsed groups only. In addition, for convenient purposes, the scepticism construct was reversely coded. In other words, the higher the mean score is, the stronger the participants' green advertising scepticism. By computing mean and SD, the study could get a basic understanding of the differences between groups.

Table 2

Scale description of constructs

	Brand-only(n=53)		Traditional ce. (n=57)		Neoteric ce. (n=45)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
AttB	3.52	0.99	3.61	0.85	3.78	0.65
BI	2.96	0.83	3.29	0.87	3.34	0.83
eWOM	3.07	1.04	3.20	0.96	3.25	0.71
GAS	3.45	0.73	3.36	0.72	3.30	0.59
Ad congruence	3.04	1.07	3.04	0.91	3.42	0.78
ESI celebrity congruence	–	–	2.41	1.16	2.68	0.98

Correlation Between Demographics and Dependable Variables

The correlation between demographics and attitude toward the brand, buying intention, and electronic word-of-mouth is presented in Table 3. Accordingly, the negative relationship between annual income and the three dependent variable scales showed that people with higher annual income had less favorable AttB, BI, and eWOM after seeing the sustainable advertisement.

Table 3*Correlation analysis*

	1	2	3	4	5	6	7
1 Age	1						
2 Gender	-.13	1					
3 Educational level	.43	-.01	1				
4 Annual Income	.65	.02	.43	1			
5 AttB Mean Scale	-.30	.04	-.22	-.32	1		
6 BI Mean Scale	-.15	.15	-.04	-.17	.63	1	
7 eWOM Mean Scale	-.30	.06	0.17	-.28	.75	.68	1

Hypothesis Testing***One-way ANOVA for H1a&b***

H1a assumed that a celebrity endorsed advertisement would lead to stronger effects than brand-only one on AttB, BI, and eWOM. H1b assumed that a neoteric endorsed advertisement would lead to stronger effects than a traditional celebrity endorsed one on AttB, BI, and eWOM. The study had three groups, and the AttB, BI, and eWOM constructs were all quantitative variables. Therefore, the one-way ANOVA test was performed to identify whether significant mean differences exist between these three groups.

The results show that there was an insignificant effect of advertising type on AttB and eWOM at the $p < .05$ level for the three conditions [$F(2,152) = 1.07, p = .35$] and [$F(2,152) = .52, p = .06$]. For BI, the effects of advertising type were marginally significant for the three conditions [$F(2,152) = 2.93, p = .06$]. The F-value is greater than one, indicating there might be differences between groups. Furthermore, a p-value of .06 suggests moderate evidence against the null hypothesis. To investigate further and identify specific group differences, an independent samples t-test was employed, with a prior check for equal variances. There was a significant difference in the BI for brand-only ($M = 2.96, SD = 0.83$) and celebrity endorsed ($M = 3.31, SD = 0.85$) conditions; $t(153) = 2.41, p = .02$. These results indicated that celebrity

endorsement did significantly affect people’s BI. Hence, hypotheses 1a was partially supported and 1b was not supported.

Mediation Testing for H2a&b

H2a predicted that the level of advertising congruence between ESI and the brand-only advertisement would have less mediation effects on AttB, BI, and eWOM than a celebrity endorsed one. H2b predicted that the mediation effects would be stronger in a neoteric endorsed advertisement than a traditional one. Therefore, a mediation analysis was used to examine H2a and H2b.

Firstly, the study check if the data was normally distributed by computing the skewness of each scale because skewness measures the symmetry of the data distribution. A significant skewness statistic might show the worry of the normality among the population (Doane & Seward, 2011). After computing the skewness of AttB, BI, and eWOM, the AttB scale was found to be -1.11, suggesting that the distribution was highly negatively skewed. Therefore, to solve the non-normality, a log transformation was used.

The brand-only group. The mediation effect of the perceived congruence between the HEINZ advertisement without a celebrity endorsement and people’s ESI was examined. The output can be seen in Table 4.

