To Disclose or Not Disclose?

The Role of AI-Disclosure in Shaping Consumers' Feelings, Thoughts and Behaviours

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Abstract

In recent years, artificial intelligence (AI) has significantly disrupted the marketing industry, becoming a prevalent tool for marketers. Despite its growing prominence, the effects of AI-disclosure have not been extensively researched. Drawing upon the Uncanny Valley Theory, the Persuasion Knowledge Model, and Schema Congruity Theory, this quantitative study investigates AI-disclosure within the airline industry, measuring its impact on consumers' perceived joy, trustworthiness, expertise, brand attitude, and purchase intention. An online survey experiment was conducted, collecting responses from 519 U.S.-based participants. The study employed Independent t-Tests and Hayes Process models 4 and 7 to analyse the data, examining the mediating roles of joy, trustworthiness, and expertise in shaping brand attitudes and their subsequent influence on purchase intentions. Additionally, the study explored the moderating effects of brand type (low-cost vs. premium). The results showed that AI-disclosure leads to lower evaluations in terms of joy, trustworthiness, and brand attitude. Moreover, joy and expertise played a mediating role in influencing brand attitudes, which in turn predicted purchase intentions. Furthermore, the study found no moderating effect of brand type on these relationships. This study contributes novel insights to the underexplored domain of AI-disclosure, particularly within the airline industry. The findings are valuable for marketing practitioners, offering critical guidance on the implications of AI-disclosure for consumer perceptions and advertising strategies.

Keywords: advertising, artificial intelligence, the uncanny valley, persuasion knowledge model, schema congruity theory

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1. Introduction

What role does AI-disclosure play in shaping consumers' feelings, thoughts, and behaviours? In recent years, artificial intelligence (AI) has disrupted the marketing industry, significantly altering how firms operate (Hartmann et al., 2023; Kar, 2023). Industry reports suggest that AI's impact on the marketing sector alone could surpass USD 450 billion (Chui et al., 2023), with AI set to reduce traditional marketing costs (Arango et al., 2023) and reshape firms' approach to their marketing mix (Jarek & Mazurek, 2019). Researchers generally agree that AI will significantly change the marketing industry by increasing productivity (Chen et al., 2022; Davenport et al., 2020; Kaplan & Haenlein, 2019; Kumar et al., 2019). However, a significant research gap remains concerning the antecedents and consequences of using AI-generated images in advertising.

The integration of AI-generated images into advertising is rapidly becoming a norm, with numerous companies already incorporating these images into their campaigns (Travel News, 2024; Campaigns of the World, 2024). This trend is set to escalate, with studies predicting exponential growth of AI in marketing over the next decades (Campbell et al., 2022; Whittaker et al., 2020). In advertising, AI is becoming crucial at every step of the marketing process (Wu et al., 2024), with practical implications ranging from content creation to predictive analytics (Deshpande, 2021). This study focuses on the consequences of AI's application within content creation, specifically on AI-generated images, by exploring the effects when AI's involvement is disclosed versus when it is not, and between low-cost and premium brands.

Disclosure in advertisements is generally defined as providing more information to consumers to prevent them from being misled (Andrews et al., 2000). However, there is a significant research gap regarding the effects and implications of AI-disclosure for profit-oriented organisations. As the use of AI continues to grow within the marketing sector, it becomes crucial to understand how AI-disclosure will impact consumers, especially given that the impact of disclosure is dual-sided. On one hand, disclosure has been shown to increase brand evaluations (Semaan et al., 2012), perceptions of transparency (van Reijmersdal et al., 2023), and persuasion knowledge (Evans & Hoy, 2016). On the other hand, disclosure has been shown to have adverse effects on brand-related attitudes (Boerman et al., 2015), source credibility perception (Nekmat,

2012), product evaluations (Cermin et al., 2019), and purchase intentions (Cermin et al., 2019; Nekmat, 2012).

This study seeks to address this gap by investigating the impact of AI-disclosure on consumer emotions, trust, expertise, brand attitudes, and purchase intentions. The dual nature of disclosure effects will be examined to provide a comprehensive understanding of AI's role in modern advertising strategies.

1.1 Purpose

As the use of AI-generated images in advertising continues to expand, it remains uncertain how consumers will react upon discovering that an image is AI-generated. Moreover, with an increasing number of countries mandating advertising disclosures (van Reijmersdal et al., 2023), the necessity for research on AI-disclosure is growing. However, previous studies have not comprehensively explored the impact of AI-disclosure on consumers' emotions, evaluations, and behavioural intentions within profit-oriented firms. This study aims to fill this research gap by investigating the relationship between AI-disclosure and consumers' emotions, evaluations, and behavioural intentions. Additionally, this study seeks to determine whether variations in brand type influence the effects of AI-disclosure, as well as the role of brand attitude antecedents in this context, and how these factors subsequently affect purchase intentions. Consequently, the research questions addressed in this study are as follows:

- *What role does AI-disclosure play in shaping consumers' feelings, thoughts, and behaviours?*
- *Do the effects of AI-disclosure on consumer responses vary between low-cost and premium brands?*

2. Theoretical Framework & Hypothesis Formulation

To examine this study's research questions, a theoretical framework incorporating the dual-sided nature of disclosure effects, including schema congruity theory (Mandler, 1982), the persuasion knowledge model (Friestad & Wright, 1994), and the uncanny valley theory (Mori et al., 2012), is employed to offer insights into consumers' responses to AI-generated images. Further elaboration on these models will be provided in the following sections, followed by an exploration of how brand credibility and joy contribute to brand attitude and subsequently influence purchase intentions.

2.1 Effects of AI-Disclosure

2.1.1 The Uncanny Valley

Originally hypothesised by Masahiro Mori in the 1970s, the uncanny valley describes a phenomenon where humanoid objects that appear almost, but not exactly, like real human beings cause a response of eerie discomfort among observers. Initially linked to robotics, this concept has since been applied to other human-like figures such as computer generated (CG) characters and virtual avatars (Lay, 2015; Seyama & Nagayama, 2007; Shin et al., 2019). Research indicates that the uncanny valley effect is particularly pronounced when the humanoid objects exhibit subtly distorted or abnormal features, suggesting that mere near-perfect realism, such as deep-fakes, do not necessarily evoke this response unless they contain noticeable imperfections (Lay, 2015; Seyama & Nagayama, 2007). The feeling of eeriness, categorised as a negative emotional state (Schwind & Jäger, 2015; Shin et al., 2019), is believed to arise from a primal instinct to safeguard oneself against entities that appear familiar yet are recognisable foreign, potentially posing hidden dangers (Mori et al., 2012).

When presented with an AI-generated image containing a virtual avatar, the uncanny valley effect triggers a cognitive conflict within the brain, shifting between two opposing hypotheses: "this is a human being" and "this is not a human being" (Brenton et al., 2005). Thus, disclosing the use of AI can shift the consumer's mental state, shattering the illusion and making it clear that the figure in the image is not real. This disruption is known as a break in presence (BIP), which can instil an unsettling feeling in the viewer (Brenton et al., 2005; Lay, 2015).

As brands start to integrate AI-generated images featuring virtual avatars into their marketing campaigns, concerns regarding their uncanny qualities are increasing. Despite the growing prevalence of AI in advertising, a significant research gap persists regarding the broader implications of the uncanny valley effect in general advertising contexts. However, recent studies in adjacent fields can provide relevant insights. For example, a recent study by Lou et al. (2023) on the uncanny valley effect concerning AI-generated influencers found that most followers perceive AI-influencers as uncanny. Furthermore, Ham et al. (2023) observed that AI-influencers garner more positive attitudes when presented alone rather than alongside real humans—thus avoiding a BIP. Suggesting that the absence of a BIP might enhance viewer receptivity and hinting that disclosing AI's involvement could potentially diminish positive attitudes. Expanding into service settings, Stein and Ohler (2017) conducted research within a virtual reality (VR) chat program and observed that participants experienced stronger negative emotions when the virtual agent was more obviously AI-driven. This underscores how increased awareness of AI's involvement can provoke adverse reactions, further complicating the consumer's response. Given these dynamics and considering that advertisements are inherently persuasive (Pollay, 1986), the Friestad and Wrights (1994) Persuasion Knowledge Model could provide a valuable framework for understanding consumer reactions to AI-generated images in advertising.

