

**The AI-Disclosure Dilemma: How AI labels shape advertisement Attitudes,  
Credibility, Transparency, and Purchase Intention in a digital environment**

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### **Abstract**

As the role of artificial intelligence, also known as AI, in digital marketing is getting bigger and bigger, understanding its impact on consumers is vital. While AI is becoming more common in marketing, the involvement of AI in creating and/or delivering advertisements is often undisclosed to consumers. Therefore, this study examined whether adding AI labels to a personalized advertisement influences how individuals perceive the advertisement, based on the idea that this disclosure could evoke psychological reactance by giving individuals the impression that their autonomy is being limited.

### **Method & Results**

In this study, three conditions - no label, “This advertisement was brought to you by AI”, and “This advertisement was created and brought to you by AI” - were used in a between-subjects survey experiment ( $n = 126$ ). In this experiment, participants viewed an advertisement based on their selected product category of interest. Importantly, the content of the advertisement, apart from the AI label, was constant across conditions. Afterwards, participants were asked about their attitude toward the advertisement, how credible and transparent they perceived the advertisement to be, and about their intention to purchase the product. Finally, participants were asked both open- and closed questions about their general attitude toward AI, aimed to further contextualize the results. In contrast to what was hypothesized, adding any AI label to an advertisement did not have any influence on purchase intentions, attitude toward the advertisement, or the advertisement's perceived credibility. Nonetheless, advertisements with an AI label were judged to be significantly more transparent than advertisements without an AI label. Finally, a significant positive relationship was identified between general attitude toward AI and the scores on the above variables.

**Discussion**

According to these results, consumers' first reactions, partially based on preexisting beliefs, were unaffected by the explicit labeling of advertisements as "created" and/or "brought" by AI, while it may actually encourage more transparency. As a result, being transparent about the involvement of AI in advertisements can work out to be a clever strategy.

*Keywords:* Artificial Intelligence in advertising, consumer attitudes, credibility, purchase intention, advertisement transparency

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## Introduction

If I were to encounter an advertisement labeled as “This advertisement was brought to you by AI” or “This advertisement was created and brought to you by AI”, I would have questions. Did it check every page that I visited in the last few months, every product I viewed, every search I made? What personal data that I do not know about was used to create and/or deliver this advertisement? If I encountered this, even if the advertisement shows me something I might genuinely like, I would probably ask myself: who’s watching, and where does all my data go? Who has access to my data, and what are they doing with it when I am not looking? At the same time, I would be skeptical about whether these AI labels actually improve my overall experience, and it would make me question the credibility of the advertisement. Is this advertisement really customized to solve a need I have, or am I just being nudged towards buying a product because an AI thinks I am susceptible at this moment?

Building on this, over the last decade, the growth of digital platforms has transformed how businesses communicate and connect with potential consumers. Traditional advertising approaches have given way to more advanced, data-driven advertisements that utilize large amounts of customer data. At the core of this evolution lies programmatic advertising, or in other words, the process that automates the buying and placement of digital ads (This Play Media, 2022). Within this context, in contrast with “traditional” digital advertising, which, although automated and based on algorithms, typically relies on historical data and static segmentation, this research defines AI advertising as systems that apply those “traditional” systems to learn from real-time consumer data and automatically bid on, distribute, and personalize advertisements based (Ford et al., 2023). While digital transformation is not only a change in tools and strategies, it is a shift that also affects consumers. Consumers encounter large amounts of digital advertisements that all try to grab their attention. Although AI plays

an increasingly prominent role in advertising, there remains a limited understanding of what happens to consumer behavior, specifically consumer attitude towards the advertisement, perceived advertisement credibility, and consumer purchase intention, when consumers find out about the involvement of AI in the advertisements they encounter. Additionally, the possibility of preexisting beliefs toward AI on these possible effects of AI labels demands investigation. When advertisements are clearly labeled, consumers can quickly recognize that AI was involved (and in what way), which they could see as improved advertisement relevance. Seeing that AI made or distributed the advertisement could give them the feeling that it was specifically aligned with their personal habits and interests, possibly leading to a more positive attitude toward the advertisement, while the honesty of the label itself could lead to the advertiser being perceived as more transparent. However, AI disclosure could also cause consumers to disengage from the advertisement, as the usage of their personal data for AI advertising could come as a complete surprise, which could lead to an advertisement being perceived as less credible. An advertisement with an AI-label could also be seen as intrusive to one's privacy, which could contribute to a more negative attitude toward the advertisement.