Table 4

Mediation analysis for brand-only group

Construct	Log-attitude			BI			eWOM		
	β	Std.all	Sig.	β	Std.all	Sig.	β	Std.all	Sig.
Path a	-0.168	-0.085	.290	-0.168	-0.085	.290	-0.168	-.0085	.290
Path b	0.186	0.565	0*	0.383	0.422	0*	0.504	0.516	0*

Path c	-0.035	-0.054	.413	-0.281	-0.156	.029*	-.0068	-0.035	.609
Indirect	-0.031	-0.048	.294	-0.064	-.0036	.298	-0.085	-0.044	.295
Total	-0.067	-0.102	.202	-0.345	-0.192	.015*	-.0153	-0.079	.324

Note. * Indicates $p < .05$, which means statistically significant. Path a (brand-only HEINZ advertisement on the congruence between the advertisement and ESI), Path b (the congruence between the advertisement and ESI on AttB, BI, and eWOM), Path c (brand-only HEINZ advertisement on AttB, BI, and eWOM)

The traditional celebrity group. The mediation effect of the perceived congruence between the HEINZ advertisement with a traditional celebrity endorsement and people's ESI was examined. The output can be seen in Table 5.

Table 5

Mediation analysis for the traditional celebrity group

Construct	Log-attitude			BI			eWOM		
	β	Std.all	Sig.	β	Std.all	Sig.	β	Std.all	Sig.
Path a	2.412	0.857	0*	2.412	0.857	0*	2.242	0.857	0*
Path b	0.103	0.453	.003*	0.182	0.289	.060	-0.651	-.0341	.025*
Path c	-0.261	-0.406	.007*	-0.286	-.0161	.294	0.289	0.426	.005*
Indirect	0.249	0.388	.003*	0.439	0.248	.061	0.697	0.365	.006*
Total	-0.011	-0.018	.824	-.154	0.087	.278	0.046	0.024	.765

Note. * Indicates $p < .05$, which means statistically significant. Path a (traditional celebrity endorsed HEINZ advertisement on the congruence between the advertisement and ESI), Path b (the congruence

between the advertisement and ESI on AttB, BI, and eWOM), Path c (traditional celebrity endorsed HEINZ advertisement on AttB, BI, and eWOM)

The neoteric celebrity group. The mediation effect of the perceived congruence between the HEINZ advertisement with a neoteric celebrity endorsement and people's ESI was examined. The output is given in Table 6.

Table 6

Mediation analysis for the neoteric celebrity group

Construct	Log-attitude			BI			eWOM		
	β	Std.all	Sig.	β	Std.all	Sig.	β	Std.all	Sig.
Path a	2.678	0.919	0*	2.678	0.919	0*	2.678	0.919	0*
Path b	0.036	0.155	.444	0.281	0.435	.029*	0.053	0.034	.869
Path c	-0.011	-0.016	.935	-0.550	-0.292	.143	0.023	0.026	.898
Indirect	0.097	0.142	.444	0.753	0.400	.030*	0.063	0.031	.869
Total	.0086	0.126	.115	0.203	0.108	.177	0.115	0.057	.477

Note. * Indicates $p < .05$, which means statistically significant. Path a (neoteric celebrity endorsed HEINZ advertisement on the congruence between the advertisement and ESI), Path b (the congruence between the advertisement and ESI on AttB, BI, and eWOM), Path c (neoteric celebrity endorsed HEINZ advertisement on AttB, BI, and eWOM)

Hypothesis 2a was supported. The mediator's indirect effect was insignificant in the brand-only group in Table 4. However, the indirect effect of the mediator was significant in both AttB and eWOM for the traditional group in Table 5. In other words, the mediation effect of the advertising congruence was more potent when it came to celebrities than the brand for people. Hypothesis 2b was rejected. Because the mediation effect was not more

significant than the traditional group; only the BI model ($p = .030$) was significant in Table 6. Generally, the traditional group's mediation effect was stronger than the neoteric one.

Moderating Testing for H3

Hypothesis 3 expected that the level of GAS would have negative moderating effects on AttB, BI, and eWOM toward the brand. Hence, the moderating analysis was applied to see whether the level of GAS negatively moderates the relationships between the advertisement and people's AttB, BI, and eWOM. The results are shown in Table 7.