2.1.2 Persuasion Knowledge Model

Advertisements are powerful persuasion tools designed to affect attitudes and change behaviours (Pollay, 1986). Consequently, consumers are tasked with interpreting and coping with marketers' persuasion tactics (Friestad & Wright, 1994). As consumers interact with various persuasion attempts over time, their persuasion knowledge evolves, impacting their responses. This phenomenon can be explained through the Persuasion Knowledge Model (PKM).

In 1994 Friestad and Wright introduced the PKM to examine how consumers develop and use their persuasion knowledge throughout their life. The model examines persuasion from the persuasion target and explains how a consumer's knowledge of persuasion can influence their ability to recognise, analyse, and evaluate persuasion attempts. Over time, as consumers gain knowledge, they develop coping strategies to mediate marketers' persuasion attempts. These coping strategies have

previously been found to affect emotions, evaluations, and behavioural intentions negatively (Eisend & Tarrahi, 2022).

In the context of this study, when a participant realises that an image is AI-generated, he/she likely recognises it as a hidden persuasive tactic and a manipulation attempt, consequently enacting appropriate coping strategies such as heightened scepticism to defend against the persuasion attempt (Boush et al., 1994). This reaction is heightened by the pervasive scepticism towards AI (Cave et al., 2019; Oprea et al., 2024), which can be attributed to the uncanny valley effect. The uncanny valley effect heightens perceptions of underlying risks and intensifies consumer attention when AI involvement is disclosed (as detailed in 2.1). Additionally, as AI is a relatively new technology, consumers encountering AI-generated images in advertisements may experience schema incongruency.

2.1.3 Schema Congruity Theory

In order to further understand the effects of AI-disclosure, this study draws on the concept schema congruity theory. A schema is a memory-stored cognitive structure of previous knowledge (Crocker, 1984) that guides action, perception and thought (Mandler, 1982) and is formed through direct and indirect experiences (Halkias, 2015). Over time, as consumers are exposed to new stimuli, their corresponding schemas are activated, and details about the new experience are assimilated in connection to pre-existing schemas (Beals, 1998, as cited in Yoon, 2013). According to Mandler (1982), new information can be categorised as congruent or incongruent. Congruency occurs when information is consistent with existing knowledge, facilitating lower-involvement processing. Conversely, incongruity arises when information fails to align with existing cognitive schemas, requiring additional cognitive resources to resolve the disparity. This incongruency triggers high-involvement processing, compelling consumers to more rigorously evaluate both the credibility of the source and the accuracy of the information presented (Heckler & Childers, 1992).

This study's first hypothesis is thus that when consumers are exposed to AI-disclosure, as opposed to non-disclosure, it significantly alters their mental state by inducing a BIP. This break disrupts the perceived realism and emphasises the artificial nature of the virtual avatar in the AI-generated image. This revelation leads to schema incongruency, prompting high-involvement processing where participants critically

analyse the advertisement. Disclosure is perceived as a persuasive tactic, triggering defensive coping strategies among viewers. Consequently, this process results in more negative emotional responses, manifested explicitly as a decrease in perceived joy. The first hypothesis can thus be summarised in the following way:

> **H1**: Exposure to articles with AI-disclosure (non-disclosure) will trigger a lower (higher) level of perceived joy.

2.1.4 Influence on Credibility

The credibility of a communication source, composed of two primary components: (1) trustworthiness and (2) expertise (Erdem & Swait, 2004), is a crucial consideration within the PKM (Eisend & Tarrahi, 2022). Defined broadly as "the believability of an entity's intentions at a particular time" (Erdem & Swait, 2004), credibility significantly influences consumer behaviour. Extensive research over the past five decades, as highlighted by Pornpitakpan (2004), consistently demonstrates that individuals who perceive a source as credible are more likely to accept its message, resulting in subsequent attitude changes.

As marketing campaigns are designed to foster positive attitudes toward both the brand and the advertisement itself (Gerlich, 2023), understanding the influence of credibility on the effectiveness of these messages is crucial. Within this context, the two components of credibility—trustworthiness and expertise—are pivotal. Expertise refers to consumers' perception of a brand's ability to fulfil its promises, while trustworthiness pertains to their belief in the brand's reliability to consistently deliver on its commitments (Erdem & Swait, 2004).

Within the field of AI-disclosure in general advertising, particularly with overtly AI-generated images, there remains a largely unexplored field of research. However, prior studies have shown that schema-congruent advertisements contribute to enhanced credibility (Baum et al., 2016). Conversely, while disclosure increases persuasion knowledge, it has been found to decrease credibility and negatively impact brand attitudes (Eisend et al., 2020). Thus, research suggests that disclosures can negatively influence source credibility by triggering schema incongruency and increasing consumers' persuasion knowledge. This was demonstrated in a study by Powers et al. (2023), which focused on how AI-disclosure of deep fake videos affects consumers'

perceptions of source credibility. Consequently, this study presents the following hypotheses:

> **H2a**: Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) level of perceived trustworthiness.
>
> **H2b**: Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) level of perceived expertise.

2.1.5 Influence on Brand Attitudes

Understanding how consumers' persuasion knowledge influences their brand evaluations is essential for marketers. Previous research has found that activating consumers' persuasion knowledge can significantly alter their brand evaluation (Boerman et al., 2015). This is because consumers tend to adopt a more critical processing style when persuasion knowledge is activated, scrutinising persuasive messages with suspicion, as detailed in section 2.1.2. This activation of consumers persuasion knowledge has been found to negatively impact consumers' advertisement attitudes, brand attitudes, as well as purchase intentions (Campbell, 1995).

Brand attitude is defined as a consumer's overall evaluation of a brand, encompassing of their positive or negative perceptions and feelings toward it (Mitchell & Olson, 1981). This construct is crucial because it influences consumer behaviour. For instance, a study by Baldinger and Rubinson (1996) demonstrates how favourable brand attitudes can convert non-buyers into customers. Additionally, research by Lee et al. (2017) found that brand attitude positively influences purchase intention.

In the context of AI-disclosure, the recognition of AI's involvement can have a negative impact on brand evaluations. This is because when consumers become aware that a brand employs AI to persuade them, they might react defensively by adjusting their attitudes toward the brand, often becoming more critical. This reaction is rooted in the PKM, which suggests that consumers develop coping strategies to guard against perceived manipulation attempts. Therefore, based on the PKM and previous research findings, this study proposes the following hypothesis:

> **H3**: Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) brand attitude.

2.2 Effect on Purchase Intentions

To comprehensively measure the behavioural impact of AI-disclosure, this study examines both its direct and indirect effects on purchase intentions. Purchase intention, defined as a customer's likelihood to buy a product in the future, is a common measure in marketing research for evaluating behavioural outcomes, demonstrating strong predictive power (Morrison, 1979).

Regarding the direct effect of AI-disclosure on purchase intentions, previous research has shown that AI disclosure can negatively impact consumers' purchase intentions. In a study by Luo et al. (2019) on chatbots, it was found that AI-disclosure reduces purchase rates by more than 79.7%. Similarly, Powers et al. (2023) demonstrated that AI-disclosure diminishes perceived trustworthiness and purchase intentions. These findings highlight the potential adverse effects of AI-disclosure on consumer behaviour. Therefore, this study proposes the following hypothesis:

> **H4**: Exposure to articles with AI-disclosure (non-disclosure) will result in lower (higher) purchase intentions.

Regarding the indirect effects, this study suggests that AI-disclosures effect comes through changes in brand attitudes. As discussed in section 2.1.5, brand attitude significantly influences consumer behaviour, including purchase intentions. Thus, this study presents the following hypothesis:

> **H5**: Higher (lower) brand attitudes will result in higher (lower) purchase intentions.

2.3 Mediating Role of Joy & Credibility

As outlined in 2.1.5 brand attitude is a critical factor in consumer behaviour as it reflects a consumer's overall evaluation of a brand (Mitchell & Olson, 1981). This evaluation is shaped by various antecedents, among which joy and credibility play significant roles.

