Acceptance of AI-generated celebrity endorsement:

A study on the effects of AI in audio advertisements

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Master Thesis

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Abstract

Background: This study explores the acceptance of AI-generated celebrity endorsement in audio advertisements that imitate real celebrities. It further examines the role of transparency in consumer acceptance and evaluates how AI-generated celebrity endorsement, product-celebrity congruency, and transparency influence attitude toward the advertisement, purchase intention, and advertisement recall.

Hypotheses: It was hypothesized that AI-generated celebrity endorsement, product-celebrity congruency, and transparency would positively influence attitude toward the advertisement and purchase intention, with AI-generated celebrity endorsement and product-celebrity congruency also positively influencing advertisement recall. Additionally, participants' attitude toward AI was expected to moderate the effects of celebrity endorsement and congruency on advertisement attitudes.

Methods: A partially nested factorial experimental design was employed. Data was collected through an online experiment and analyzed using one-way ANOVAs and multiple linear regression.

Results: Findings revealed that attitude toward AI had a significant direct effect on both purchase intention and attitude toward the advertisement. Additionally, AI-generated celebrity endorsement negatively affected advertisement recall. Transparency was found to moderate the relationship between AI-generated celebrity endorsement and attitude toward the advertisement.

Discussion and Conclusion: AI-generated Celebrity endorsement, product-celebrity congruency, and transparency did not show direct significant effects on attitude toward the advertisement or purchase intention. However, attitude toward AI emerged as a key predictor of both variables. Furthermore, transparency may diminish the positive impact of AI-generated celebrity endorsements on consumer's attitude toward advertisements.

Keywords: audio; AI, purchase intention, celebrity endorsement, attitude toward advertisement, advertisement recall, product-celebrity endorsement, transparency

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Introduction

The rapid advancement and increasing integration of artificial intelligence (AI) has significantly influenced various aspects of human life (Pagollo et al., 2018). With internet access, AI tools have become widely available to the public, while also offering businesses new and innovative ways to operate. One of the areas where AI is being applied is marketing, particularly in the field of advertising. The applications of AI in this domain are diverse. On one level, AI is used to analyze consumer data and personalize advertisements through techniques such as cookie tracking, enabling platforms to display advertisements tailored to individual preferences (Mogaji et al., 2019). On another level, generative AI is now being used to create the advertisements themselves, which is a development that represents a significant shift in how marketing content is produced. This study will focus specifically on the latter: the use of generative AI in the creation of advertisements.

The use of artificial intelligence to create content is referred to as generative AI. This technology enables the creation of text, images, and even audio. In the context of advertising, one traditional method to enhance consumer behavior and purchase intention has been the use of celebrity endorsements. However, recent advances in AI have significantly transformed this practice. AI can now convincingly replicate both the appearance and voice of celebrities, with increasing accuracy and realism (Kietzmann et al., 2020). One major advancement has been in text-to-speech (TTS) technologies, while audio once sounded robotic and artificial, modern AI-generated voices are now nearly indistinguishable from real human voices (Müller et al., 2022). This progress has opened new possibilities for advertising, allowing for realistic voiceovers and endorsements without the direct involvement of the celebrity itself. Despite these new innovations, research on AI-generated audio in advertising is still in its early stages. Much of the existing literature focuses on the potential risks and ethical concerns associated with these technologies. As generative AI continues to evolve at a rapid pace, scholars have increasingly emphasized the importance of studying its implications, particularly the ethical challenges and possible negative consequences (Verdoliva, 2023).

One growing area of concern is the rise of deepfakes: AI-generated content that can convincingly imitate real people. Technological advancements have made it possible to flawlessly replicate images, to the point where it is becoming increasingly difficult to distinguish between real and artificially created visuals. In response, researchers have been developing tools to help detect and differentiate fake content from authentic material (Rana et al., 2022). However, while visual deepfakes have received significant attention, research into audio-based deepfakes remains relatively limited, particularly when it comes to understanding consumer acceptance and perception of AI-generated voices.

Some studies have started to explore how AI could be helpful as a tool to improve advertising; one new way has been to use AI influencers (Zhang & Wei Wei, 2021). These have been especially recognized for posing less risks of scandals and being more easily tailored to a specific brand or product due to them being artificial. However, what has not yet been studied in detail is the use of AI to imitate "traditional" celebrity endorsement. While this has opened an important discourse about ethical concerns around the topic, the effects these advertisements have on consumers is not yet widely explored.

Previous studies have investigated purchase intention after being exposed to AI-generated content in video formats (Sivathanu et al., 2022). However, the specific role of audio advertisements in this context remains underexplored. This study seeks to address this gap in literature by focusing on the use of audio as an isolated medium. The importance of isolating media channels is increasingly relevant, especially considering the widespread phenomenon of media multitasking: the simultaneous use of multiple media platforms (Garaus et al., 2017; Voorveld, 2011). As consumers often divide their attention across several sources, examining audio independently allows for a more precise understanding of its unique effects and potential in advertising.

This study specifically investigates how purchase intention, attitude toward the advertisement, and advertisement recall, which are measures of advertising effectiveness, are influenced by the inclusion of AI-generated celebrity endorsement in audio advertisements. To assess whether

traditional advertising principles keep their effects in this new context, product-celebrity congruency is included in the model to examine whether its typically positive effect persists when combined with AI-generated endorsements. Furthermore, it is hypothesized that consumer attitudes toward AI may significantly moderate the relationship between AI-generated celebrity endorsement and congruency on attitudes toward the advertisement. This assumption is grounded in recent findings suggesting that AI-generated advertisements are often perceived as less authentic, of lower quality, and associated with a reduced willingness to pay for the product when compared to human-authored advertisements (Kučinskas, 2024). An additional factor considered in this study is transparency, which is a common concern surrounding AI. Consumers often form skeptical perceptions due to the so-called black-box effect: a lack of understanding about how AI systems function and make decisions. As a result, transparency was incorporated into the research model as a potential enhancer of advertising effectiveness, to explore whether disclosing AI usage can mitigate skepticism and improve consumer responses.

RQ: How do consumers perceive the use of AI for celebrity endorsements in terms of traditional advertising effectiveness measures, such as attitude toward the advertisement, purchase intention, and advertisement recall, specifically in audio advertisements?

RQ1: Does the use of an AI-generated celebrity decrease attitude toward the advertisement, purchase intention, and advertisement recall?

RQ2: Does the use of product-celebrity congruency increase attitude toward the advertisement, purchase intention, and advertisement recall, when using AI technology to create celebrity endorsement?

RQ3: How does transparency of AI-generated celebrity endorsement influence attitude toward the advertisement, purchase intention, and advertisement recall?

RQ4: Does the attitude toward AI moderate the relationships between the independent variables and attitude toward the advertisement?

Theoretical Framework

The main objective of this study is to gain a deeper understanding of how the use of AI-generated celebrity endorsement in audio advertisements influences consumer responses. Specifically, the effects of AI-generated celebrity endorsement, product-celebrity congruency, and transparency regarding AI use are examined in relation to three key consumer outcome variables: attitude toward the advertisement, purchase intention, and advertisement recall. These dependent variables are commonly used in literature to assess the overall effectiveness of advertisements. To better contextualize the relationships being studied, it is essential to define the independent variables, as they represent the core elements that may shape consumer reactions. In the following sections, each of these variables will be further elaborated and defined within the scope of this research.

Attitude Toward the Advertisement

In line with the Theory of Planned Behavior (TPB), an individual's attitude toward a specific behavior plays a critical role in predicting both the intention to perform a specific behavior and the behavior itself (Ajzen, 1991). Building on this framework, the current study includes attitude toward the advertisement and purchase intention as central dependent variables to evaluate the effectiveness of AI-generated celebrity endorsement, product-celebrity congruency, and transparency in audio advertisements. Attitude toward the advertisement has been widely recognized as a key predictor of consumer engagement, as it provides insights into how positively or negatively individuals respond to the advertisement they are exposed to. In addition, purchase intention is considered a valuable complementary measure, as it reflects the consumer's self-reported likelihood of performing a desired action, such as purchasing the product featured in the advertisement. Attitude, as defined by Ajzen (1991), refers to the "degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question." More broadly, it captures an individual's overall evaluation of an "object, issue, person, or action" (Sallam & Algammash, 2016). In the context of advertising, attitude toward the advertisement serves as a meaningful predictor of behavioral intention and potential follow-up actions. The general assumption is that the more positive a consumer's attitude toward the

advertisement, the stronger their intention to act on it, such as purchasing the product or engaging with the brand.

For the purpose of this study, attitude toward the advertisement is defined as the consumer's predisposition to respond in either a favorable or unfavorable way to the specific version of the AI-generated advertisement they are exposed to.

Purchase Intention

In the field of marketing, purchase intention is widely recognized as a key indicator of advertising effectiveness. Within the framework of the TPB, behavioral intention is shaped by attitude, subjective norms, and perceived behavioral control. While this study focuses on attitude as a separate and essential dependent variable, the inclusion of purchase intention offers additional depth in evaluating how AI-generated celebrity endorsement, product-celebrity congruency, and transparency influence consumer behavior. Purchase intention is generally understood as a component of cognitive behavior, reflecting the consumer's planned or deliberate inclination to buy a particular brand's product or service (Huang & Dan, 2010). In other literature, the term is also referred to as buying intention, emphasizing the willingness or likelihood of a consumer making a purchase. Multiple factors can affect purchase intention, such as previous attitudes toward the brand, prior experiences, perceived value, or emotional responses to the advertisement (Mehyar, 2020).

For this study, purchase intention is defined as the consumer's willingness to purchase the product or service featured in the advertisement, serving as a practical indicator of how persuasive or impactful the AI-generated audio advertisement is perceived to be.

Advertisement Recall

Another commonly used indicator for evaluating the effectiveness of advertising is advertisement recall. The underlying assumption is that if consumers remember the advertisement and the featured product, they are more likely to consider purchasing it. In this sense, recall functions

as a bridge between memory and consumer behavior, reflecting how well an advertisement leaves a lasting impression. In more general terms, recall refers to the retention and retrieval of information, specifically, the ability to remember previously consumed content. In the context of advertising, it is defined as the extent to which a participant can recall the product, brand, or message after being exposed to the advertisement (Tao et al., 2023). Literature emphasizes that recall is part of the multidimensional structure of memory (Bagozzi & Silk, 1983), linking it to both cognitive psychology and consumer behavior.