This research contributes to both academic literature and practical marketing practice. Academically, it addresses a critical gap by investigating not only the effects of AI-labels in advertising but also the psychological mechanisms that shape consumer responses. Although Davenport et al. (2019) explored how AI is reshaping marketing decision-making, there is a lack of research linking the effects of AI involvement in advertisements directly to consumer responses. Recent work by Schöning (2025) examined how AI-labeled content affects credibility and engagement on LinkedIn, highlighting the broader implications of AI disclosure in digital communication. However, their focus on professional social media interactions leaves open the question of how AI-labels impact consumers in advertising

contexts. Arango et al. (2023) examined charitable Instagram advertisements and found that learning that an image was AI-generated reduced viewers' empathy and their intention to donate. However, their study focused on donation behavior rather than purchase decisions, and only tested the presence of an AI label without varying the type of AI involvement. Therefore, by labeling advertisements with an AI-label and additionally investigating the effects of wording within these AI-labels, this study aims to uncover underlying consumer responses to the involvement of AI in advertising.

More specifically, the study examines advertisements without an AI-label with advertisements, advertisements with an "This advertisement was brought to you by AI" label, and advertisements with an "This advertisement was created and brought to you by AI" label. By keeping the advertisement content the same across all conditions and only varying the presence and wording of the AI label, this method makes it possible to pinpoint the effects of the label itself, without other factors getting in the way. Additionally, this study examines reactions to AI labels based on qualitative data, to get to a deeper understanding of the first reactions of individuals when prompted with an AI label. To be specific, the research seeks to answer the following research question:

What is the effect of AI-labels in advertisements on consumer attitude towards the advertisement, perceived advertisement credibility, consumer purchase intention, and perceived transparency in a digital environment?



## **Theoretical Framework**

This chapter provides a theoretical framework for understanding how AI involvement in advertising may influence consumer responses. It begins by defining artificial intelligence in the context of advertising, then examines pertinent data on how consumers often react to AI-generated or AI-distributed information. Following that, two psychological theories, Psychological Reactance Theory and the Elaboration Likelihood Model, are presented to explain why consumers may react differently depending on their level of autonomy and engagement. Finally, the framework analyzes how various methods of disclosing AI involvement in advertisements can influence perceptions of credibility, transparency, and purchase intention.

### **Consumer Reactions to AI in Advertising**

For this study, it is important to first define the term “Artificial Intelligence” (AI). In this study, “Artificial Intelligence” is defined as an algorithmic system that integrates various technologies, among which machine learning, and continually selects, targets, and personalizes digital advertisements based on real-time consumer data (Ford et al., 2023). Unlike machine learning, which only learns patterns from past data in set batches, AI systems may include human-crafted rules and make use of machine learning systems to learn and adapt continuously across different stages of the advertising process, from targeting to performance measurement. Within the broad area of AI in advertising, this research specifically focuses on the disclosure of the involvement of AI systems capable of generating advertising content and systems that decide how and when advertisements are delivered to specific audiences. Other areas of AI in advertising, such as conversational AI, which focuses on AI bots that can imitate and automate spoken conversations and discussions using speech or text (Kulkarni et al., 2019), fall outside the scope of this study.