The positive emotion of joy (Keltner & Cowen, 2021) is particularly significant in the marketing domain, as it is one of the most intense emotional responses consumers can experience in consumption contexts, as highlighted by Richins (1997), and Zelenski and Larsen (2000). Moreover, consumers are influenced by both rational and

emotional factors (Schmitt, 1999). This means that while consumers often engage in rational decision-making, they are just as frequently driven by emotions (Schmitt, 1999). Therefore, marketers aim to appeal to consumers' emotions and feelings with the objective of creating joyful experiences linked to brands (Schmitt, 1999). A study by Berg et al. (2015) found that marketing strategies designed to evoke joy not only increase consumer joy but also lead to more positive attitudes.

Credibility also plays a crucial role in shaping consumer attitudes toward a brand or product. This is because when consumers perceive a source as credible, they are more likely to develop positive attitudes toward the brand (Bergkvist & Zhou, 2016). Moreover, as detailed in section 2.1.4 extensive research over the past five decades, consistently demonstrates that individuals who perceive a source as credible are more likely to accept its message, resulting in subsequent attitude changes (Pornpitakpan, 2004). Thus, this study presents the following hypothesis:

> **H6**: Perceived (a) joy, (b) trustworthiness, and (c) expertise mediate the effect of AI-disclosure on brand attitude.

2.4 Moderating Role of Brand Type

Different levels of involvement significantly influence how people interpret communication messages (Baines, 2022, p.57). Involvement can be broadly defined as an individual difference variable that influences consumer behaviour (Michaelidou & Dibb, 2008) or as the personal importance a person attaches to a communication message (Baines, 2022, p.57). It affects both pre-purchase and post-purchase evaluations (Patterson, 1993) and is often linked to perceived risk, brand commitment, and loyalty (Michaelidou & Dibb, 2008). Involvement can be categorised into low, medium, and high levels (Baines, 2022, p.57). Higher involvement generally leads to more thorough processing and consideration, while lower involvement results in more superficial processing (Rossiter et al., 1991).

This study aims to examine the influence of brand type on the indirect effects of AI-disclosure in the airline industry, focusing on two American airlines: Spirit Airlines (low-cost) and Delta Air Lines (premium) (Ahmed & Rodríguez-Díaz, 2020; Bachwich & Wittman, 2017; Tan, 2016). The primary difference between these brands lies in their cost structures, which influence customer involvement levels.

High-involvement products, like those offered by premium airlines, are expensive and infrequently purchased, requiring substantial pre-purchase effort. Consumers are likely to invest more effort in comparing brands and features for high-involvement products, as evidenced by Lin (2013) study. Conversely, low-cost carriers like Spirit Airlines represent low-involvement products, where purchase decisions require less effort and consideration.

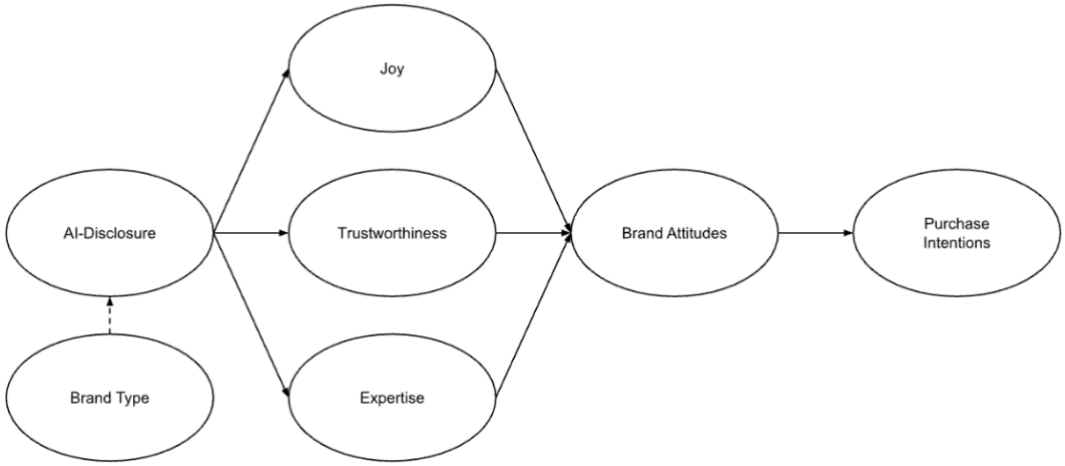
Given these differences, this study hypothesises that brand type will moderate the effects of AI-disclosure on purchase intentions through its impact on joy, trustworthiness, and expertise. Specifically, AI-disclosure is expected to have a stronger negative effect on brand attitude for premium airlines compared to low-cost airlines, due to higher consumer involvement with premium brands.

> **H7a-c**: Brand type moderates the strength of the effect of AI-disclosure through (a) joy, (b) trustworthiness, and (c) expertise on brand attitude, such that the effects are stronger for premium airlines compared to low-cost airlines.

2.5 Visualisation of the Hypotheses

To summarise, this study aims to explore how AI-disclosure in advertisements influences consumers' emotional, cognitive, and behavioural responses. The hypotheses propose that AI-disclosure impacts perceived joy, trustworthiness, and expertise, which in turn affect brand attitudes and purchase intentions. Furthermore, the study suggests that brand type moderates these effects. These relationships are illustrated in figure 1.

Figure 1.



3. Methodology

The purpose of this section is to explain the reasoning behind the scientific approach and experimental design used in this study. This section details the conducted pre-test, the main study, the measurements employed, and the study's validity and reliability.

3.1 Scientific Approach

This study, aiming to provide potential insights into how AI-disclosure influences consumers reactions to AI-generated images, was conducted using a deductive research approach. The hypotheses were developed from existing theory and subsequently empirically tested (Bryman & Bell, 2015, p.23; Bryman, 2011, p.26). A quantitative method was selected for data collection and analysis, a suitable choice that aligns well with the deductive approach (Bryman, 2011, p. 40) and is suited to the objectives of this study: to use statistical testing to analyse relationships between multiple variables and infer generalisations from a small sample to a larger population (Eliasson, 2013, p. 21). While a mixed-method approach, including both a quantitative- and a qualitative approach, could have offered deeper insights (Eliasson, 2013, p.30-31), the time constraints of this study made such an approach suboptimal.

3.2 Pre-test

3.2.1 Purpose of Pre-test

The pre-test was designed to perform a manipulation check to evaluating whether the visual stimuli used in the treatments of the main study accurately represented their intended purpose. This step was taken to mitigate the risk of drawing inaccurate conclusions regarding causality (Söderlund, 2018, p. 87). The treatments included six AI-generated images presented without disclosing their AI origin. The pre-test aimed to assess whether participants could accurately identify the images as AI-generated. By conducting the manipulation check as an independent pre-test before the main study, it is possible to identify potential treatment issues early on, enabling timely adjustments (Perdue & Summers, 1986; Söderlund, 2018, p. 87). Consequently, this approach ensures that the treatments in the main study accurately represent their intended purpose.

3.2.2 Pre-test Design

The pre-test was administered through a digital questionnaire that included six separate AI-generated images. A detailed description of the images is provided in section 3.3.2, which describes the main study design (identical images were used in the pre-test and the main study treatments). Each participant was exposed to the same sequence of images, with results later analysed using quantitative methods. The survey design ensured that each participant viewed one image at a time, each locked for 10 seconds, followed by a question asking whether the image was AI-generated. Participants were given three answer options: 'Yes', 'No', or 'Do not know'. This format guaranteed consistent exposure to the visual elements of each image for all participants.

3.2.3 Pre-test Sample

The pre-test sample consisted of 56 participants, adhering to the guideline suggested by several researchers that a pre-test sample should be around 10% of the sample size projected for the main study (Memon et al., 2017). To mitigate potential interaction effects—where subjects might become sensitised to the experimental treatment due to pre-testing—those who participated in the pre-test were excluded from the main study (Bryman & Bell, 2015, p. 56). The questionnaire was distributed in Sweden through the researcher's personal network. Many participants extended the reach by passing the survey on to their friends and family, effectively utilising convenience and snowball sampling methods to expand beyond the researcher's direct contacts (Eliasson, 2013, p. 50). Although a non-probability sampling is not representative of the general population and, therefore, cannot yield fully generalisable results (Bryman & Bell, 2015), it was considered sufficient for identifying early warning signs regarding the interpretation of the treatment variables.