This study adopts a definition of advertisement recall that aligns with both cognitive psychology and consumer behavior research, framing it as a cognitive indicator of advertising effectiveness. By evaluating whether participants can recall the content of an advertisement, the study aims to determine how effectively AI-generated audio advertisements engage memory and influence consumer response. Research into advertisement recall dates back to Strong (1912), establishing it as one of the earliest and most enduring methods for assessing advertising impact. Over time, it has continued to serve as a key measure across disciplines, including marketing, psychology, and advertising, for measuring how well an advertisement captures attention, leaves a lasting impression, and potentially shapes consumer decisions.

AI-generated Celebrity Endorsement

Next, the manipulations used in the advertisements are defined. Celebrity endorsement refers to the use of well-known public figures to promote a product or service. Research generally shows that such endorsements potentially enhance brand recall and improve perceptions of product value (Clark & Horstmann, 2013). When employed effectively, celebrity endorsements can significantly strengthen advertising effects (Osei-Frimpong et al., 2019), particularly when the celebrity possesses favorable attributes such as high likability and familiarity. Numerous studies have found that well-regarded celebrities positively influence attitudes toward both brands and products (Wang et al., 2017; Vien et

al., 2017), and that such endorsements tend to increase favorable attitudes toward advertisements and purchase intention.

Familiarity was found to play a crucial role in determining the effectiveness of a celebrity endorser. It is commonly defined as the “interpersonal knowledge of another individual” (Rockett & Okhyusen, 2002) and includes both affective and behavioral components. It reflects the participant’s perceived knowledge or recognition of a person, or in this case a voice, used in an advertisement. Rockett and Okhyusen (2002) found that high familiarity paired with positive associations makes individuals more likely to respond in a favorable manner. Accordingly, a celebrity who is familiar to consumers is more likely to elicit positive attitudes toward the advertisement and foster greater willingness to purchase the featured product or service.

In addition, celebrity endorsement has been shown to enhance memorability, recall, and recognition, and can even help to create a more direct emotional connection with the viewer (Dothre & Bhola, 2010). Using recall and aided recall measures, their study revealed that advertisements featuring a highly popular Turkish singer achieved the highest recall scores, underlining the strong connection between celebrity presence and memory performance.

This study takes a different approach by employing AI to generate imitations of real celebrities, effectively creating “fake” celebrity endorsements. The goal is to assess whether these AI-generated endorsements can replicate the impact of traditional, real celebrity endorsements. Existing studies suggest that AI influencers can be as effective as human endorsers when promoting search products. However, for experience products, human endorsers appear to be more persuasive (Song et al., 2024). Despite these findings, research specifically focusing on AI-generated endorsements that mimic real celebrity personas remains scarce. This study aims to explore how such AI-generated celebrity endorsements shape consumer perceptions and evaluate their effectiveness in comparison to traditional endorsements.

H1a: AI-Celebrity endorsement has a positive effect on attitude toward the advertisement, compared to an unfamiliar voice endorsement.

H1b: AI-Celebrity endorsement has a positive effect on purchase intention, compared to an unfamiliar voice endorsement.

H1c: AI-Celebrity endorsement has a positive effect on advertisement recall, compared to an unfamiliar voice endorsement.

Product-Celebrity Congruency

As previously discussed, celebrities can serve as effective marketing tools to enhance the impact of advertisements. One factor that can influence the strength and direction of this effect is product-celebrity congruency: the perceived match between the celebrity and the advertised product or service. While self-celebrity congruency (i.e., the perceived similarity between the consumer and the celebrity) is difficult to control, product-celebrity congruency can be more easily manipulated within experimental settings. Research shows that this type of congruency can significantly impact how consumers perceive the celebrity's expertise (Lee et al., 2022).

Several studies have examined how congruency between celebrities and brands affects purchase intention. Pradhan et al. (2014) found that alignment between brand and celebrity personality has a significant positive effect on consumers' intention to purchase a product or service. This is supported by Shrestha (2019), who demonstrated that similarity, matching, and familiarity with the endorser are key factors that enhance purchase intention. Interestingly, some research suggests that slight incongruence between the celebrity and the product can potentially improve advertising effectiveness, particularly in terms of attitude toward the brand and purchase intention (Harmon-Kizer, 2017). This may be due to the increased cognitive processing or attention such incongruence causes, potentially leading to stronger impressions and greater advertisement recall from the consumer.

Further support for the impact of congruency comes from a case study examining Kobe Bryant's endorsement of a Nike campaign. Due to the high congruency between Bryant's image and

the Nike brand, consumers perceived the advertisement and brand more positively (Mohammad et al., 2023). Similar findings by Nguyen & Nguyen (2016) emphasized that product-celebrity congruency significantly influences consumer attitudes toward both the product and the brand. Across multiple studies, factors such as celebrity-product match-up, trustworthiness, and expertise are identified as key elements of congruency that collectively enhance consumer attitudes.

Finally, the "vampire effect" is worth noting when discussing product-celebrity congruency. This phenomenon describes instances where the celebrity's presence overwhelms the advertisement content, potentially reducing brand or product recall. Erfgen et al. (2015) argue that this effect can be mitigated through high product-celebrity congruency, helping to maintain the advertisement's focus and effectiveness.

H2a: Product-celebrity congruency has a positive effect on attitude toward the advertisement, compared to no congruency between product and celebrity.

H2b: Product-celebrity congruency has a positive effect on purchase intention, compared to no congruency between product and celebrity.

H2c: Product-celebrity congruency has a positive effect on advertisement recall, compared to no congruency between product and celebrity.

Transparency of AI use

Another important variable considered in this research is transparency, particularly in the context of AI technology. The use of AI often elicits skeptical reactions, as many consumers lack a clear understanding of how these technologies operate. This unfamiliarity can lead to increased distrust and skepticism. One way to counteract these negative perceptions is through enhanced transparency about the use of such technologies.

Transparency is a multifaceted concept applied across various disciplines (Margetts, 2011; Ball, 2014). Definitions of transparency often include themes such as openness, accountability, surveillance,

simplicity, effectiveness, and efficiency. Within the scope of this study, transparency is defined as the openness regarding the use of AI in generating advertisements. According to the EU Commission's High-Level Expert Group on AI (AI HLEG), transparency is one of the seven key requirements necessary for creating trustworthy AI (Larsson & Heintz, 2020). In this context, AI transparency refers to the ability to "see through" the technology, to understand how it functions or, in this case, how it generates content (Andrada et al., 2022). Despite its growing importance, practical guidelines and research on AI transparency remain limited (Balasubramaniam et al., 2023).

In this study, transparency will be operationalized through a disclaimer placed at the beginning of the audio advertisements, explicitly stating that the celebrity voice featured was generated using AI. This approach reflects openness about the AI's role in creating the endorsement in the aadvertisement. Literature supports transparency as a driver of consumer trust and behavior. For instance, studies on corporate transparency in the context of Corporate Social Responsibility (CSR) have shown that it can positively influence purchase intention and consumer trust (Lee & Nam, 2021). Consumers are more likely to engage in favorable behavior when they understand how a brand or technology operates. This is further supported by findings that consumers are even willing to pay for transparency, particularly in the context of intelligent systems, up to 20 euros for detailed transparency information (Peters et al., 2020). These findings highlight transparency not only as a communication strategy but as a consumer demand in AI-driven contexts.

Moreover, studies in various sectors, such as banking and sales promotion, have found that transparency significantly affects consumer attitudes and purchase intentions. Agu et al. (2021), for example, defined transparency using the Business Dictionary as "the lack of hidden agenda or conditions, cooperation, and collective decision making." Their findings indicated that transparency improved both attitude and intention to purchase. Similarly, Kang and Hustvedt (2014) found that corporations demonstrating transparency in production and labor conditions fostered more positive consumer attitudes.

In summary, transparency is increasingly recognized as a critical factor in building trust, particularly in the use of AI technologies. Its role in shaping consumer perceptions, purchasing decisions, and attitudes toward advertisements is supported across a range of fields. As such, it represents a valuable variable for further exploration in the context of AI-generated advertisements.

H3a: Transparency of the use of AI has a positive effect on attitude toward the advertisement, compared to no transparency.

H3b: Transparency of the use of AI has a positive effect on purchase intention, compared to no transparency.

Attitude toward AI

In this study, attitude toward AI is examined as a moderating variable influencing other relationships. Prior literature has shown that the integration of AI into celebrity endorsements in advertising can impact consumer attitudes, trust, and perceived fit between the influencer and the product. These effects are shaped by seven perceived attributes: anthropomorphism, artificiality, attractiveness, luminary status, quality, trendiness, and robophobia, all of which contribute to consumers' acceptance of AI technologies (Feng et al., 2023).

This same study highlights that, compared to human influencers, AI influencers are generally perceived as less authentic, resulting in lower levels of trust and a more negative consumer attitude. Experimental findings also indicate that AI influencers often elicit more negative reactions than their human counterparts. These insights suggest that a low attitude toward AI could potentially moderate and even diminish the positive effects typically associated with celebrity endorsement and product-celebrity congruency. When AI is used to imitate real celebrities, the expected benefits of endorsement may not fully materialize if consumers hold negative views toward AI, thereby influencing their attitude toward the advertisement.

H4a: Low Attitude toward AI negatively influences the relationship between celebrity endorsement and attitude toward the advertisement.