While Ford et al. (2023) often emphasized AI's ability to enhance the efficiency and precision of advertising campaigns, close to zero studies have directly linked the involvement of AI in advertising campaigns to consumer attitudes towards the advertisement, perceived advertisement credibility, and consumer purchase intention. Schöning et al. (2025) found that marking textual components of LinkedIn posts as AI-generated can impair trust and reduce participation in professional social media, implying that transparency is important, while Arango et al. (2023) showed that realizing an Instagram charity ad was created by AI reduced viewers' empathy and contribution intent. However, research into how labeling (transparently announcing that an advertisement is "brought to you by AI" or "created and brought to you by AI") and different types of labeling affect the aforementioned consumer perceptions in an advertising context has yet to be performed. If one looks into the effects of AI integration into advertising campaigns on consumer behavior, the psychological reactance theory could prove to be very helpful. The psychological reactance theory (Brehm, 1966) suggests that if individuals have certain freedoms in their behavior and if their autonomy is being compromised or manipulated, they may exhibit resistance or a decline in trust. Based on the core of psychological reactance theory, this study investigates whether individuals feel that their autonomy is threatened when they see that AI has been involved in creating and/or distributing the advertisements that they see, and, if so, how this influences their purchase intention, attitude towards the advertisement, and how credible they perceive the advertisement to be.

However, while Psychological Reactance Theory explains how individuals resist when they perceive their autonomy is threatened, it does not fully account for situations where consumers may not notice those cues, situations in which reactance may never be triggered. The aforementioned indicates that the way consumers engage with an advertisement, such as the amount of attention they assign to it, could also have a significant

influence on their responses. Given this, it is important to consider the Elaboration Likelihood Model (Petty & Cacioppo, 1986). In the Elaboration Likelihood Model, two routes of persuasion are identified: the central and peripheral routes. According to this model, strongly involved consumers who process information via the central route would examine the specific content of the advertising message, while their attention would be less towards an AI label. In contrast, according to this theory, other consumers, who process information via the peripheral route, may react more to cues such as an AI label than to the quality of the advertisement itself. At the same time, consumer engagement is critical in research on the effects of digital advertising because it provides insights into long-term cognitive and affective mechanisms, which impact how people perceive and respond to certain stimuli.

Although labeling advertisements in which AI has been involved with AI labels is often intended as a sign of transparency towards the viewer, recent experiments show that such AI labels often negatively affect consumer attitudes. Wortel et al. (2024) found that Instagram advertisements explicitly labeled “Made with AI” were perceived to be worse than identical advertisements without the label. In a different social media context, Schöning (2025) observed that LinkedIn posts marked as “AI-generated” made the author less credible. However, this effect was less apparent when just the accompanying image was labeled as AI-generated, underscoring the importance of the label's context. Building on this information, Sands et al. (2025) discovered that, in comparison to human-made advertisements, AI-generated advertisements were perceived as substantially less credible and led to more unfavorable attitudes. The latter highlights the fact that the mere appearance of an AI label may negatively impact ad credibility and consumer attitudes toward the advertisement. Taken together, these findings demonstrate that labeling advertisements with an AI label might trigger negative attitudes and might cause a lower perceived credibility. The following hypotheses are proposed:

**H1:** Adding an AI label to an advertisement will have a negative effect on attitude towards the advertisement compared to an advertisement without an AI label.

**H2:** Adding an AI label to an advertisement will have a negative effect on perceived credibility compared to an advertisement without an AI label.

The attitudinal effects from H1 and H2 have direct implications for consumer behavior. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), the attitude of an individual toward a message or product strongly predicts their behavioral intentions. Building on this, Spears and Singh (2004) demonstrated that positive consumer attitudes toward an advertisement not only predict more favorable brand attitudes but also higher purchase intentions, suggesting that, if an advertisement with an AI-label is received negatively, that negativity could also lead to weaker purchase intentions. Drawing on this, Cicek et al. (2024) found that using the words “artificial intelligence” in the description of a product caused consumers to lose trust in the product, ultimately leading to a decrease in their purchase intentions. Pavlou and Gefen (2004) further demonstrated that trust in the structural integrity and credibility of online platforms plays a crucial role in reducing perceived risk and directly increases consumers’ intentions to make purchases. Applied to AI labels on advertisements, this suggests that if an AI label triggers concerns about credibility or authenticity, it may not only lower trust in the ad but also reduce the likelihood of consumers purchasing the advertised product. The following hypothesis is proposed:

**H3:** Adding an AI label to an advertisement will have a negative effect on purchase intention compared to an advertisement without an AI label.