Table 7

Moderating analysis

Construct	Log-attitude			BI			eWOM		
Brand-only group									
Model statistics	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.
	0.08	5.19	.002*	0.09	6.18	.001*	0.03	2.55	0.06
Regression coefficients									
	β	t-value	Sig.	β	t-value	Sig.	β	t-value	Sig.
GAS on brand-only Ad.	0.213	2.952	0.004*	0.583	2.960	.004*	0.278	1.266	.208
Traditional celebrity group									
Model statistics	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.
	0.06	4.46	.005*	0.10	6.47	< .001*	0.05	3.55	.016*

Regression coefficients

	β	t-value	Sig.	β	t-value	Sig.	β	t-value	Sig.
GAS on traditional celebrity Ad.	-0.202	-2.798	.006*	-0.726	-3.716	< .001*	0.337	1.277	.204

Neoteric celebrity group

Model statistics	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.	Adj. R	F-value	Sig.
	0.03	2.44	.067	0.02	2.27	0.083	0.03	2.44	.067

Regression coefficients

	β	t-value	Sig.	β	t-value	Sig.	β	t-value	Sig.
GAS on Neoteric celebrity Ad.	0.004	0.045	.964	0.277	1.128	.261	0.337	1.277	.204

Note. * Indicates $p < .05$, which means statistically significant.

After computing the moderating models, several tests were performed to check whether the models met all the statistical assumptions. The study had found no detectable patterns and deviations from zero mean on the residuals versus fits plots, pointing out that the relationships were linear and additive. The Durbin-Watson test results also confirmed no proof of autocorrelation in the residuals. The p-value of the Breusch-Pagan tests were greater than 0.05 ($p = .062$), meaning homoscedasticity existed in the model. Regarding the normality of residuals, the Shapiro-Wilk tests showed the residuals were normally distributed. Finally, the Cook's distance values were all lower than one, indicating no influential outliers. Therefore, all the model assumptions met.

Although the models' assumptions were ensured, the moderating effects of GAS varied, with only the brand-only and traditional celebrity group showing moderating effects on AttB ($p = .004, .006$) and BI ($p = .004, .0$), indicated by coefficients on AttB ($\beta = 0.213, -0.202$), and BI ($\beta = 0.583, -0.726$). In the brand-only group, the positive coefficients on AttB and BI suggested that when the green advertising skepticism increased, people became more favorable toward the brand on AttB and BI. In the traditional celebrity group, the negative coefficients suggested that when the green advertising skepticism increased, people became more negative toward the brand via attitudes and BI. Therefore, the hypothesis 3 was partially supported.

Discussion

This chapter will provide integrated interpretations of the supported findings and counterarguments. Several existing literature sources will be referenced to discuss the findings further. A few implications and recommendations could be addressed based on the integrated interpretations. In addition, the limitations of this study will be elaborated. Lastly, the overall conclusion will be used to close this study.

Hypothesis 1a predicted that a sustainability brand message endorsed by a celebrity would have a more substantial positive direct effect on people's AttB, BI, and eWOM compared to a brand-only endorsement. The one-way ANOVA and independent sample t-test results revealed a significant relationship ($p = .02$) between BI and celebrity endorsement. In other words, celebrity endorsement had a more potent effect on BI than a brand-only message. This finding aligns with previous studies that have reported a significant relationship between celebrity endorsement and BI (Ahmed et al., 2015; Priyankara et al., 2017; Abbas et al., 2018). As a result, Hypothesis 1a was partially accepted. Hypothesis 1b expected that a neoteric celebrity endorsement would have a stronger positive direct effect on people's AttB, BI, and eWOM compared to a traditional celebrity endorsement. The one-way ANOVA results showed no statistically significant differences ($p > .05$) in AttB, BI, and eWOM between traditional and neoteric celebrity endorsements. On the other hand, although the mean age in this study ($M = 26.7$) was relatively young, the neoteric celebrity endorsement was not more potent than the traditional celebrity endorsement. This insignificance might be explained by the binary conceptualization of what is traditional celebrity and neoteric celebrity. In many studies (Djafarova & Rushworth, 2017; Hess et al., 2022), traditional celebrity is defined according to how they become well-known by the public. As long as the approach is through traditional media, they are regarded as traditional