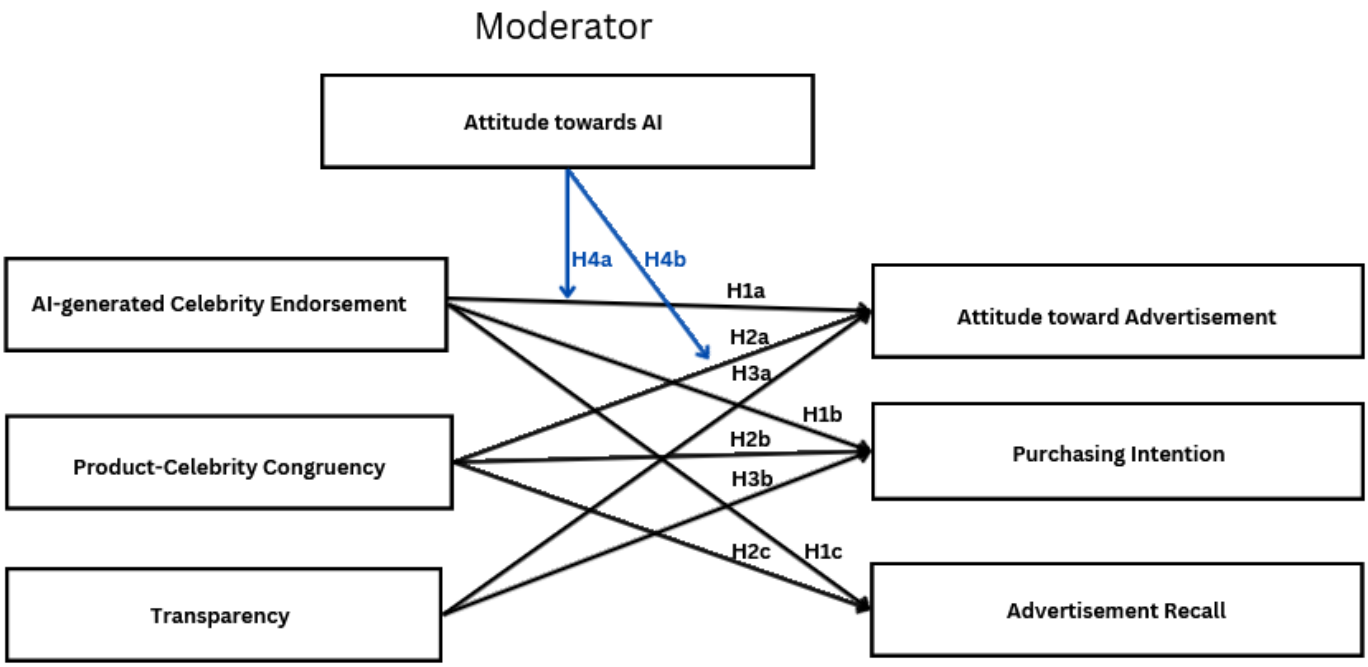
H4b: Low Attitude toward AI negatively influences the relationship between congruency and attitude toward the advertisement.

Conclusion

This theoretical framework defined the key variables used in this study, including the dependent variables attitude toward the advertisement, purchase intention, and advertisement recall and the independent variables AI-generated celebrity endorsement, product-celebrity congruency, and transparency regarding AI use. Based on the derived hypotheses, the research design was developed (see Figure 1).

Figure 1

Conceptual Framework



Research Methodology

Design

The design of this research was a partially nested factorial design, where the factor product-celebrity congruency is nested within the AI-generated celebrity endorsement condition, with an additional moderator consisting of a between-subjects experimental design with three manipulated independent variables being celebrity endorsement (present vs. absent), product-celebrity congruency (congruent vs. incongruent), and transparency (transparent vs. non-transparent).

- **Version 1:** AI-generated celebrity, congruent, transparent
- **Version 2:** AI-generated celebrity, incongruent, transparent
- **Version 3:** AI-generated celebrity, congruent, non-transparent
- **Version 4:** AI-generated celebrity, incongruent, non-transparent
- **Version 5:** AI-generated no celebrity, transparent (congruency not applicable)
- **Version 6:** AI-generated no celebrity, non-transparent (congruency not applicable)

The effect of the independent variables and their manipulation in the advertisements were tested on the dependent variables purchasing intention, attitude toward the advertisement, and advertisement recall. Additionally, attitude toward AI was tested as a moderator for the relationships between the independent variable AI-generated celebrity endorsement on attitude toward the advertisement, as well as product-celebrity congruency on attitude toward the advertisement.

Pre-test

For the pre-test participants were asked to listen to five different celebrity voices, without mentioning any names. After listening to a voice, they were asked if they recognized the voice of the celebrity and could give the name. After the celebrity's name was established, they were asked what they associate with the specific celebrity. Next, they were asked what product they could see the celebrity advertise, and what product they could not see fitting for them to advertise.

According to the results of the pretest, which was conducted as a structured interview with a sample of n=9 interviewees, Dwayne “The Rock” Johnson was chosen as a celebrity that has high recognition of his voice amongst the sample population, as well as positive associations. The Rock’s voice was recognized by seven out of the nine participants interviewed in the pre-test. Associations that were repeatedly mentioned as connected to the celebrity were confident, fit, charming, strong, powerful, kind, and funny. Almost all the associations were positive. One of the participants, as an outlier, mentioned “one-hit wonder” as an association related to the celebrity always playing a similar role in movies, which they formulated as a more negative association.

Furthermore, advertisements that were perceived as fitting the persona of The Rock were mostly fitness related, especially protein products were heavily mentioned. As for the incongruent feeling of an advertisement very feminine or “cutesy” products were mentioned, as well as skincare specifically.

Instruments

In this study, six different audio advertisement clips were created, each representing a different combination of the manipulated independent variables. These versions were developed using an AI tool called FineVoice, which employs text-to-speech technology. The scripts for the advertisements were tailored to reflect each specific constellation of variables (see Appendix B). To implement the AI-generated celebrity endorsement manipulation, FineVoice’s voice imitation feature was used to replicate the voice of the actor Dwayne "The Rock" Johnson. The first four versions of the advertisement featured this AI-generated celebrity voice. In contrast, the final two versions used a generic AI-generated voice provided by the tool, without imitating a specific person.

For the product-celebrity congruency manipulation, insights from the pre-test were used to determine which products participants perceived as most fitting for the celebrity persona. A protein product was selected to represent high congruency, as it aligned with the perceived image of The Rock.

In contrast, a skincare product was chosen to represent low congruency, as multiple pre-test participants stated that such a product would be incongruent with the celebrity's persona.

Transparency was manipulated by including a brief disclaimer at the beginning of the advertisement. This disclaimer explicitly informed listeners that the voice featured in the advertisement was AI-generated and used for the purpose of endorsing the product within the advertisement.

Participants

Participants were required to have internet access in order to complete the online survey. A random sample was recruited primarily from bachelor students at the BMS faculty of the University of Twente via the SONA participant pool. Additional participants were gathered by posting the survey on academic forums and online platforms such as SurveyCircle.com and SurveySwap.com, which contributed to a large portion of the overall sample. The age distribution across the experimental conditions was relatively consistent, with most participants falling within the 26–35 age range. An exception was observed in Version 4 of the study, where the participant pool tended to be slightly younger, with the average age range between 18–25 years. Across all conditions, there was a slight majority of female participants, and one participant identified as non-binary or preferred not to disclose their gender.

Table 1

Distribution of Participants, Mean Age Ranges, and Gender of each Version

Versions	***1***	***2***	***3***	***4***	***5***	***6***
Participants (N)	21	25	22	21	22	23
average Age range	26-35	26-35	26-35	18-25	26-35	26-35
Male	7	11	8	5	8	6
Female	13	14	13	15	13	16
Non-binary	0	0	0	1	0	0
prefer not to say	1	0	1	0	1	1

Measures

This study included the following measures: basic demographics, purchase intention, attitude toward the advertisement, advertisement recall, attitude toward AI, celebrity endorsement, product-celebrity congruency, and transparency of AI use. Most variables were assessed using a 5-point Likert scale, with the exception of attitude toward the advertisement, which was measured using a 7-point Likert scale.

- Purchase intention: The purchasing intention scale was a traditional 5-Likert scale ranging from strongly disagree to strongly agree. This is a typical measurement adopted and adjusted by studies such as Bovell-Benjamin et al. (2016).
- Attitude toward the advertisement: For the measurement of this variable a scale taken from Donthu (1998) was used. The scale is a 7-point Likert scale with attributes such as appealing, believable etc.
- Advertisement recall: This variable was assessed by including a question later in the survey that asked participants to indicate whether they could remember the name of the product featured in the advertisement.

- Attitude toward AI: To measure the attitude toward AI, the scale from Schepman & Rodway (2022) was used that scored high factor loadings in measuring “General Attitude toward Artificial Intelligence” in their study. The GAAIAS scale consists of 12 positively, and eight negatively phrased statements about AI.
- AI-celebrity endorsement: This variable was measured by presenting Dwayne “The Rock” Johnson’s voice and a generic voice. An item in the survey was included to assess whether participants recognized the voice of the celebrity featured in the advertisement.
- Product-celebrity congruency: For this measure, there was tracking of what version the participants were exposed to.
- Transparency of AI use: For this variable, certain advertisement versions included a disclaimer at the beginning of the audio clip, indicating that the voice featured in the advertisement was generated using AI. The presence or absence of this disclaimer was tracked for each version.

Procedure

For the main study, the participants were asked to fill in a survey. The first part of the survey provided participants with a brief overview of the study's purpose and disclosed that the advertisements featured in the study were generated using AI. At the end of the briefing the participants were asked for their consent to participate voluntarily in the study. Once consent was given, participants were randomly assigned to one of six groups. Each group corresponded to a different audio clip, and participants were directed to listen to the clip assigned to their group. After listening to the advertisement, they proceeded to the next sections of the survey, which measured various dependent and independent variables.

Following the audio clip, a control question was asked to test the identification of the celebrity, asking participants to type the name of the celebrity featured in the advertisement. Additionally, specific questions aimed at measuring perceived congruency and transparency of the advertisement were included as part of the manipulation checks. Proceeding, participants answered basic

demographic questions, such as age and gender. In the following sections, they were asked to respond to statements measuring purchase intention using a 5-point Likert scale (strongly agree – agree – unsure – disagree – strongly disagree). The same scale and statement format were used to assess advertisement recall and attitude toward AI. To measure participants' attitude toward the advertisement itself, a 7-point Likert scale was used (see Appendix A).