### **The Role of Transparency in AI Disclosure**

When a consumer sees a label like “This advertisement was created and brought to you by AI,” it may also raise concerns about which personal data was used to tailor the advertisement. Even if the advertisement perfectly matches the consumer’s needs, the AI label could perceive it as intrusive rather than helpful, prompting doubts: Is the consumer being genuinely understood or just being targeted? To answer this, one must not only ask whether AI labels are transparent, but also measure how transparent they feel to consumers. Transparency is often viewed in marketing as a knowledge-sharing process that enhances the clarity and understandability of messages. In line with this, Montecchi et al. (2024) recently developed a multi-dimensional perceived transparency scale for brands, making it a timely and suitable instrument for measuring such consumer perceptions. Montecchi et al. note that if brands show a “willingness to explain”, this transparency benefits consumers.

In a related context, Yang & Battocchio (2020) found that when businesses are honest in sharing internal processes, consumers perceive greater transparency and authenticity. Although their study was not conducted in the context of AI advertising, it suggests that honest disclosure alone, regardless of complexity, can positively influence how transparent a message feels. Applying the above to this study, disclosing AI involvement in an advertisement could be interpreted by consumers as a gesture of honesty, leading to a higher perceived transparency of the advertisements.

This idea is supported by Park and Yoon (2024), who show that user trust and relationship satisfaction with the brand significantly rise when businesses openly reveal how their AI algorithms work, exposing data sources, decision criteria, and even the reasoning behind targeting, suggesting that disclosing AI involvement in the form of an AI label might also have a positive effect on the perceived transparency of advertisements. Their findings

suggest that consumers respond positively to detailed algorithmic explanations. However, Park and Yoon's work focuses broadly on brand-level transparency, showing how open AI-use explanations can build brand equity across product categories, whereas in advertising, the stakes are slightly different, as the consumer must decide, often in a split second, whether an AI-labeled advertisement deserves their attention at all. To test the aforementioned ideas, the following subquestion is proposed:

**Subquestion:** Does an AI label on an advertisement improve consumers' perceived transparency of the advertisement?

### **How Framing Shapes Meaning**

Nevertheless, AI-enabled advertising also comes with its own set of challenges. While high AI involvement can significantly enhance the benefits of the personalization of advertisements, it could also have negative effects. If the consumer sees the label ("This advertisement was brought to you by AI" or "This advertisement was created by AI and brought to you by AI"), the advertisement could become overly intrusive, while it could also give the consumer the feeling that they are being watched. Interestingly, these AI labels express different types of AI involvement. "This advertisement was brought to you by AI" relates to programmatic advertising, a form of advertising that leverages machine learning to analyze consumer data and dynamically allocate impressions for optimal timing and audience targeting (Singhal, 2024). On the other hand, "This advertisement was created by AI" is part of AI-generated advertising, which refers to advertising content entirely created by generative AI models (Gu et al., 2024). To put the aforementioned into perspective, Wu et al. (2024)'s research demonstrated that framing AI as merely "placing" advertisements, rather than "creating" them, results in increased sharing intentions because consumers see AI as an

objective allocator of information, an observation that emphasizes why how we characterize AI participation is important.

Applying this to this study, the phrasing of AI-involvement in advertising may trigger a sense of privacy invasion or manipulation, which could then cause a worse consumer attitude towards the advertisement, lower advertisement credibility, and lower purchase intention than advertisements that have not been influenced in any way by AI.