3.2.4 Pre-test Results

Out of the 56 participants in the pre-study, 51 completed the questionnaire and were subsequent to analysis. The sample consisted of 68.6% (N = 35) who identified as female and 31.4% (N = 16) who identified as male. The median age of participants was 24, with ages ranging from 20 to 58. The results from the pre-study indicated that the manipulation had the intended effect; 82.3% of the participants correctly identified at least five of the six images as AI-generated.

Table 1. Pre-Study Results

No. Correct Answers	%	N
3 out of 6	5.9%	3
4 out of 6	11.8%	6
5 out of 6	17.6%	9
6 out of 6	64.7%	33

3.3 Main Study

3.3.1 Purpose of Main Study

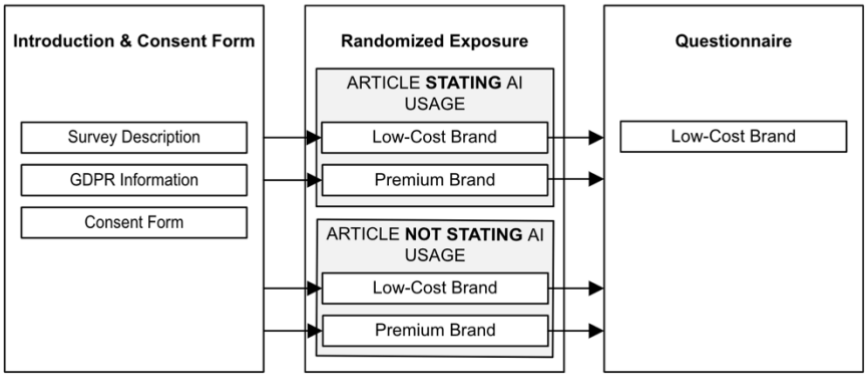
The purpose of the main study was to examine the hypothesised causal relationships involving AI-disclosure across two distinct brand types. Specifically, the study sought to determine whether AI-disclosure had a direct effect on purchase intentions or an indirect effect mediated through brand attitude and its antecedents, joy and credibility. The objective was to understand how AI-disclosure impacts consumer behaviour in the context of different brand types, focusing on the underlying mechanisms that influence purchase intentions.

3.3.2 Main Study Design

The main study employed an experimental procedure designed to evaluate the causal effects of AI-disclosure on two distinct brand types. The experimental design was considered appropriate for the study's aims, as it enabled the assessment of how specific treatments impact consumer reactions and the degree of these impacts (Söderlund, 2018, p. 16-18). To effectively evaluate multiple causal variables, the study was structured using a 2x2 factorial design (Söderlund, 2018, p.46), comparing the effects of AI-disclosure (stated vs. not stated) and brand type (low-cost vs. premium). Each participant was randomly assigned to one of four groups and was only exposed to its respective treatment. Moreover, the study was organised into three primary components: (1) an introduction and consent form, (2) the treatment, and (3) the questionnaire, as illustrated in Figure 2.

Figure 2.

Figure 2. *A Visualisation of the Main Study's Central Parts.*



The study's treatments consisted of four distinct articles, with two explicitly stating their AI usage and two without such disclosure. Furthermore, within each category of article, one featured a low-cost brand and one a premium brand, resulting in a total of one article per brand within each article type. The treatments (found in Appendix A) consisted of four separate articles incorporating the six AI-generated images from the pre-study. The images were generated using DALL-E[1], with specific prompts to diversify the image selection and counteract AI's bias (Kenthapadi et al., 2023). The mock articles were then assembled using Canva[2] and the inspect element feature in Safari to tailor the existing article "Tallink Silja Line Storsatsar På AI – Har Skapat Sex Virtuella Resenärer" (2024). An existing article was used as it was considered essential to achieve ecological validity to promote a natural setting and evoke genuine and realistic reactions (Bryman, 2011, p. 51).

Along with the articles participants were given a brief instruction to inspect the advertisements and zoom in if needed. They were required to spend at least 10 seconds examining the article before moving on, ensuring adequate exposure. For the complete survey, see Appendix B.

3.3.3 Main Study Survey Design

Following exposure to one of four treatments, the survey's third phase included a questionnaire measuring the emotional, cognitive, and behavioural effects of AI-disclosure (stated vs. not stated) and brand type (low-cost vs. premium). The survey

[1] Link to the DALL-E web page can be found here [https://chat.openai.com/g/g-2fkFE8rbu-dall-e].
[2] Link to the Canva web page can be found here [https://www.canva.com/].

design is detailed below and presented chronologically, mirroring the participants' experience. It begins with the manipulation check and concludes with the measures employed to evaluate the study's outcomes. This structured approach ensures a clear understanding of the survey's flow and the rationale behind the sequence of questions.

3.3.3.1 Manipulation Check

Perceived price was utilised as a manipulation check to evaluate how participants perceived the prices of the airlines featured in the treatments they were exposed to. Including a manipulation check within the main study framework was deemed necessary to ensure a credible interpretation of the results (Perdue & Summers, 1986), particularly given that the articles did not disclose specific prices; instead, the airlines' known pricing strategies were implied. The selected airlines were Spirit Airlines, known for its low-cost pricing strategy, and Delta Air Lines, which operates with a non-low-cost, premium pricing model (Ahmed & Rodríguez-Díaz, 2020; Bachwich & Wittman, 2017; Tan, 2016). The question "I perceive the prices of the airline in the article to be..." was answered using a 7-point bipolar scale that ranged from "1 = very low" to "7 = very high". Given the straightforward and explicit nature of the query, a single item was deemed sufficient for this measure.

3.3.3.2 Measures

After the manipulation check, participants were asked, “How do you feel now, after reading this article?” They ranked the following statements from 1 = Strongly Disagree to 7 = Strongly Agree: “I feel joyful,” “I feel pleased,” and “I am in a good mood.” This measure, adapted from Söderlund and Rosengren (2008) and Berg et al. (2015), evaluated the participants' emotional state after exposure to the treatment.

To capture the participant's attitudes, they were asked, “What is your overall evaluation of the airline?” The measure was adopted from Berg et al. (2015) and included four adjective pairs: (1) unlikable – likable, (2) negative impression – positive impression, (3) very bad – very good, and (4) unpleasant – pleasant. These items were ranked on a 7-point Likert scale.

Measures for perceived credibility were adapted from Erdem & Swait (2004). To measure expertise, participants were asked to rate the airline with the following items: (1) "This airline reminds me of someone who’s competent and knows what they are

doing," (2) "This airline has the ability to deliver what it promises," and (3) "This airline delivers what it promises." To measure trustworthiness, participants rated: (1) "This airline's product claims are believable," (2) "This airline has a name you can trust," and (3) "This airline does not pretend to be something it isn't." All questions used a 7-point Likert scale.

Purchase intention was measured using items from Söderlund and Rosengren (2008), and Spears and Singh (2004). Respondents rated their purchase intention using three adjective pairs: not likely – likely, not probable – probable, and not possible – possible, on a 7-point Likert scale.

All measures were indexed after confirming an acceptable Cronbach's Alpha. Table 2 presents a summary of the measures and their respective Cronbach's Alpha values, ensuring reliability for each construct.