Data Analysis

The data analysis examined the effects of AI-generated celebrity endorsement, product-celebrity congruency, and transparency on the dependent variables: attitude toward the advertisement, purchase intention, and advertisement recall. These effects were analyzed using multiple one-way ANOVAs. To assess the potential moderating role of attitude toward AI, several multiple linear regressions were conducted. It was hypothesized that attitude toward AI could either strengthen or weaken the relationship between AI-generated celebrity endorsement and product-celebrity congruency on attitude toward the advertisement. For the binary variable advertisement recall, a chi-square test was used to test for significant effects. Additionally, multiple linear regressions were performed to explore potential interaction effects between the manipulated conditions. Reliability and validity were evaluated through a factor analysis including all survey items, and Cronbach's alpha was calculated to assess internal consistency and reliability of the scales.

Results

Factor Analysis

The first step of the analysis was to ensure the reliability and validity of the variables and outcomes. For this, a factor analysis was conducted. As a prerequisite, the Kaiser-Meyer-Olkin (KMO) measure was calculated and showed an overall value of 0.8, indicating that the sampling was adequate and therefore suitable for factor analysis.

Following the factor analysis, results showed that the specific items designed for each variable loaded highly on their respective hypothesized factors (see Table 2). All items developed to measure purchase intention (item p1 to p4) had high factor loadings on Factor 1 of with values > 0.74. Similarly, the items measuring attitude toward the advertisement (aa._1 to aa._8) showed high factor loadings on Factor 2, ranging from 0.59 to 0.84.

Lastly, for the variable measuring attitude toward AI, the items ai1 to ai11 showed high factor loadings. However, beginning with item ai12, the factor loadings decreased significantly, with values dropping below 0.4. Notably, the items ai12 to ai20 were phrased negatively, while the items ai1 to ai11 were phrased positively. This difference in item phrasing may explain the lower factor loadings. To address this, the values of items ai12 to ai20 were reversed, and the factor analysis was repeated. Despite this adjustment, the factor loadings for these items remained significantly low. Therefore, a threshold of 0.4 was applied, and all items with loadings below this threshold, specifically ai12 to ai20, were excluded from further analysis.

Additionally, the Cronbach's alpha was calculated for the items with factor loadings > 0.4 to assess internal consistency. The results showed excellent reliability, with Cronbach's alpha values of .94 for purchase intention, .93 for attitude toward the advertisement, and .89 for attitude toward AI.

Table 2

Exploratory Factor Analysis

Item	Factor 1: Purchase Intention	Factor 2: Attitude Toward the Ad	Factor 3: Attitude Toward AI
pi1	.81		
pi2	.86		
pi3	.80		
pi4	.77		
aa._1		.74	
aa._2		.76	
aa._3		.72	
aa._4		.78	
aa._5		.61	
aa._6		.60	
aa._7		.85	
aa._8		.87	
ai1			.84
ai2			.76
ai3			.75
ai4			.71
ai5			.69
ai6			.49
ai7			.79
ai8			.67
ai9			.52

ai10			.41
ai11			.55
Factor	**SS Loadings**	**Proportion of Variance**	**Cumulative Variance**
Factor 1	3.48	.15	.15
Factor 2	5.12	.22	.37
Factor 3	5.04	.22	.59

Note. The Factor loadings are presented for the constructs: purchase intention (pi1–pi4), attitude toward the advertisement (aa_1–aa_8), and attitude toward AI (ai1–ai11). Loadings below .40 are not displayed for clarity.

Manipulation Checks

Next, the manipulations of the experiment needed to be tested for their reliability. To do this, a manipulation check using Welch's two-sample t-test was conducted to examine differences between the conditions for product-celebrity congruency versus incongruency, as well as transparency versus non-transparency in the advertisement versions.

The results of the test showed a significant difference in perceived congruency between the two groups ($t(86.96) = 3.98$, $p < .001$, 95% CI [0.46, 1.38]). Participants in the congruent condition reported significantly higher perceived congruency ($M = 3.77$) than those in the incongruent condition ($M = 2.85$), indicating that the manipulation of congruency was successful.

Similarly, the t-test for perceived transparency revealed a significant difference between the two conditions ($t(130.46) = -3.82$, $p < .001$, 95% CI [-1.35, -0.43]). Participants in the transparent condition reported higher perceived transparency ($M = 3.60$) compared to those in the non-transparent condition ($M = 2.71$), suggesting that this manipulation was also effective.

To verify the correct recognition of the AI-generated celebrity used in the advertisements, participants were asked to write down the name of the celebrity they identified after listening to the

audio advertisement. Most participants were able to correctly name and recall the celebrity, providing responses such as “The Rock,” “Dwayne the Rock Johnson,” and “Dwayne Johnson.” Overall, nearly all participants recognized the celebrity accurately. Only four participants across all conditions failed to recall the name. However, no participant data was removed from further analysis as a result.

Effects on Attitude toward the Advertisement

To assess the effects of AI-generated celebrity endorsement, product-celebrity congruency, and transparency on purchase intention and attitude toward the advertisement, a series of one-way ANOVAs were conducted. The ANOVA testing the effect of AI-generated celebrity endorsement on attitude toward the advertisement revealed a marginal effect ($p = .09$). While this result was not statistically significant, it indicates a trend suggesting that celebrity endorsement may positively influence attitude. A comparison of mean values between the conditions showed that advertisements featuring an AI-generated celebrity elicited a more favorable attitude ($M = 3.77$) than those using a non-celebrity voice ($M = 3.53$). In contrast, neither product-celebrity congruency nor transparency showed a statistically significant effect on attitude toward the advertisement. The ANOVA for congruency yielded a p-value of .57, and the ANOVA for transparency produced a p-value of .39, indicating no significant main effects for these variables.

To explore potential interaction effects, a multiple linear regression analysis was performed, focusing on the interaction between transparency and AI-generated celebrity endorsement. The analysis showed that transparency had a significant positive effect on attitude toward the advertisement ($b = 0.61$, $SE = 0.28$, $t(130) = -2.60$, $p = .01$). However, AI-generated celebrity endorsement did not show a significant direct effect ($b = 0.22$, $SE = 0.34$, $t(130) = 0.65$, $p = .52$), which contrasts with the marginal trend observed in the one-way ANOVA. An additional linear regression only including transparency on attitude toward the advertisement had insignificant findings too.

Most notably, the multiple linear regression revealed a significant interaction effect between AI-generated celebrity endorsement and transparency ($b = -1.26$, $SE = 0.48$, $t(130) = -2.62$, $p = .01$). This

finding suggests that the effect of transparency on attitude toward the advertisement is moderated by the presence of an AI-generated celebrity. Specifically, the positive impact of transparency is reduced when an AI-generated celebrity is present.

Further comparison of condition means supports this interaction: within the AI-generated celebrity condition, transparency yielded slightly higher attitude scores (M = 4.07 for congruent, M = 4.06 for incongruent) than non-transparency (M = 3.65 for congruent, M = 3.25 for incongruent). However, in the non-celebrity condition, the non-transparent version (M = 3.67) was rated more favorably than the transparent one (M = 3.02). This contrast supports the notion that transparency's effectiveness is diminished when paired with a non-celebrity voice and highlights the importance of transparency in the presence of a celebrity.

Table 3

Mean Scores of ID Variables on Attitude Toward Advertisement

		Transparency	***Non-transparency***	***Mean Scores***
Celebrity				**3.77 (1.36)**
	Congruency	4.07 (1.22)	3.65 (1.46)	3.85 (1.35)
	Incongruent	4.06 (1.23)	3.25 (1.43)	3.69 (1.37)
Non-celebrity		3.02 (1.24)	3.67 (1.34)	**3.53 (1.32)**
Mean Scores		3.73 (1.31)	3.53 (1.40)	

Effects on Purchase Intention

To assess the influence of AI-generated celebrity endorsement, product-celebrity congruency, and transparency on consumers' purchase intention, a series of one-way ANOVAs were conducted. The results showed that none of the independent variables had a statistically significant effect on purchase

intention. Specifically, the ANOVA results indicated non-significant effects for AI-generated celebrity endorsement ($p = .86$), congruency ($p = .97$), and transparency ($p = .87$).

An examination of the mean scores across conditions supports these findings. Purchase intention scores were relatively consistent across all conditions, ranging narrowly between 2.29 and 2.32. This suggests that none of the manipulated variables, whether the presence of a celebrity voice, the perceived congruency of the endorsement, or the level of transparency about the use of AI, were effective in significantly influencing participants' intention to purchase the advertised product. Overall, the data indicates that none of the experimental manipulations implemented in this study had a measurable impact on participants' purchase intentions.

Table 4

Mean Scores of ID Variables on Purchase Intention

		Transparency	Non-transparency	Mean Scores
Celebrity				2.29 (1.15)
	Congruency	2.23 (1.06)	2.36 (1.23)	2.30 (1.14)
	Incongruent	2.58 (1.23)	1.94 (1.04)	2.29 (1.18)
Non-celebrity		2.11 (0.94)	2.53 (1.12)	2.23 (1.04)
Mean Scores		2.32 (1.09)	2.29 (1.14)	

Effects on Advertisement Recall

To explore whether AI-generated celebrity endorsement and product-celebrity congruency influenced advertisement recall, a chi-square test was conducted. This analysis aimed to determine if there was a significant association between the experimental conditions and advertisement recall.

The results revealed a significant effect of AI-generated celebrity endorsement on advertisement recall ($x^2(1, N = 134) = 4.22$, $p = .04$). Participants in the non-celebrity condition

demonstrated higher recall rates, with 80% (36 out of 45) successfully recalling the product featured in the advertisement. In contrast, only 60.7% (54 out of 89) of participants in the AI-celebrity condition recalled the advertisement. This finding suggests that the presence of a prominent AI-generated celebrity voice may capture more of the listener's attention, possibly diverting attention away from processing other advertisement details, such as the product itself.

On the other hand, congruency did not significantly affect advertisement recall ($x^2(1, N = 89) = 0.07$, $p = .80$). This indicates that whether the celebrity endorser was congruent or incongruent with the product did not meaningfully influence participants' ability to recall the advertised product. These results highlight a potential conflict between heightened attention to the endorser and reduced retention of the product message. While an AI-generated celebrity voice may enhance engagement or entertainment value, it may also act as a distraction that impairs memory for the actual product being advertised.