In light of these challenges, Pezzuti et al. (2020) further argue that in digital advertising, only attracting superficial attention is insufficient. They examined how using certain language in social media posts influences consumer engagement on social media platforms, like Facebook and Twitter. During their research, they found that posts that contain words like “always”, “everything”, and “forever” gained significantly more likes, comments, and shares than less “certain language”, such as “maybe”, “perhaps”, and “guess”. Moving over to this research, the findings of Pezzuti et al. (2020) emphasize the need for a balance between innovative interactive design and transparent (and tailored) messaging. In order to achieve this, transparent communication could not only help with mitigating negative perceptions by framing personalization as a positive feature, rather than being intrusive, but it could also offer direct benefits for consumers. If companies were more transparent (such as adding an AI label) in explaining how consumer data is used for personalization, consumers could obtain a better understanding of their digital footprint and become more aware of the decisions that they make regarding their privacy, which could ultimately also lead to more consumer trust. However, as the findings of Pezzuti et al. (2020) indicate, the phrasing of an AI label could have different effects on individuals. While “traditional” machine learning systems personalize advertisements using historical data and batch-trained models, AI-based selection goes further, as it also combines real-time signals with human-crafted rules and

dynamic creative adjustments to tailor ads instantly to the user's current context. This theoretical perspective shows that the use of AI in advertising can not be seen as a given positive; by not only using historical data, but by also combining real-time signals with human-crafted rules and dynamic adjustments to personalize advertisements, AI in advertising opens doors for improved personalization, while it also presents challenges related to privacy and control.

Therefore, while the initial interaction with AI-labeled content might have positive effects on purchase intention, attitude towards the advertisement, and perceived credibility of the advertisement, the wording of the AI-labels could significantly shape consumer perceptions. Specifically, stressing the "creation" component of AI involvement could shift consumer attention away from the usefulness of the advertisement, because of the fact that consumers cannot focus on everything at the same time, focusing on how the advertisement was created leaves fewer cognitive resources for actually evaluating what the advertisement really offers. To explore these nuances, the following hypotheses are proposed:

**H4:** Attitude towards the advertisements will be more negative for advertisements with the “created and brought to you by AI” label than for advertisements with the “brought to you by AI” label.

**H5:** Perceived credibility will be lower for advertisements with the “created and brought to you by AI” label than for advertisements with the “brought to you by AI” label.

**H6:** Purchase intentions will be lower for advertisements with the “created and brought to you by AI” label than for advertisements with the “brought to you by AI” label.



## **Methodology**

### **Research Design**

This study used a quantitative design featuring a survey that used a between-subjects element. Participants were randomized into groups by Qualtrics. The control group was exposed to traditional advertisements, while the second group, the experimental group, was shown the same advertisement, but with the label “This advertisement was brought to you by AI”. A third group was shown the same advertisement as the other two groups, but with the label “This advertisement was created and brought to you by AI”. This setup allowed for a comparison between the three groups on the dependent variables: consumer attitude towards the advertisement, perceived advertisement credibility, and consumer purchase intention.

The participants were informed about the study, its nature, and procedures, and their rights through a detailed consent form before they actually participated. Hence, participation was on a purely voluntary basis. To ensure privacy, all forms of responses were anonymous and securely stored.

### **Participants**

This study targeted individuals 18 years and older who were also regularly exposed to online advertisements. To reach this target group, the study used a convenience sampling approach by making use of the researcher’s personal and professional networks.

At the start of the survey, the following item was used to make sure that participants were exposed to online advertisements at least once in the last week:

How often did you see an online advertisement in the past week?

The results showed that all participants had at least seen an online advertisement once in the week before they participated in the study, while 87% of participants noted that they were “often” (32%) or “very often” (55%) exposed to online advertisements within the aforementioned timeframe. After data cleaning, during which incomplete responses and participants who did not view the advertisement for at least 2 seconds were removed, the final sample consisted of 126 individuals, equally divided into 63 men and 63 women. Within the sample, after randomization, 43 participants were in the control group, 40 were in the first experimental group, and 43 were in the second experimental group. The age division within the sample is illustrated in Table 1.