Table 2. Measures

Construct	Item	Source	Cronbach's Alpha
Joy	"I feel joyful" "I feel pleased" "I am in a good mood"	(Söderlund & Rosengren, 2008)	.933
Brand Attitude	Dislikeable – Likable Negative Impression – Positive Impression Bad – Good Unpleasant – Pleasant	(Berg et al., 2015)	.974
Brand Expertise	This [airline] reminds me of someone who's competent and knows what they are doing This [airline] has the ability to deliver what it promises This [airline] delivers what it promises	(Erdem & Swait, 2004)	.924
Brand Trustworthiness	This [airline's] product claims are believable This [airline] has a name you can trust	(Erdem & Swait, 2004)	.885

	This [airline] does not pretend to be something it isn't		
Purchase Intentions	Not Likely – Likely Not Probable – Probable Not Possible – Possible	(Söderlund & Rosengren, 2008; Spears & Singh, 2004)	.950

3.4 Assessment of Reliability and Content Validity

To ensure the highest reliability and content validity standards, all employed measures were carefully selected from peer-reviewed literature and adjusted as needed to maintain their relevance. The motivations behind each measurement are detailed in Section 3.3.3.2

Recognising the importance of survey validity, this study took proactive steps to address potential issues, such as participants not adhering to instructions, which could skew the accuracy of their responses (Evans & Mathur, 2018). To mitigate these concerns, this study conducted a thorough theoretical review and developed our survey in close consultation with an experienced researcher, as recommended by Söderlund (2018). Additionally, a preliminary trial within the researcher's professional network was conducted to gather feedback on the clarity and effectiveness of the question's phrasing. This process allowed this study to refine its survey to capture accurate and meaningful data better.

In order to ensure reliability, this study employed multi-item measurements for all constructs except for the manipulation check. This approach was chosen to mitigate potential errors associated with psychological reactions (Söderlund, 2018, p. 135-136). The responses to these measures were aggregated into indexes after Cronbach's Alpha was calculated, and results were considered satisfactory as they exceeded the widely accepted threshold of 0.7 (Söderlund, 2018, p.136).

4. Analysis & Results

This section presents the empirical findings of the study. First, the main study sample is described. Subsequently, the results from the manipulation check and the direct effects of AI-disclosure are detailed. This is followed by analyses of mediation and moderation effects. Statistical significance was established in accordance with common practice, predetermined at a threshold of 5% or lower (Frost, 2020, p. 13-17; Söderlund, 2018, p. 156). Hence, statistically significant results were interpreted as support for the provided hypotheses.

4.1 Main Study Sample

519 US-based participants were recruited using CloudResearch[3] and were paid the recommended hourly wage of USD 7.5 (CloudResearch, 2023) to complete the survey. Participants who failed to finish the survey or incorrectly answered control questions were removed from the sample. More precisely, participants who could not correctly identify the survey topic and the brand featured in the treatment were excluded from the analysis. As a result, a sample size of 463 participants was obtained for the study analysis; of these, 54.6% (N = 253) identified as male, 45.1% (N = 209) as female, and 0.2% (N = 1) as third gender/non-binary or chose not to disclose their gender. The sample's age range was 18 to 78, with a mean age of 41.

As outlined in section 3.3.2 participants were randomly allocated to one of four treatment groups. Group 1 consisted of the low-cost brand (Spirit Airlines) and AI-disclosure (N = 120). Group 2 consisted of the low-cost brand (Spirit Airlines) and non-disclosure (N = 122). Group 3 consisted of the premium brand (Delta Air Lines) and AI-disclosure (N = 109), and group 4 consisted of the premium brand (Delta Air Lines) and non-disclosure (N = 112).

4.2 Manipulation Check

The in-study manipulation check was designed to ascertain whether participants perceived the prices of the selected low-cost brand (Spirit Airlines) as lower than those

[3] Link to CloudResearch web page can be found here [https://www.cloudresearch.com/].

of the selected premium brand (Delta Airlines). Participants were asked to respond to a question regarding perceived price, and their responses were subsequently analysed and compared between the two groups. The analysis showed that participants exposed to articles featuring the low-cost brand (Spirit Airlines) indeed perceived the prices as lower (M_{SPIRIT} = 4.21) compared to those exposed to the premium brand (Delta Airlines) (M_{DELTA} = 5.03). An independent t-test confirmed that this difference was statistically significant (t = 6.73, p <.001). These results verify that the manipulation of the cause variable had the intended effect, demonstrating that the treatment was effective.

4.3 Direct Effects of AI-Disclosure

To assess the effects of AI-Disclosure on various consumer perceptions, independent samples t-Tests were conducted. The inputs were indexes for perceived joy, credibility (including trustworthiness and expertise), brand attitude, and purchase intentions. Accordingly, compared to participants exposed to non-disclosure (NON), AI-disclosure (AI) was found to significantly negatively influence (a) joy [M_{AI} = 4.15, M_{NON} = 4.50, t = -2.89, p = .018, (b) trustworthiness [M_{AI} = 4.12, M_{NON} = 4.67, t = -1.94, p = .018], and (c) brand attitude [M_{AI} = 4.51, M_{NON} = 4.91, t = -2.90, p = .016)], thus supporting H1, H2a and H3. However, the findings indicate that AI-disclosure did not exhibit a significant effect on the expertise component for credibility (H2b) [M_{AI} = 4.45, M_{NON} = 4.70, t = -1.97, p = .10], nor purchase intentions (H4) [M_{AI} = 4.14, M_{NON} = 4.41, t = -1.60, p = .411], thus failing to provide support for H2b and H4. Table 3 provides a summary of the t-Test results for hypotheses 1 to 4.

Table 3. Direct Effects of AI-Disclosure

	AI	NON		
Mean Comparison	**M (SD)**	**M (SD)**	**t**	**p**
Joy	4.15 (1.4)	4.50 (1.2)	-2.89	.018**
Trustworthiness	4.41 (1.5)	4.67 (1.3)	-1.94	.018**
Expertise	4.45 (1.5)	4.70 (1.4)	-1.97	.10*
Brand Attitude	4.51 (1.6)	4.91 (1.4)	-2.90	.016**
Purchase Intentions	4.14 (1.8)	4.41 (1.7)	-1.60	.411

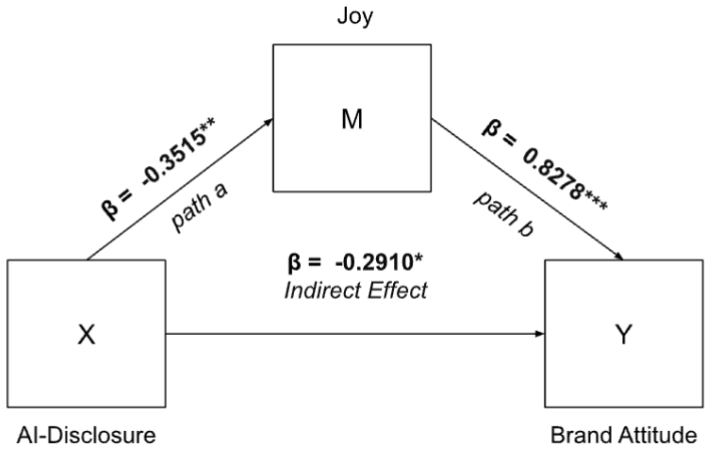
Note: Significance at *p < 0.10, and **p < 0.05.

4.4 Mediation Analysis

To explore how joy and credibility (including trustworthiness and expertise) mediate the relationship between AI-disclosure (independent variable) and brand attitude (dependent variable), this study employed the Hayes (2018) PROCESS Macro (Model 4). By analysing 5,000 bootstrap samples and using a 95% confidence interval, the study determined both the significance and magnitude of the indirect effects. A mediator was deemed to have a mediational effect if it met two criteria: (1) the indirect effect of AI-disclosure occurred through one of the mediators—joy (M1), trustworthiness (M2), or expertise (M3); and (2) the bias-corrected 95% confidence interval around the indirect effect, derived from 5,000 bootstrapped resamples, did not include zero (Hayes, 2018).