Table 5

Chi-square Test Results

	Recall Ad (Yes)	***Did Not Recall Ad (No)***	***Total***
Celebrity	54 (60.7%)	35 (39.3%)	89
No Celebrity	36 (80%)	9 (20%)	45
Total	90 (67%)	44 (32.8%)	N = 134

Moderation Effect of Attitude Toward AI

Lastly, a moderation analysis was conducted to investigate whether participants' attitudes toward AI moderated the relationships between AI-generated celebrity endorsement and product-celebrity congruency on attitude toward the advertisement. The results of both moderation models using linear regression were statistically insignificant, indicating that attitude toward AI does not

significantly moderate the effect of either AI-generated celebrity endorsement or congruency on attitude toward the advertisement. For the interaction between AI-generated celebrity endorsement and attitude toward the advertisement, the moderation effect was not significant (b = -0.059, SE = 0.327, t(130) = -0.18, p = .86). This suggests that a lower or higher attitude toward AI does not influence the effect of AI-generated celebrity endorsement on participants' attitudes toward the advertisement. Regarding the moderation of the relationship between product-celebrity congruency and attitude toward the advertisement, the interaction effect was again not significant as well (b = -0.28, SE = 0.39, t(85) = -0.73, p = .47). This means that attitude toward AI does not significantly influence the relationship between the perceived product-celebrity congruency of the advertisement and participants' attitudes toward it.

However, the analysis of a possible moderation on AI-generated celebrity endorsement on attitude toward the advertisement revealed a significant direct effect of attitude toward AI on attitude toward the advertisement (b = 0.48, SE = 0.19, t(130) = 2.53, p = .01). The model was statistically significant ($p < .05$), although it explained only a small portion of the variance in attitude toward the advertisement ($R^2 = 0.084$). In Addition, a significant direct effect of attitude toward AI on attitude toward the advertisement was found in the model testing a possible moderation between product-celebrity congruency on attitude toward the advertisement (b = 0.647, SE = 0.29, t(85) = 2.23, p = .02). The overall model approached significance (p = .07), but again, it explained only a small portion of the variance ($R^2 = 0.08$).

A separate linear regression showed that attitude toward AI had a significant direct effect on purchase intention too (b = 0.42, t(132) = 3.32, $p < .05$), yet again only explaining 8.4% of the variance. These findings suggest that although attitude toward AI directly influences how participants perceive advertisements, it does not strengthen or weaken the effects of AI-generated endorsement type or product-celebrity congruency. Other factors are important in further determining purchase intentions.

Discussion and Conclusion

Main Findings

This study examined the effects of AI-generated advertisements, focusing on the influence of AI-generated celebrity endorsement, product-celebrity congruency, and transparency on attitude toward the advertisement, purchase intention, and advertisement recall. Additionally, the potential moderating role of consumers' attitudes toward AI was investigated.

The key findings revealed that AI-generated celebrity endorsement had a significant effect on advertisement recall, showing that participants better remembered products from advertisements that did not feature an AI-generated celebrity. In contrast, neither transparency nor product-celebrity congruency showed significant effects on any of the dependent variables. The hypothesized moderating role of attitude toward AI was not supported, as no moderation effects were found. However, attitude toward AI demonstrated a significant direct effect on both purchase intention and attitude toward the advertisement. This suggests that a more positive attitude toward AI leads to a more favorable perception of the advertisement. Lastly, a significant interaction emerged between celebrity endorsement and transparency on attitude toward the advertisement. Specifically, transparency had a slightly negative effect when the advertisement featured an AI-generated celebrity, indicating that disclosing the use of AI may reduce advertisement effectiveness under these conditions.

Discussion of Findings

This section presents the interpretation of the findings, their significance, and answers the research questions and hypotheses outlined in the study. The findings provide new insights into how AI-generated celebrity endorsements are perceived in audio advertising, particularly regarding their impact on attitude toward the advertisement, purchase intention, and advertisement recall.

The finding that celebrity endorsement had a significant effect on advertisement recall, with advertisements featuring no AI-generated celebrity being more memorable to participants directly addresses RQ1: Does the use of an AI-celebrity decrease attitude toward the advertisement, purchase

intention, and advertisement recall?, and supports the rejection of H1c, which hypothesized that AI-generated celebrity endorsement would increase recall. Interestingly, this finding contrasts with traditional advertising literature, which typically suggests that celebrities enhance attention and memory retention (Sridevi, 2012; Pilehvarian, 2020). In the context of this study, the use of AI-generated celebrities appears to diminish advertisement recall. This could potentially be caused by the artificiality of the AI element that distracts from the core message or product being advertised.

In terms of purchase intention and attitude toward the advertisement, the study found no significant direct effects for celebrity endorsement, congruency, or transparency, thus rejecting H1a, H1b, H2a, H2b, H3a, and H3b. This addresses RQ: How do consumers perceive the use of AI for celebrity endorsements in terms of traditional advertising effectiveness measures, such as attitude toward the advertisement, purchase intention, and advertisement recall, specifically in audio advertisements? The findings suggest that AI-generated celebrity endorsements do not function in the same persuasive way as traditional celebrity endorsements. While traditional literature supports the idea that celebrity involvement enhances these outcomes, the current results point toward a limitation of AI in replicating this effect. This effect may be attributed to the perceived lack of authenticity associated with AI-generated celebrities. Due to their technological nature, such endorsements may be evaluated as inauthentic and evoke concerns about the absence of genuine consent from the real celebrity (Kučinskas, 2024).

Regarding congruency, no statistically significant results were found across any of the dependent variables. This means that H2a, H2b, and H2c must be rejected, addressing RQ2: Does the use of product-celebrity congruency increase attitude toward the advertisement, purchase intention, and advertisement recall, when using AI technology to create celebrity endorsement? In previous studies, congruency between a celebrity and product has been shown to enhance message credibility and persuasion (Gaied & Rached, 2017). However, the results of this study suggest that when the celebrity is AI-generated, the effects of congruency may be weakened. A likely explanation is that AI-generated personas lack the perceived authenticity and personal connection of real-life celebrities. As

such, consumers may find it difficult to transfer existing associations with the real celebrity onto the AI version, especially when they are made aware of the AI-generated nature.

A similarly unexpected finding emerged for transparency. Despite ongoing discussions in the literature about the ethical implications of transparency in AI applications, this study found no significant main effects of transparency on attitude toward the advertisement or purchase intention, resulting in the rejection of H3a, H3b, and H3c. This addresses RQ3: How does transparency of AI-generated celebrity endorsement influence attitude toward the advertisement, purchase intention, and advertisement recall? Interestingly, there was a significant interaction effect between transparency and celebrity endorsement. When transparency was combined with an AI-generated celebrity, it appeared to have a slightly negative impact attitudes toward the advertisement. This suggests that transparency alone may not be enough to build trust—and in some cases, it may backfire by reminding consumers that the endorsement lacks human authenticity. This supports existing work suggesting that transparency in AI can heighten consumer skepticism (Peters et al., 2020; Anderljung et al., 2024), particularly in contexts involving simulated identities.

A key insight from the study is the role of attitude toward AI, which did not moderate any of the main effects but instead acted as a direct predictor of both purchase intention and attitude toward the advertisement. This result leads to the rejection of H4a and H4b and answers RQ4: Does the attitude toward AI moderate the relationships between the independent variables and attitude toward the advertisement? Instead of acting as a moderator, attitude toward AI significantly influenced consumer responses overall, supporting its role as an independent variable. Specifically, participants who had a more positive attitude toward AI were also more likely to have favorable attitudes toward the ad and increased purchase intention. Conversely, participants with negative views toward AI were less responsive, showing a decrease in purchase intention and more negative attitudes. This finding underscores the importance of the technological acceptance model, suggesting that general attitudes toward AI may shape how persuasive or trustworthy an AI-generated endorsement appears.

These findings challenge some established assumptions in celebrity endorsement literature. For example, celebrity-product congruency, a traditionally robust predictor of advertising effectiveness (Misra & Beatty, 1990), was not significant in this study possibly because AI-generated versions of celebrities lack the emotional resonance or authenticity of their human counterparts. Similarly, the failure of celebrity endorsement to enhance recall or purchase intention in this context suggests that AI-generated endorsements may not replicate the benefits of real celebrities. These insights contribute to a growing need of research suggesting that AI in advertising, especially in forms mimicking human identity, requires careful implementation as it may trigger unintended psychological effects such as detachment, skepticism, or ethical concerns.

Implications

This study contributes to research on AI in advertising by demonstrating that traditional marketing predictors, such as celebrity endorsement and congruency, may lose significance when applied to AI-generated content. The findings reveal that attitude toward AI emerges as a key predictor, emphasizing the importance of examining consumer perceptions of AI beyond specific elements of the advertisement itself. This aligns with the Technology Acceptance Model (TAM), which suggests that a consumer's attitude toward a new technology influences behavioral intention, in this case, the intention to purchase the advertised product. Aspects of consumer attitude, such as perceived authenticity, fear, and perceived threat, should therefore be further examined. Prior studies have found that AI-generated advertisements are often seen as less authentic and of lower quality compared to those created by humans (Kučinskas, 2024). This may explain the insignificant effect from AI-generated celebrity endorsement, contrasting with traditional endorsements where celebrities actively and voluntarily promote a product. Recent research has investigated AI in advertising through the rise of AI influencers (Feng et al., 2024). These are entirely fictional, AI-generated personas whose endorsements are clearly understood as voluntary. Because they are not imitating real people, the perception of authenticity may differ, potentially leading to more favorable consumer responses compared to the use

of AI-generated versions of real celebrities. Future research should further explore consumer attitudes toward AI and investigate how AI-generated endorsements can be ethically utilized and improved.

Furthermore, the interaction effect between celebrity endorsement and transparency suggests that transparency may act as a moderator rather than a direct influence in AI advertising effectiveness. It is crucial to understand how transparency can be better applied to enhance advertisements that make use of AI technologies to operate ethically and effectively. The insignificant effect of the predictors congruency and transparency suggests that different predictors need to be taken into consideration when switching to an AI-celebrity instead of traditional celebrity endorsement. When looking at the study from Feng et al. (2023), it is evident that factors such as anthropomorphism, attractiveness, luminary, quality, trendiness, and robophobia play a crucial role in affecting consumers' acceptance. This was tested and found using AI-influencers and could be interesting to study on replications of celebrities, such as in this study.