celebrities. However, a young traditional celebrity may significantly differ from an older traditional celebrity. The distinctions between a young traditional celebrity and a neoteric celebrity could be smaller, even though they do not belong to the same category. In this study, Taylor Swift, aged 33, and MrBeast, aged 25, exhibit a relatively minor age difference. They might attract a similar target audience due to shared characteristics such as age, interests, and life stages, reflecting their status as young (traditional/neoteric) celebrities (Potter & Stapleton, 2011). Therefore, the impact on AttB, BI, and eWOM is less determined by the types of celebrities. This could offer an explanation for why hypotheses 1b was rejected.

Hypothesis 2a assumed that a celebrity endorsement would lead to a stronger positive mediation effect on people's AttB, BI, and eWOM by the ESI congruence than a brand-only endorsement. H2a was supported because the mediator's indirect effect was insignificant in the brand-only group, indicating the congruence between ESI and the brand-only advertisement was less potent than the congruence with a celebrity endorsement. The results were consistent with Basil (1996) and Chen et al. (2021), identification of the endorsement mediates message effects. The mediation effects of the perceived intimacy with a celebrity spokesperson are lacking in a brand-only advertisement. Aligned with Waqas et al. (2020) and Chekima et al. (2020), celebrity endorsement strongly affects advertisement persuasion. Hypothesis 2b expected that a neoteric celebrity endorsement would have a more pronounced positive mediation effect on people's AttB, BI, and eWOM by the ESI congruence than a traditional celebrity endorsement. H2b was rejected since the mediation effect was not stronger than the traditional group, suggesting the mediation effect was counter to the hypothesis. Although the score of the congruence between ESI and the neoteric celebrity ($M=2.68$) is higher than with the traditional celebrity ($M=2.41$), the perceived congruence did not fully mediate AttB and eWOM toward the brand. This finding is coherent with Schouten et

al. (2021). Participants felt more congruent with neoteric celebrities than with traditional celebrities. However, no direct endorsement was found, such as attitudes toward traditional or neoteric advertisement (Schouten et al., 2021). In other words, this finding challenges the hegemony of influencer marketing as a crucial element to successful digital marketing (Han & Xu, 2020; Schouten et al., 2021; Ahmadi & Ieamsom, 2022). It emphasizes that celebrity-consumer congruence does not guarantee a direct positive effect on consumer attitudes and behaviors toward the brand, as demonstrated by studies such as Albert et al. (2017).

Finally, hypothesis 3 posited that the stronger the GAS, the more negative impacts on people's AttB, BI, and eWOM. H3 was partially supported because the GAS only moderated the relationships significantly in the brand-only and traditional celebrity groups but not for the neoteric celebrity group. Aligned with H3, the result of the traditional group indicated that the higher the GAS, the lower the AttB and BI. The outcomes echo the previous studies (Obermiller & Spangenberg, 1998; Nouri, 2018) that show that a high GAS level leads to unfavorable customer responses. In addition, traditional celebrity is interpreted as more superficial and less trustworthy than neoteric celebrity.

However, the results of the brand-only group contrasted with H3. The higher the GAS, the higher the AttB and BI. These unexpected results might be explained by Silva et al. (2020). Contradicting previous research claims about the negative role of GAS. They discovered that GAS does not equal disbelief in brand environmental claims in developed countries like France. GAS is more like a customer's elaboration on green brand advertising. Consequently, GAS is associated with higher AttB and BI. Empirically, they demonstrate that GAS could be seen as a positive moderator associated with customer advertising elaboration and green advertising literacy, positively influencing AttB and BI in developed countries.

Therefore, these counterintuitive GAS findings regarding green customers in developed countries may provide a possible explanation for the study conducted in the Netherlands.