4.4.1 Indirect Effect of Joy

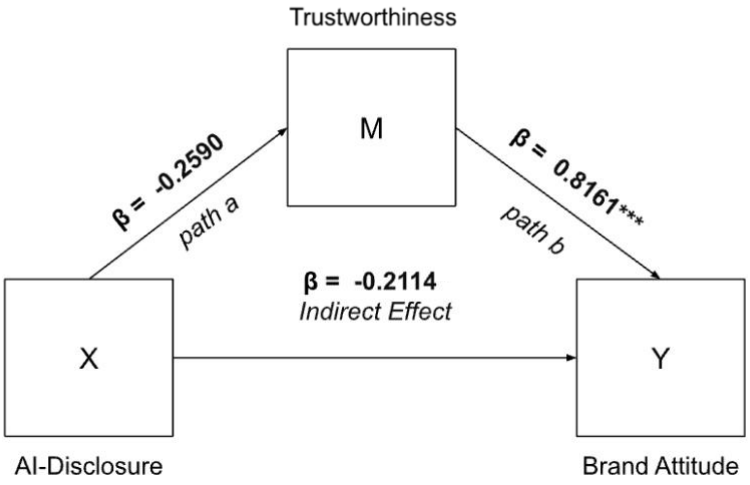
The first mediator examined was joy. It was hypothesised that AI-disclosure would negatively impact joy (path a), which in turn would influence brand attitude (path b). The results from the mediation analysis showed that within the model (path b) joy explained 52.88% of the variance in brand attitude (Adj. R^2= 0.5288). Moreover, joy was found to be a significant predictor of brand attitude (β = 0.8278, p < .0001), suggesting that higher levels of joy are associated with more positive brand attitudes. Regarding the indirect effects, the results showed that joy significantly mediates the relationship between AI-disclosure and brand attitude (β = -0.2910, $Boot_{SE}$ = 0.1003, Boo_{tLLCI} = -0.4919, $Boot_{ULCI}$ = -0.1028), implying that AI-disclosure affects brand attitude indirectly through its impact on joy. Thus, supporting H6a.



Note: Significance at *p < .05, **p < .01, and ***p < .001.

4.4.2 Indirect Effect of Trustworthiness

The second mediator analysed was trustworthiness. It was hypothesised that AI-disclosure would negatively impact trustworthiness (path a), which in turn would influence brand attitude (path b). The results from the mediation analysis showed that within the model (path b) trustworthiness explained 61.16% of the variance in brand attitude (Adj. R^2= 0.6116). Moreover, trustworthiness was found to be a significant predictor of brand attitude (β = 0.8161, p < .0000), suggesting that higher levels of trustworthiness are associated with more positive brand attitudes. Regarding the indirect effects, the results showed that the indirect effect of AI-disclosure through trustworthiness is not statistically significant at the 95% confidence level, as the confidence interval crosses zero (β = -0.2114, $Boot_{SE}$ = 0.1104, $Boot_{LLCI}$ = -0.4275, $Boot_{ULCI}$ = 0.0068). Thus, H6b is rejected.

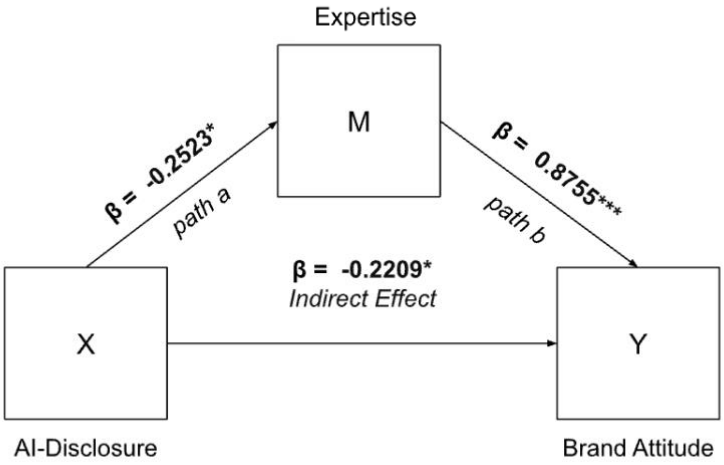


Note: Significance at *p < .05, **p < .01, and ***p < .001.

4.4.3 Indirect Effect of Expertise

The third mediator analysed was expertise. It was hypothesised that AI-disclosure would negatively impact expertise (path a), which in turn would influence brand attitude (path b). The results from the mediation analysis showed that within the model (path b) expertise explained 64.97% of the variance in brand attitude (Adj. R^2= 0.6497). Moreover, expertise was found to be a significant predictor of brand attitude (β = 0.8755, p < .0000), suggesting that higher levels of expertise are associated with more positive brand attitudes. Regarding the indirect effects, the results showed that expertise significantly mediates the relationship between AI-disclosure and brand

attitude (β = -0.2209, $Boot_{SE}$ = 0.1126, $Boot_{LLCI}$ = -0.4408, $Boot_{ULCI}$ = -0.0017), implying that AI-disclosure affects brand attitude indirectly through its impact on expertise. Thus, supporting H6c.



Note: Significance at *p < .05, **p < .01, and ***p < .001.

4.4.4 Link Between Brand Attitude and Purchase Intentions

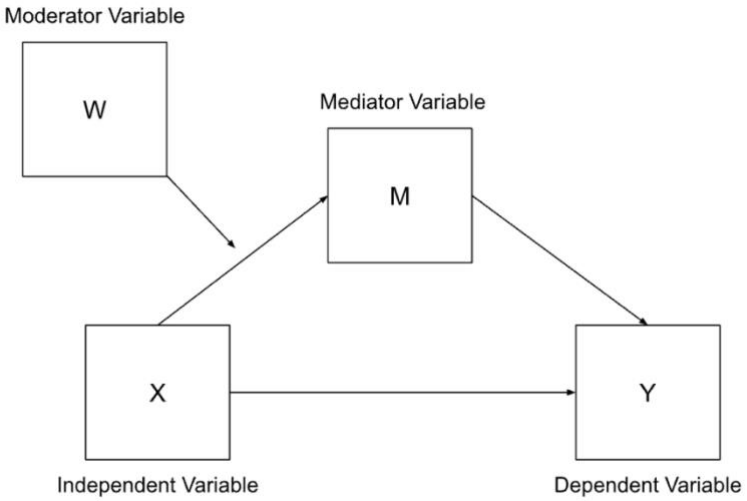
To examine the connection between brand attitude and purchase intention, this study conducted a simple linear regression with purchase intention as the dependent variable and brand attitude as the independent variable. The results from the regression showed a positive and significant correlation between the two variables (β = 0.844, SE = 0.038, t = 22.192, p < .001). Thus, suggesting that a one-unit increase in brand attitude is associated with a 0.844-unit increase in purchase intention. Overall, these findings demonstrate that more favourable brand attitude is strongly linked to higher purchase intentions, thus supporting H5.

4.5 Moderation Analysis

To examine this study's seventh hypothesis (H7a-c), this study employed the Hayes (2018) PROCESS Macro (Model 7) [visualized in Figure 3]. The first stage moderated mediation model, Model 7, allows us to investigate if the moderator (brand type) alters the strength of the indirect effect. In this analysis, the independent variable (X) is AI-disclosure, the dependent variable (Y) is brand attitude, and the mediators (M), tested

separately, are joy, trustworthiness, and expertise. Interaction effects were assessed with 95% confidence intervals to provide insights into the moderating role of brand type on these variables.

Figure 3.



The results from the first stage moderated mediation model show that brand type does not significantly moderate the indirect effect of AI-disclosure on brand attitude through (a) joy (index = -0.0269, $Boot_{SE}$ = 0.2032, $Boot_{LLCI}$ -0.4391, $Boot_{ULCI}$ 0.3538), (b) trustworthiness (index = -0.1277, $Boot_{SE}$ = 0.2149, $Boot_{LLCI}$ -0.5558, $Boot_{ULCI}$ 0.2899), and (c) expertise (index = -0.0361, $Boot_{SE}$ = 0.2296, $Boot_{LLCI}$ -0.4854, $Boot_{ULCI}$ 0.4199). Suggesting that brand type does not significantly alter the strength of the mediation effect for variables a to c. Thus, rejecting H7a-c, table 4 provides a summary of the moderation analysis for hypotheses to H7 a to c.

Table 4. Moderation Analysis

M	Index	$Boot_{SE}$	$Boot_{LLCI}$	$Boot_{ULCI}$
Joy	-0.0269	0.2032	-0.4391	0.3538
Trustworthiness	-0.1277	0.2149	-0.5558	0.2899
Expertise	-0.0361	0.2296	-0.4854	0.4199

4.6 Hypotheses Summary

Table 5 provides a clear overview of the results of this study's hypotheses testing.