Practical implications are that marketers that want to use AI-generated celebrity endorsement should consider emphasizing transparency in a way that builds trust instead of skepticism of the consumer. The interaction between celebrity endorsement and transparency proves that it is of importance to communicate AI use in a way that can maximize the positive effect of AI-generated celebrity endorsement on attitude toward advertisements, instead of it possibly backfiring and producing more negative attitudes. It is advised to use a disclaimer when working with AI-celebrities, while it is not effective to use a simple disclaimer when working with non-celebrities in AI generated audio advertisements. Other options to communicate AI use ethically need to be researched for this.

Additionally, it could be beneficial to use AI endorsements when specifically targeting consumers who already have a positive perception of AI. The findings suggest that AI-generated endorsement would be more effective among consumers that are AI-friendly. Brands could also advocate trust-building campaigns to improve consumers' attitudes toward AI before introducing such AI-marketing strategies.

Lastly, product-celebrity congruency and transparency alone were not found to be significantly effective on the dependent variables. This implies that product-celebrity congruency could be less essential when it comes to AI content, compared to traditional celebrity endorsement. This suggests that the consumer's attitude toward AI becomes a more dominant factor, diminishing the influence of celebrity associations on the perceived congruency with the product. Moreover, product-celebrity congruency could become less effective since the consumer might find the AI-generated celebrity to be lacking authenticity or a genuine connection to the product, thus reducing the effect of congruency.

Limitations and Future Research

One major limitation of this study is the sample size, which may impact the generalizability of the findings. A better foundation to draw more reliable conclusions is through increasing external validity of the results; future research should consider expanding the sample size and exploring further demographics such as ethnicity and levels of familiarity with AI technologies to gain a better understanding of variations in consumer responses.

Secondly, the experimental design of this study contained six different versions of advertisement, which is not a typical 2x2x2 factorial structure. Future research could test alternative factorial designs to better isolate the effects. While the current study design was able to test multipole conditions, it complicated the isolation of individual factors as well as the testing of an interaction effect of congruency on AI-celebrity endorsement on attitude toward advertisement or purchase intention. A 2x2x2 factorial structure could help to analyze the factors in a better structured manner and draw more conclusions. Other possible manipulations in advertisements, such as the quality/realism of AI-generated celebrities or comparing them to versions with traditional celebrity endorsement as a condition, could help to understand the different effects better.

Regarding the interaction effect of celebrity endorsement and transparency on attitude toward the advertisement, future research should explore different levels of transparency and the effects on consumer trust. Transparency in addition to AI use is complex, as it can either foster further skepticism

or trust from the consumer. The different levels that could be tested in future research could be partial disclosure vs. full disclosure of the use of AI. Variables that it could be tested on should be consumers' trust, as well as possible ethical concern. Furthermore, the difference in products could prove to have an effect (e.g. luxury product vs. everyday goods), meaning that the type of product could be manipulating the difference in the results of the versions.

Lastly, future research could explore participants' emotions and attitudes toward AI in greater depth by incorporating variables such as trust in AI and emotional responses to AI-generated endorsements. This study highlights that AI plays a significant role in shaping consumer acceptance of advertisements. To further investigate this relationship, upcoming studies should examine emotional variables such as excitement, fear, trust, and perceived authenticity, as these may offer deeper insights into consumer reactions and how they potentially moderate the impact of AI-generated celebrity endorsements. Furthermore, investigating the role of celebrity consent, whether the use of AI to endorse a product is presented as being approved by the celebrity, may yield different outcomes in consumer perception and could contribute valuable perspectives to the evolving field of AI in advertising.

Conclusion

This research highlights the shifting importance of key predictors when transitioning from traditional celebrity endorsements to AI-generated celebrity endorsements. The results show that while attitude toward AI becomes a more significant factor, previously established predictors such as product-celebrity congruency and transparency lose their influence on attitude toward the advertisement, purchase intention, and advertisement recall. Notably, the presence of an AI-generated celebrity, had a negative effect on advertisement recall, as participants were more likely to remember the product name when no celebrity was featured.

Moreover, AI-generated celebrity endorsements did not directly enhance attitude toward the advertisement nor increase purchase intention, suggesting that simply incorporating an AI-generated

version of a celebrity does not achieve the same effectiveness as traditional celebrity endorsements. This may be due to a lack of emotional connection and persuasiveness of the celebrity to the consumer. Additionally, the study stresses the crucial role of consumers' pre-existing attitudes toward AI, which appeared to overshadow other factors, directly influencing their attitude toward the advertisement and purchase intention. This aligns with the Technology Acceptance Model (TAM), which emphasizes that attitudes shape the adoption and use of new technologies.

Transparency also emerged as a key consideration for future research. Rather than acting as an independent predictor, it could function as a moderator, influencing the effectiveness of AI-generated celebrity endorsements depending on whether AI usage was disclosed. This suggests that properly implementing transparency could enhance consumer trust and engagement with AI-generated advertisements.

Future research should adopt a 2x2x2 factorial design and expand the sample size to ensure greater diversity and generalizability. Further investigation into the role of attitudes toward AI, particularly by incorporating emotional and ethical concerns, would provide deeper insights on this topic. Additionally, exploring varying levels of transparency could help optimize the effectiveness of AI in advertising, ensuring its strategic implementation in a way that maximizes consumer acceptance and engagement ethically.

References

Agu, G.A., Onuoha, O.A., Agu, P.C., & Gazie, O.S. (2021). Perceived transparency and students' intention to participate in banks' sales promotion: Empirical evidence based on the theory of planned behaviour. *Nigerian Academy of Management Journal, 15*(4), 29-38. Retrieved from https://namj.tamn-ng.org/index.php/home/article/view/6

AIES '21: Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society Pages, 597- 607. https://doi.org/10.1145/3461702.3462566

Anderljung, M., Hazell, J. & von Knebel, M. (2024). Protecting society from AI misuse: when are restrictions on capabilities warranted?. *AI & Society*. https://doi.org/10.1007/s00146-024-02130-8

Andrada, G., Clowes, R. W., & Smart, P. R. (2022). Varieties of transparency: Exploring agency within AI systems. *AI & SOCIETY*. https://doi.org/10.1007/s00146-021-01326-6

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Bagozzi, R.P., & Silk, A.J. (1983). Recall, recognition, and the measurement of memory for print advertisements. *Marketing Science*, *2*(2), 95-202. https://doi.org/10.1287/mksc.2.2.95

Ball, C. (2014). What is transparency?. *Public Integrity, 11*(4). https://doi.org/10.2753/PIN1099-9922110400

Banik, S., & Dhar, S.R. (2021). Effect of advertisement on children's purchase intention: The mediating role of advertisement recall. *The Journal of Management Theory and Practice (JMTP), 2*(2), 81-87. https://doi.org/10.37231/jmtp.2021.2.2.113

Childres, T.L., Carr, C.L, Peck, J., & Carson, S.J. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing, 77(4),* 511-535. https://doi.org/10.1016/S0022-4359(01)00056-2

Clark, C.R., & Horstmann, I.J. (2013). A model of advertising format competition: On the use of celebrities in ads. *Canadian Journal of Economics, 46*(4), 1606-1630. https://doi.org/10.1111/caje.12056

Copeland, L., Lyu, J., & Han, J. (2021). Does familiarity matter? Examining model familiarity in instagram advertisements. *Journal of Internet Commerce, 22*(1), 97-121. https://doi.org/10.1080/15332861.2021.2011600

Davis, F. (1987). User acceptance of information systems: The technology acceptance model (TAM). *Information Seeking Behavior and Technology Adoption, 205(219)*, 5. https://quod.lib.umich.edu/b/busadwp/images/b/1/4/b1409190.0001.001.pdf

Dhotre, M. P., & Bhola, S. S. (2010). Analytical study of association between celebrity advertising and brand recall. *IUP Journal of Brand Management*, *7*. https://www.csus.edu/faculty/M/fred.molitor/docs/Ads%20and%20Recall.pdf

Erfgen, C., Zenker, S., & Sattler, H. (2015). The vampire effect: When do celebrity endorser harm brand recall? *International Journal of Research in Marketing, 32*(2), 155-163. https://doi.org/10.1016/j.ijresmar.2014.12.002

Feng, Y., Chen, H., & Xie, Q. (2023). AI influencers in advertising: The role of AI influencer-related attributes in shaping consumer attitudes, consumer trust, and perceived influencer-product fit. *Journal of Interactive Advertising, 24*(1). https://doi.org/10.1080/15252019.2023.2284355

Gaied, A.M., & Rached, K.S.B. (2017). The congruence effect between celebrity and the endorsed product in advertising. *Journal of Marketing Management, 5(1),* 27-44. https://doi.org/10.15640/jmm.v5n1a4

Habes, M., That, K., That, D., Attar, R.W., Masoori, A., & Ketbi, N. (2023). The Theory of Planned Behavior Regarding Artificial Intelligence in Recommendations and Selection of YouTube

News content. *2023 International Conference on Multimedia computing, Networking and Applications (MCNA).* https://doi.org/10.1109/MCNA59361.2023.10185878

Harmon.Kizer, T.R. (2017). The effects of schema congruity on consumer response to celebrity advertising. *Journal of Marketing Communications, 23*(2), 162-175. https://doi.org/10.1080/13527266.2014.975831

Huang, X., Dan, S. (2010). Research on online shopping intention of undergraduate consumer in china-based on the theory of planned behavior. *International Business Research, 4(1).* https://doi.org/10.5539/jbr.v4n1p86

Jeong, H.J., Chung, D.S., & Kim J. (2022). Brands are human on social media: The effectiveness of human tone-of-voice on consumer engagement and purchase intentions through social presence. *International Journal of Communication, 16*, 4231-4253. https://ijoc.org/index.php/ijoc/article/view/19269/3878

Kang, J., & Hustvedt, G. (2014). Building trust between consumers and corporations: The role of consumer perceptions of transparency and social responsibility. *Journal of Business Ethics, 125*, 253-265. https://doi.org/10.1007/s10551-013-1916-7