Implications

This research is dedicated to the need to examine types of celebrities in the same model context (Han & Xu, 2020), especially combining the congruence and ESI concepts to media study in the environmental domain. Firstly, improving the binary criteria for defining traditional celebrities is vital. Because traditional celebrities nowadays also transform into celebrity influencers to make extra profits or attract audiences via entrepreneurial passion for producing (sponsored) social media content (Ouvrein et al., 2021). Therefore, the line between traditional and neoteric celebrities needs to be clarified. Otherwise, it could lead to ambiguous results. Secondly, although neoteric celebrities are more associated with customers' ESI congruence than traditional celebrities, high identification cannot guarantee more customer response. And neoteric celebrities generate less GAS toward advertising. Importantly, the study also found that GAS does not always serve as a negative moderator that weakens AttB and BI. It could amplify AttB and BI due to customers' green advertising elaboration and literacy. These results inform scholars of the possible threat of using binary definitions. Also, the moderating results show a relatively new GAS perspective that GAS does not equal negative influence only in sustainable consumer behaviors. These results also offer practical reminders to practitioners when choosing either a traditional celebrity or a neoteric celebrity to endorse sustainable advertising.

Limitation

The study has three possible limitations: the treatment design, the chosen scale, and the participant recruiting criterion. Despite the researcher conducting twice pre-tests to ensure

the quality of the treatment, errors could still occur due to the small number of participants joining the pre-test. The treatment design might be satisfactory for pre-test participants but may not suit the population's mind. Also, the scale application, especially the green advertising scepticism scale by Mohr and Ellen (1998), is relatively old. However, the study still chose it because of its focus on green scepticism. Although the study modified the wording, it could confuse some participants while reading it. Finally, the age distribution is skewed. Most participants are students or young adults. This skewed situation might cause errors in our experiment since previous studies show that different types of celebrities attract different audiences regarding demographics.

Recommendations

Accordingly, future studies can focus on discerning the nuances between each type of celebrity, such as celebrity influencers (Ouvrein et al., 2021). It could enhance the accuracy of future research. Furthermore, why can a high identification with a neoteric celebrity not generate direct positive effects on customer attitudes and behaviors? What are the unknown factors in the relationships? Also, future studies can consider using a cross-country approach like Silva et al. (2020) to discern the various roles GAS plays in different socioeconomic contexts. Hence, our understanding of GAS can be broadened than merely a unitary view of negative influence. Lastly, this study focuses on HEINZ, a food company only. The results may vary in different industries. These questions provide research directions for future scholars.

Conclusion

The study delved into the relationships between sustainable messages, celebrity endorsements, and consumer behaviors, specifically examining the mediating role of

perceived congruence. Our findings underscored the significant influence of traditional celebrity endorsements, particularly when perceived as congruent with ESI, on AttB and eWOM. Perceived congruence emerged as a vital mediator, shedding light on how sustainable messages resonate with consumers when endorsed by traditional celebrities. Contrary to prevailing assumptions, GAS exhibited a nuanced role, acting not only as a negative factor associated with disbelief but also representing customer elaboration and literacy regarding environmental claims. Despite not universally confirming all hypotheses, our study's nuanced understanding of perceived congruence's mediating influence provides valuable practical insights for marketers. The potency of celebrity endorsements, especially when aligned with ESI, in shaping consumer perceptions remains evident. This study contributes to the literature by emphasizing the complexity of the sustainability persuasion process and offering actionable recommendations for businesses aiming to leverage the power of celebrity endorsements in promoting environmentally conscious consumer behaviors.

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“During the preparation of this thesis, the author used [Grammarly, Google Translate, and Chat GPT free version] in order to [improve the wording and language] only. After using these tools, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.”

Appendix A

The ranking results table

<i>Ranking</i>	
<hr/> <i>Traditional celebrity</i> <hr/>	
Taylor Alison Swift	1
Leonardo DiCaprio	2
Cristiano Ronaldo	3
Selena Gomez	4
<hr/> <i>Neoteric celebrity</i> <hr/>	
MrBeast	1
PewDiePie	2
Zoe Sugg	3
Chiara Ferragni	4

Appendix A. Participants were asked to rank these celebrities based on how popular they were.