Table 5. Summary of Hypothesis Testing

Hypothesis		Results
H1	Exposure to articles with AI-disclosure (non-disclosure) will trigger a lower (higher) level of perceived joy.	**SUPPORTED**
H2a	Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) level of perceived trustworthiness.	**SUPPORTED**
H2b	Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) level of perceived expertise.	**NOT SUPPORTED**
H3	Exposure to articles with AI-disclosure (non-disclosure) will result in a lower (higher) brand attitude.	**SUPPORTED**
H4	Exposure to articles with AI-disclosure (non-disclosure) will result in lower (higher) purchase intentions.	**NOT SUPPORTED**
H5	Higher (lower) brand attitudes will result in higher (lower) purchase intentions.	**SUPPORTED**
H6a	Perceived joy mediates the effects of AI-disclosure on brand attitude.	**SUPPORTED**
H6b	Perceived trustworthiness mediates the effects of AI-disclosure on brand attitude.	**NOT SUPPORTED**
H6c	Perceived expertise mediates the effects of AI-disclosure on brand attitude.	**SUPPORTED**
H7a-c	Brand type moderates the strength of the effect of AI-disclosure through (a) joy, (b) trustworthiness, and (c) expertise on brand attitude, such that the effects are stronger for premium airlines compared to low-cost airlines.	**NOT SUPPORTED**

5. Discussion

5.1 Summary of Main Findings

At the beginning of this study, two primary research questions were posed: (1) ‘What role does AI-disclosure play in shaping consumers’ feelings, thoughts, and behaviours?’, and (2) ‘Do the effects of AI-disclosure on consumer responses vary between low-cost and premium brands?’

To address the first research question, this study found that AI-disclosure influences consumers’ emotions and thoughts. Specifically, AI-disclosure has a direct negative impact on consumers’ perceived joy, trustworthiness, and brand attitudes. However, AI-disclosure did not yield a significant direct negative impact on consumers’ perceived expertise nor purchase intentions. Despite the absence of statistical significance, a negative trend was observed in perceived expertise. An underlying factor affecting perceived expertise may be that consumers perceive firms that use AI as more innovative, attributing to a higher level of expertise – though this was not examined within the scope of this study.

Furthermore, this study investigated the causal chain from AI-disclosure to purchase intentions. The research identified a positive effect between more favourable brand attitudes and purchase intentions, mediated though joy and expertise. Although, trustworthiness influenced brand attitudes, it was not statistically significant. Overall, these findings suggest that AI-disclosure negatively affects consumers emotions and thoughts, which in turn influence their brand attitudes and subsequently affect purchase intentions.

To address the second research question, the study explored whether the effects of AI-discourse vary between different brand types (low-cost versus premium). The results revealed that brand type does not moderate the relationship between AI-disposure and brand attitudes. This indicates that the effects of AI-disclosure are consistent across brand types leading to intriguing implications for future research and practical implementations.

5.2 Theoretical & Managerial Implications

Previous research on AI-disclosure has mainly focused on deep fakes. However, to the authors' knowledge, no prior quantitative study has explored the impact of AI-disclosure on overtly AI-generated images. Therefore, the main contribution of this study is providing a deeper understanding of the potential negative effects of AI-disclosure on consumers' emotions, evaluations, and behaviours.

This study contributes to marketing and advertising theory by helping researchers understand how consumers perceive and process messages when exposed to AI-disclosure. It expands the limited body of research on AI-disclosure by examining consumer reactions to overtly AI-generated images. Drawing upon the Uncanny Valley theory (Mori et al., 2012), the Persuasion Knowledge Model (Friestad & Wright, 1994), and Schema Congruity Theory (Mandler, 1982), this study examines whether the effects observed in previous contexts are applicable in the contemporary digital landscape. Therefore, it offers valuable insights into how these theoretical frameworks can help understand consumer behaviour in response to AI-driven advertising strategies.

The findings of this study align with prior studies in adjacent fields, confirming the negative impact of AI-disclosure. Previous research has shown that AI-disclosure, particularly in the context of deep fakes, often results in negative consumer reactions (Powers et al., 2023). This study extends these insights to overtly AI-generated images, demonstrating similar adverse effects on consumers' emotions, evaluations, and behaviours. By highlighting how AI-disclosure can lead to diminished joy and reduced brand attitudes, this research supports the broader notion that transparency about AI’s involvement in marketing can trigger defensive coping mechanisms among consumers, ultimately affecting their overall perceptions and interactions with advertising content.

For marketers, this study presents several important implications. The fact that brand type did not play a moderating role in consumers' emotional responses, thoughts, or behaviours suggests that AI-disclosure affects consumers uniformly across different brand types. This indicates that there is no need for marketers to differentiate AI-

disclosure strategies based on brand type, as the impact of AI-disclosure seems to be consistent regardless of brand type.

Furthermore, the finding that AI-disclosure results in diminished emotions and evaluations is crucial for marketing practitioners. As AI-generated images become more prevalent in marketing, transparency about the use of AI seems to generate diminishing brand attitudes. Thus, marketers must proceed with caution, weigh the potential risks and advantages of including AI-generated images in their campaigns.

In summary, this study underscores the importance of understanding the effects of AI-disclosure on consumer behaviour and provides a foundation for both theoretical advancements and practical applications in the evolving field of AI-driven marketing communications. Marketers must carefully consider the implications of AI-disclosure and strategize accordingly to avoid falling into the uncanny valley.

5.3 Limitations and Future Research

While this study fills a notable research gap by examining how AI-disclosure affects feelings, thoughts, and behaviours, there are potential limitations worth noting. These limitations highlight areas that require further exploration and consideration in future research.

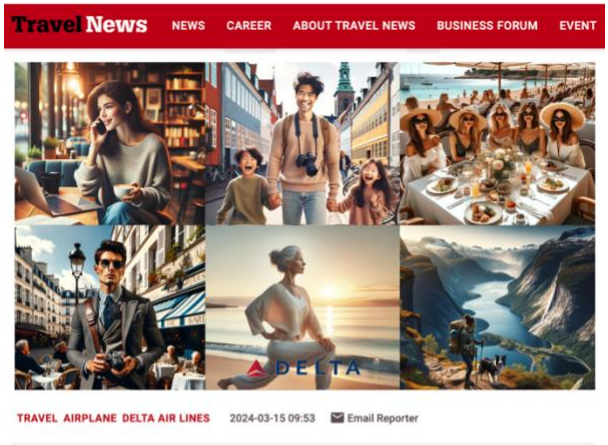
One significant limitation lies in the scope of brands examined. This study focused specifically on Spirit Airlines (a low-cost brand) and Delta Air Lines (a premium brand). While these brands provided valuable insights into the effects of AI-disclosure within the airline industry, the findings might not directly apply to other industries or types of brands. Future research should consider including a broader range of brands and industries to validate and extend the findings.

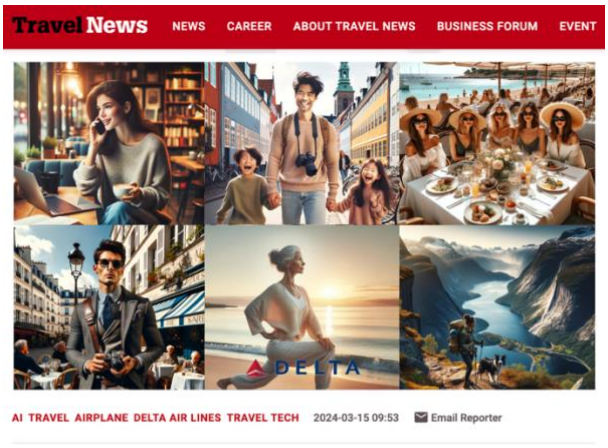
The sample demographics also present a limitation. The research was conducted with a US-based sample, which may limit the generalisability of the findings to other cultural or geographic contexts. Different cultural backgrounds might influence perceptions of AI-disclosure in advertisements differently. Therefore, future studies should include more diverse participant samples across different cultures and regions to examine how cultural differences influence the perception of AI-generated images and disclosures.