Kučinskas, G. (2024). Negative Effects of Revealing AI Involvement in Products: Mediation by Authenticity and Risk, moderation by Trust in AI and Familiarity with AI. http://dx.doi.org/10.2139/ssrn.4805186

Larsson, S., & Heintz, F. (2020). Transparency in artificial intelligence. *Internet Policy Review*, *9*(2). https://policyreview.info/concepts/transparency-artificial-intelligence

Lee, E.J., & Nam, J.H. (2021). Effects of corporate transparency on trust and purchase intention. *International Journal of Advanced Culture Technology, 9*(1), 40-51. https://doi.org/10.17703/IJACT.2021.9.1.40

Lee, J.S., Chang, H., & Zhang, L. (2022) An integrated model of congruency and credibility in celebrity endorsement. *International Journal of Advertising*, *41*(7), 1358-1381. https://doi.org/10.1080/02650487.2021.2020563

Ling, K.C., Lau, T.C., & Piew, T.H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Busines Research, 3(3).* https://doi.org/10.5539/jbr.v3n3p63

Liu, B., Moyle, B., Kralj, A., & Li, Y. (2023). Celebrity endorsement in tourism: Attention, emotional arousal and familiarity. *Tourism Management, 98*, 104750. https://doi.org/10.1016/tourman.2023.104750

Liu, Z., Yang, J.Z., Clark, S.S., & Shelly, M.A. (2021). Recycling as a planned behavior: The moderating role of perceived behavioral control. *Environment, Development and Sustainability, 24*, 11011-11026. https://doi.org/10.1007/s10668-021-01894-z

Malhotra, G., & Ramalingam, M. (2023). Perceived anthropomorphism and purchase intention using artificial intelligence technology: Examining the moderated effect of trust. *Journal of Enterprise Information Management*, 1741-0398. https://doi.org/10.1108/JEIM-09-2022-0316

Margetts, H. (2011). The internet and transparency. *The Political Quartely, 82*(4). https://doi.org/10.1111/j.1467-923X.2011.02253.x

Mehyar, H., Saeed, M., Baroom, H., Al-ja'afree, A., & Al-adaileih, R. (2020). The impact of electronic word of mouth on consumers purchasing intention. *Journal of Theoretical and Applied Technology, 98*,2. http://www.jatit.org/volumes/Vol98No2/2Vol98No2.pdf

Misra, S., & Beatty, S.E. (1990). Celebrity spokesperson and brand congruency: An assessment of recall and affect. *Journal of Business Research, 21(2),* 159-173. https://doi.org/10.1016/0148-2963(90)90050-N

Mohammed, A.P.H., Astuti, B., & Basu, S.D. (2023). The influence of Kobe Bryant as an endorser and subjective norms on consumer purchase intentions for Nike basketball shoes. *Jurnal Dinamika Manajemen, 14*(1), 137-148. https://journal.unnes.ac.id/nju/jdm/article/view/41967

Mohr, S., & Kühl, R. (2021). Acceptance of artificial intelligence in german agriculture: An application of the technology acceptance model and the theory of planned behavior. *Precision Agriculture, 22*, 1816-1844. https://doi.org/10.1007/s11119-021-09814-x

Nguyen, M.H., & Nguyen, H.L. (2016). The effect of celebrity endorsement on customer's attitude toward brand and purchase intention. *International Journal of Economics and Finance, 9*(1). ttp://dx.doi.org/10.5539/ijef.v9n1p64

Pavlou, P.A., & Fygenson, M. (2006). Understanding the predicting electronic commerce adoption: An extension of the theory of planned behavior. *Management Information Systems Research Center, University of Minnesota, 30*(1), 115-143. https://doi.org/10.2307/25148720

Peters, F., Pumplun, L., & Buxmann, P. (2020). *Opening the Black Box: Consumer's Willingness to Pay for Transparency of Intelligent Systems. 90.* https://web.archive.org/web/20220802070343id_/https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1089&context=ecis2020_rp

Pilehvarian, S. The impact of using celebrity endorsement in television (TV) commercials on advertisement recall: A research applied to young students. *Journal of Banking and Financial Research, 7(1),* 29-41. https://dergipark.org.tr/en/download/article-file/933961

Pradhan, D., Duraipandian, I., & Sethi, D. (2014). Celebrity endorsement: How celebrity-brand-user personality congruence affects brand attitude and purchase intention. *Journal of Marketing Communications, 22(5),* 456-473. https://doi.org/10.1080/13527266.2014.914561

Rana, M.S., Nobi, M.N., Murali, B., & Sung, A.H. (2022). "Deepfake detection: A systematic literature review,", *IEEE*, *10*, 25494-25513. https://doi.org/10.1109/ACCESS.2022.3154404

Rockett, T.L., & Okhuysen, G.A. (2002). Familiarity in groups: Exploring the relationship between inter-member familiarity and group behavior. *Research on Managing Groups and Teams, 4*, 173-201. https://doi.org/10.1016/S1534-0856(02)04008-2

Sadriwala, M.F., & Dadhich, M. (2024). Marketing innovation, subjective norms, behavioral control and intention to adoption of artificial intelligence. *The AI Revolution: Driving Business, Innovation and Research,* 263-275. https://doi.org/10.1007/978-3-031-54383-8_21

Sallam, M.A., & Algammash, F.A. (2016). The effect of attitude toward advertisement on attitude toward brand and purchase intention. *International Journal of Economics, Commerce and Management, 4*(2), 2348-0386. https://www.researchgate.net/publication/301764911_The_effect_of_attitude_toward_advertisement_on_attitude_toward_brand_and_purchase_intention

Satrio, D., Priyanto, S.H., & Nugraha, A.K.N.A. (2020). Viral marketing for cultural product: The role of emotion and cultural awareness to influence purchasing intention. *Montenegrin Journal of Economics, 16*(2), 77-91. https://doi.org/10.14254/1800-5845/2020.16-2.6

Schepman, A., & Rodway (2020). Initial validation of the general attitudes toward Artificial Intelligence Scale. *Computers in Human Behavior Reports, 1*, 100014. https://doi.org/10.1016/j.chbr.2020.100014

Shrestha, S.K. (2019). Celebrity endorsement and purchase Intention: A structural equation modeling approach. *Management Dynamics, 22*(1), 35-46. https://doi.org/10.3126/md.v22i1.30237

Song, Y., Wang, L., Zhang, Z., & Hikkerova, L. (2024). AI or human: How endorser shapes online purchase intention? *Computers in Human Behavior, 158,* 108300. https://doi.org/10.1016/j.chb.2024.108300

Sridevi, J. (2012) Effectiveness of celebrity endorsement in brand recall and brand recognition. *international journal of business economics & management research*, *2(5)*, 203-209.

https://www.researchgate.net/publication/317231512_EFFECTIVENESS_OF_CELEBRITY_ENDORSEMENT_IN_BRAND_RECALL_AND_BRAND_RECOGNITION

Tao, L., Nakamura, S., Wang, X., Kawahara, T., Tamura, G., & Yamasaki, T. (2023). A large-scale television advertising dataset for detailed impression analysis. *Multimedia Tools and Applications*. *83,* 18779-18802. https://doi.org/10.1007/s11042-023-14704-7

Vien, C.V., Yun, C.T., & Fai, P.L. (2017). The effect of celebrity endorsement on brand attitude and purchase intention. *Journal of Global Business and Social Entrepreneurship (GBSE), 1*(4), 141-150. http://www.gbse.my/v1no4jan17/Paper-73-.pdf

Voorveld, H.A.M. (2011). Media multitasking and the effectiveness of combining online and radio advertising. *Computers in Human Behavior, 27*(6), 2200-2206. https://doi.org/10.1016/j.chb.2011.06.016

Von Eschenbach, W.J. (2021). Transparency and the black box problem: Why we do not trust AI. *Philosophy & Technology, 34,* 1607-1622. https://doi.org/10.1007/s13347-021-00477-0

Wang, S.W., Kao, G.H., & Ngamsiriudom, W. (2017). Consumers' attitude of endorser credibility, brand and intention with respect to celebrity endorsement of the airline sector. *Journal of Air Transport Management, 60,* 10-17. https://doi.org/10.1016/j.jairtraman.2016.12.007

Wolf, A.M. (2021). Voice Assistants in Cars: Dream or Nightmare?: The effects of voice assistants on trust, emotions and purchase Intention. https://essay.utwente.nl/86672/

WR, J.W., & Ariyanti, M. (2015). Perceived factors influencing consumer trust and its impact on online purchase intention in indonesia. *International Journal of Science and Research.* 2319-7064. https://www.researchgate.net/profile/Joko-Wijoseno/publication/320076534_Perceived_Factors_Influencing_Consumer_Trust_and_Its_Impact_on_Online_Purchase_Intention_in_Indonesia/links/5adf051b0f7e9b285943ad58/Perceived-Factors-Influencing-Consumer-Trust-and-Its-Impact-on-Online-Purchase-Intention-in-Indonesia.pdf

Zhang, L., & Wei, W. (2021). Influencer Marketing: A Comparison of Traditional Celebrity, Social Media Influencer, and AI Influencer. *Boston Hospitality Review.* *https://www.bu.edu/bhr/files/2022/04/BHR_Zhang-Wei_Influencer-Marketing_OCT.21.pdf*

Zhuang, X., Hou, X., Feng, Z., Lin, Z., & Li, J. (2020). Subjective norms, attitudes, and intentions of AR technology use in tourism experience: The moderating effect of millennials. *Leisure Studies, 40*(3), 392-406. https://doi.org/10.1080/02614367.2020.1843692

Appendix

Survey Items

The Appendix A consists of the questionnaire items that were used to create the items and variables in the analysis for this study.

Section 1: Informed Consent

1.) Dear Participant,

Welcome! In advance, we would like to thank you for your participation:

This study is being conducted to gain a better understanding of customer acceptance of AI-generated audio advertisements.

By participating in this study, you agree that your participation is voluntary and as accurate as possible. Any responses you provide will be anonymized, so the identity of the participants will be kept secret. The data will be handled carefully and safely and deleted after the end of the research.

Voluntary participation: Your participation in this research project is completely voluntary. You have the right to withdraw from the research study at any time. You can withdraw at any time prior to the completion of the online survey by simply abandoning the survey.

After having read the terms and instructions we ask for your consent to participate in the study. By participating in this study, you are helping a student at the University of Twente, to graduate with their Master Thesis.

If there are any questions, feel free to contact the researcher: lootboxutstudy@gmail.com

PS: Users of the research platform SurveyCircle.com will receive SurveyCircle points for their participation. As well as SurveySwap users.

( ) Yes

( ) No

Section 2: Demographics

2.) To draw more detailed results, some demographics are asked in the first part of this survey. Your responses will remain anonymous and confidential.

3.) What Gender do you identify as?

( ) Male

( ) Female

( ) Non-binary / third gender

( ) Prefer not to say

Section 3: Audio Advertisement Clips

Version 1

4.) Clip 1

5.) Enter the name of the celebrity endorsing the product in the advertisement.

_____

6.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

7.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

8.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Version 2

9.) Clip 2

10.) Enter the name of the celebrity endorsing the product in the advertisement.

_____

11.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

12.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

13.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Version 3

14.) Clip 3

15.) Enter the name of the celebrity endorsing the product in the advertisement.

_____

16.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

17.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

18.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Version 4

19.) Clip 4

20.) Enter the name of the celebrity endorsing the product in the advertisement.

_____

21.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

22.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

23.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Version 5

24.) Clip 5

25.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

26.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

27.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Version 6

28.) Clip 6

29.) Enter the name of the celebrity endorsing the product in the advertisement.

(Insert field)

30.) After listening to the advertisement clip, indicate to what extent you agree with the following statements.

31.) I feel like the congruency between the celebrity and product in the advertisement is high.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

32.) I feel like the advertisement is very transparent about the use of AI.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Section 4: Purchase Intention

33.) Please answer the following statements truthfully.

34.) I would intent to buy this product.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

35.) I would plan to purchase this product.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

36.) I would attempt to purchase this product.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

37.) I would certainly purchase this product.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Section 5: Attitude toward Advertisement

38.) Indicate how you would evaluate the advertisement you have listened to.

	1	**2**	**3**	**4**	**5**	**6**	**7**
appealing							
believable							
impressive							
attractive							
informative							
clear							
convincing							
overall likable							

Section 6: Advertising Recall

39.) Do you remember the product mentioned in the audio clip?

( ) Yes

( ) No

Display this question if "Yes" is selected

40.) What is the name of the product presented in the advertisement?

_____

Section 7: Attitude toward AI

41.) Please indicate the degree to which you agree to the following statements considering AI technology systems.

42.) I am interested in using artificially intelligent systems in my daily life.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

43.) There are many beneficial applications of Artificial Intelligence.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

44.) Artificial Intelligence is exciting.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

45.) Artificial Intelligence can provide new economic opportunities for this country.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

46.) I would like to use Artificial Intelligence in my own job.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

47.) An artificially intelligent agent would be better than an employee in many routine jobs.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

48.) I am impressed by what Artificial Intelligence can do.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

49.) Artificial Intelligence can have positive impacts on people's wellbeing.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

50.) Artificially intelligent systems can help people feel happier.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

51.) Artificially intelligent systems can perform better than humans.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

52.) Much of society will benefit from a future full of Artificial Intelligence.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

53.) For routine transactions, I would rather interact with an artificially intelligent system than with a human.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

54.) I think Artificial Intelligence is dangerous.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

55.) Organizations use Artificial Intelligence unethically.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

56.) I find Artificial Intelligence sinister.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

57.) Artificial Intelligence is used to spy on people.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

58.) I shiver with discomfort when I think about future uses of Artificial Intelligence.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

59.) Artificial Intelligence might take control of people.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

60.) I think artificially intelligent systems make many errors.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

61.) People like me will suffer if Artificial Intelligence is used more and more.

( ) Strongly disagree

( ) Somewhat disagree

( ) Neither agree nor disagree

( ) Somewhat agree

( ) Strongly agree

Section 8: End of Survey

62.) We thank you for your time spent taking this survey.

Your response has been recorded.

For SurveyCircle users (www.surveycircle.com): The Survey Code is: Q86N-LRWN-31Y7-KW7P

or Redeem Survey Code with one click: https://www.surveycircle.com/Q86N-LRWN-31Y7-KW7P/

The following code gives you Karma that can be used to get free research participants at SurveySwap.io.

Go to: https://surveyswap.io/sr/3J05-ZCPR-E17U

Or, alternatively, enter the code manually: 3J05-ZCPR-E17U

If there are any questions, feel free to contact the researcher: lootboxutstudy@gmail.com

Scripts and Conditions for the Audio Advertisements

This Appendix gives the Advertisement scripts that were used to create the six different versions of audio, using Text-to-speech AI.

Version1: Celeb, congruent, disclaimer

This advertisement features the AI-generated voice and persona of Dwayne 'The Rock' Johnson.

Listen up, champions! This is Dwayne 'The Rock' Johnson, and I've got one question for you: What are you fueling your body with? You put in the hours, you sweat, you grind, but without the right fuel, you're leaving results on the table.

That's why I trust IronClad Protein Supplements — designed to help you go harder, recover faster, and push past your limits. Packed with 30 grams of premium protein per serving, plus the essential amino acids your muscles crave after a brutal workout. Whether you're lifting heavy, smashing cardio, or just looking to get the edge — IronClad has your back. You don't do anything halfway — so why should your nutrition? It's time to level up, to outwork, and to dominate every goal in front of you. IronClad Protein Supplements. Train like me. Fuel like me.

Fuel your greatness. Be IronClad.

IronClad Protein Supplements. Available at your local stores and online at IronCladSupplements.com.

Version2: Celeb, incongruent, disclaimer

This advertisement features the AI-generated voice and persona of Dwayne 'The Rock' Johnson.

Hey there... Dwayne 'The Rock' Johnson here. When it comes to taking care of yourself, it's not just about hitting the gym or pushing your limits. It's about taking time to nourish your skin.

That's why I turn to LuxeSilk Skincare—a luxurious blend of natural ingredients that hydrates, revitalizes, and brings out the best in your complexion. Whether it's a long day on set or just unwinding after a tough workout, LuxeSilk's silky-smooth formula gives my skin the care it deserves.

With ingredients like rejuvenating rose oil and antioxidant-rich green tea extract, LuxeSilk helps you achieve that glow—because real strength is about balance, inside and out.

So treat yourself to luxury. Treat yourself to LuxeSilk.

LuxeSilk Skincare. Because your skin deserves the best. Available now at high-end retailers and LuxeSilk.com.

Version3: Celeb, congruent, no disclaimer

Listen up, champions! This is Dwayne 'The Rock' Johnson, and I've got one question for you: What are you fueling your body with? You put in the hours, you sweat, you grind, but without the right fuel, you're leaving results on the table.

That's why I trust IronClad Protein Supplements — designed to help you go harder, recover faster, and push past your limits. Packed with 30 grams of premium protein per serving, plus the essential amino acids your muscles crave after a brutal workout. Whether you're lifting heavy, smashing cardio, or just looking to get the edge — IronClad has your back. You don't do anything halfway — so why should your nutrition? It's time to level up, to outwork, and to dominate every goal in front of you. IronClad Protein Supplements. Train like me. Fuel like me.

Fuel your greatness. Be IronClad.

IronClad Protein Supplements. Available at your local stores and online at IronCladSupplements.com.

Version4: Celeb, incongruent, no disclaimer

Hey there... Dwayne 'The Rock' Johnson here. When it comes to taking care of yourself, it's not just about hitting the gym or pushing your limits. It's about taking time to nourish your skin.

That's why I turn to LuxeSilk Skincare—a luxurious blend of natural ingredients that hydrates, revitalizes, and brings out the best in your complexion. Whether it's a long day on set or just unwinding after a tough workout, LuxeSilk's silky-smooth formula gives my skin the care it deserves.

With ingredients like rejuvenating rose oil and antioxidant-rich green tea extract, LuxeSilk helps you achieve that glow—because real strength is about balance, inside and out.

So treat yourself to luxury. Treat yourself to LuxeSilk.

LuxeSilk Skincare. Because your skin deserves the best. Available now at high-end retailers and LuxeSilk.com.

Version5: no celeb, disclaimer

This advertisement features the AI-generated voice which was used to generate text-to-speech.

Morning. It's the start of a new day, and there's only one way to kick it off right… with the perfect cup of coffee.

Introducing BoldBrew Coffee. Crafted from the finest beans, BoldBrew isn't just a drink—it's a moment. A moment to savor the bold, rich flavors, whether you're getting ready to tackle your biggest challenges or just easing into the day.

It's more than just coffee—it's fuel for your passions, your hustle, your time. With notes of dark chocolate and a smooth finish, BoldBrew is designed to be as bold as you are.

So, whether you're on your grind or taking a moment to relax, BoldBrew is there to elevate your experience. Because the best days always start with a bold cup of coffee.

BoldBrew Coffee. Find your bold. Available now at BoldBrew.com and in stores near you.

Version6: no celeb, no disclaimer

Morning. It's the start of a new day, and there's only one way to kick it off right… with the perfect cup of coffee.

Introducing BoldBrew Coffee. Crafted from the finest beans, BoldBrew isn't just a drink—it's a moment. A moment to savor the bold, rich flavors, whether you're getting ready to tackle your

biggest challenges or just easing into the day.

It's more than just coffee—it's fuel for your passions, your hustle, your time. With notes of dark chocolate and a smooth finish, BoldBrew is designed to be as bold as you are.

So, whether you're on your grind or taking a moment to relax, BoldBrew is there to elevate your experience. Because the best days always start with a bold cup of coffee.

BoldBrew Coffee. Find your bold. Available now at BoldBrew.com and in stores near you.

The Use of Artificial Intelligence

During the preparation of this work, I Patricia Riesner used ChatGPT to help rephrase and reorder paragraphs of this thesis. Additionally, it was used to generate ideas for the advertisement scripts. After using this tool/service, I thoroughly reviewed and edited the content as needed, taking full responsibility for the final outcome.

Furthermore, FineVoice.com was used as a tool to create the instruments in this study to create the audio advertisements. A Subscription was purchased, then text used to convert it from text to speech.