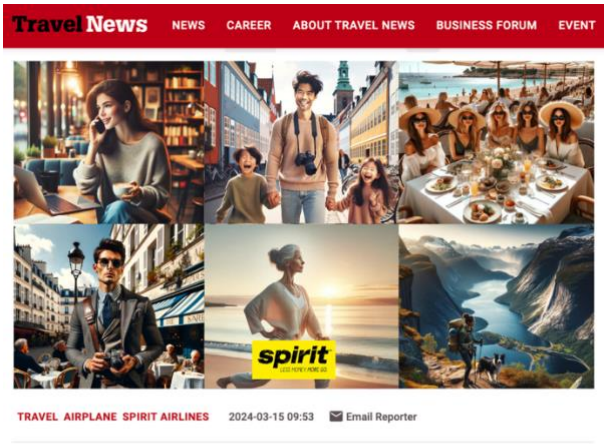
Another limitation is the experimental nature of the study. While the controlled environment allowed for precise control over variables, it might not fully capture the complexity and variability of real-world advertising contexts. Participants were exposed to predefined AI-generated images and disclosures in a controlled setting, which may differ from how consumers interact with such content daily. Future studies should aim to replicate the findings in more naturalistic settings to increase ecological validity.

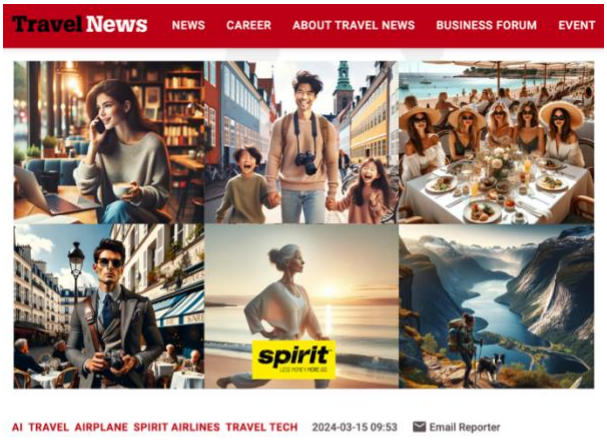
Additionally, the research primarily focused on joy, trustworthiness, and expertise as mediating variables. While these are important factors, other emotional and cognitive responses, such as fear, curiosity, or perceived novelty, were not explored. Future research should consider a broader range of emotional and cognitive metrics to provide a more comprehensive understanding of consumer reactions to AI-disclosure. By addressing these limitations and exploring these areas, a more complete understanding of the impacts of AI-disclosure in advertising can be achieved.

6. **Appendix A:** Treatment Images









7. Appendix B: Main Study Survey Questions

7.1 Disclaimer and Consent Form

Welcome!

I am a student from the Stockholm School of Economics, conducting research for my bachelor thesis. The survey is anonymous and follows GDPR guidelines and is open for U.S. citizens or those currently residing in the U.S. No personal data will be collected, and the data will be deleted June 1st.

This survey will take approximately 5 minutes to complete.

If you have any questions, please feel free to email me at 50747@student.hhs.se!

Thank you,
Meilín Pei Purroy

By selecting "I consent" you acknowledge the above text and agree to continue.

- I consent

7.2 Survey Description

Please carefully read the instructions below
In the following survey, you will be provided with an **article** about a US based **airline** company, followed by some questions. Please inspect the article carefully before moving on as you will not be able to go back later.

7.3 Treatment Images

Please look carefully at the article below
Zoom in if needed

(One of four different treatment images is randomly presented)

You can proceed to the next page after 10 seconds

7.3 Survey Questions

On the previous page, you saw an article about an airline company. In the following questions you will be presented with a number of statements about the **airline** and the **article**. In the questions, **airline** refers to *the company from the article* and **ambassadors** refers to *the agents from the article.*

Price_perception: I perceive the prices of the **airline** in the article to be...

- (1= Very Low, 7 = Very High)

Joy: How do you feel now, after reading this article?

- I feel joyful
- I feel pleased
- I am in a good mood

(1 = Strongly Disagree, 7 = Strongly Agree)

Att_brand: What is your overall evaluation of the **airline**?

- (1 = Unlikable, 7 = Likable)
- (1 = Negative Impression, 7 = Positive Impression)
- (1 = Very Bad, 7 = Very Good)
- (1 = Unpleasant, 7 = Pleasant)

Att_post: What is your overall evaluation of the **ambassadors** from the **article**?

- (1 = Unlikable, 7 = Likable)
- (1 = Negative Impression, 7 = Positive Impression)
- (1 = Very Bad, 7 = Very Good)
- (1 = Unpleasant, 7 = Pleasant)

Congruence: Please indicate your perceived congruence between the **airline** and the **ambassadors** by checking the appropriate space.

Congruence in this context refers to the degree to which the **airline** is compatible with the **ambassadors** presented in the **article**.

- (1 = Inappropriate, 7 = Appropriate)
- (1 = Bad fit, 7 = Good fit)
- (1 = Bad match, 7 = Good match)

- (1 = Not compatible, 7 = Compatible)

Brand_expertise: Please rate the **airline** in terms of

- This airline reminds me of someone who's competent and knows what they are doing
- This airline has the ability to deliver what it promises
- This airline delivers what it promises

(1 = Strongly Disagree, 7 = Strongly Agree)

Brand_trustworthines: Please rate the **airline** in terms of

- This airline's product claims are believable
- This airline has a name you can trust
- This airline does not pretend to be something it isn't

(1 = Strongly Disagree, 7 = Strongly Agree)

Brand_accessibility: Please rate the **airline** in terms of

- Information about the airline's services is easily accessible
- Information provided by the airline about its services is easily understood
- The airline provides helpful information about its services

(1 = Strongly Disagree, 7 = Strongly Agree)

Perceived_quality: In comparison to other airlines, this **airline**...

- (1 = has high quality, 7 = has inferior quality)
- (1 = is the best one, 7 = is the worst one)
- (1 = has consistent quality, 7 = has inconsistent quality)

Fut_purch: After reading this article, what is the chance you will book a flight with this **airline**?

- (1 = Not likely, 7 = Likely)
- (1 = Not probable, 7 = Probable)
- (1 = Not possible, 7 = Possible)

Wom: After reading this article, how likely is it that you would recommend this **airline** to a friend?

- (1 = Not likely, 7 = Likely)
- (1 = Not probable, 7 = Probable)

- (1 = Not possible, 7 = Possible)

Airline_trust: Please indicate your agreement with the following statements about the **airline** after seeing this **article**

- I trust this airline
- I rely on this airline
- This is an honest airline
- This airline is safe

(1 = Strongly Disagree, 7 = Strongly Agree)

7.4 Demographic Questions

Age: What is your age?
(Fill in the blank)

Gender: What is your gender?

- Male
- Female
- Non-binary / third gender
- Prefer not to say

Avg_flight: On average, how many flights do you take in a typical year?

- 0 (I do not travel by airplane)
- 1 - 2 flights
- 3 - 7 flights
- 7 - 10 flights
- More than 10 flights

Previous_exp: Have you ever travelled with any of the following airline companies?

- Spirit Airlines
- Delta Air Lines
- None of the above

Tech_prof: On a scale from 1 to 7, how would you rate your overall proficiency with technology?
(1 = Not Proficient, 7 = Very Proficient)

Ai_fam: How familiar are you with the term 'Artificial Intelligence (AI)'?

- Not familiar at all
- Slightly familiar
- Moderately familiar
- Very familiar
- Extremely familiar

Ai_usage: How often do you interact with AI-based technologies or services?

- Daily
- Weekly
- Monthly
- Rarely
- Never

7.5 Control Questions

Control_1: What airline was shown in the **article**?

- Spirit Airlines
- Delta Air Lines

Control_2: What was this survey about?

- Airlines
- Coffee
- Books

8. Appendix C: AI-Disclosure

In this thesis, AI has been used for two main purposes. Firstly, AI has been used to generate the study's treatment images, as detailed in section 3.3.2. Secondly, AI tools (ChatGPT4 and ChatGPT4o)[4] have been employed to detect and correct grammatical errors as well as improving some sentence structures to enhance text clarity. It is important to note that AI has not been utilised as a reference finder nor to produce original text content. Additionally, the thesis as a whole has been inputted as a PDF to identify any instances of ambiguity or lack of citation, especially concerning references to different sections and tables within the thesis.

[4] *Link to OpenAI's web page can be found here [*https://openai.com/].

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