**Table 1***Sample Age Division*

Age Group	Number of Participants	% of Total
18-24	70	56%
25-34	13	10%
35-44	7	6%
45-54	14	11%
55-64	16	13%
65+	6	5%

*Note.* Sample Age Division

## Stimuli

At the beginning of the survey, in between the demographic questions (age, gender, digital-media usage), an item asked participants to select a product category that they were most interested in. The participants were given the following product categories to choose from: Electronics & Technology, Clothing & Fashion, Health & Beauty, Food & Beverages, and Home & Furniture. This item functioned as a personalization filter for the advertisement

exposure part of the survey. This filter question allowed for each individual to be shown an advertisement that aligned with the product category that they opted for. The goal here was to reproduce the experience of encountering a targeted, personalized advertisement, similar to what the individual would be likely to encounter during their typical browsing activity.

In the advertisement module of the survey, participants were randomly assigned to one of three experimental conditions. All groups were served an advertisement related to the product category they selected, but the framing of the ad differed across the conditions. For example, a participant who opted for the “Clothing & Fashion” category, who was assigned to the control group, received an advertisement promoting a clothing brand, without any mention of AI. In contrast, if this participant was assigned to the second group, they would have received the same advertisement, but with the label “This advertisement was brought to you by AI”, indicating that the advertisement was AI-delivered to the participant. Finally, a participant who selected the “Clothing & Fashion” product category, assigned to the third group, received an advertisement with an even more explicit AI label: “This advertisement was created and brought to you by AI”. Participants in this third group were thus informed that the advertisement they encountered was not only AI-created but also AI-delivered to them. Aside from these labels, the advertisements within each product category were completely identical across conditions, to make sure that any observed differences in participant responses could only be linked to the presence and phrasing of the AI label.

Before launching the main study, a small pilot test was conducted to ensure that participants saw and understood the labels correctly. In this test, participants were shown four different versions of an advertisement, each featuring an AI label. The AI label was placed in a different corner of the advertisement in each version to test how the placement affected participant understanding. The pilot test ( $n = 20$ ) found that 9 out of 20 participants felt that

placing the AI label at the upper left corner made it stand out the most, while 4 participants preferred placement in the upper right, 4 preferred the bottom left corner, and 3 preferred the bottom right corner. Seeing the fact that there was a clear difference between placement in the upper left corner and placement in one of the other corners, conducting pre-testing of the AI labels by performing a pilot test led to the AI label being placed in the upper left corner for the final survey, as this placement would make the labels the most visible, which was essential for assessing the effects of seeing the label. The pilot test concluded with the question, “Do you fully understand what the AI label indicates?” All participants were able to explain the label’s meaning easily, confirming that the labels worked as intended.

### **Instrument**

The survey used adaptations of established Likert scales to measure attitude towards the advertisement, perceived advertisement credibility, consumer purchase intention, and perceived transparency of the advertisement. Developed based on the work of Spears & Singh (2004), the Attitude toward the Advertisement and the Purchase Intention scale evaluated concepts such as ad engagement, clarity, and persuasiveness in terms of purchase intention.

Further in the survey, an adaptation of the Advertising Involvement Scale was used to study consumer engagement with the advertisements (Zaichkowsky, 1985). This scale, based on Zaichkowsky's study, was shortened and adapted to specifically assess the perceived credibility of the advertisement. Although the scale was originally created in 1985, the idea that not all advertisements are equally personally relevant and engaging to a viewer has not changed over the years. While this scale slightly overlapped with the scale of Spears & Singh (2004), the purpose of this scale was to measure how credible the participants found the

advertisement. The scale checked whether the advertisement actually captured the personal interest of the participant, which allowed for explaining certain findings in more detail.

Following this, a fourth scale, adapted from the brand transparency scale from Montecchi et al. (2024), aimed at measuring the perceived transparency of the advertisements. For the final scale, the Attitude toward AI scale, participants were served several questions to measure their view towards AI, in order to get a better understanding of their thought process during the experiment. The experiment concluded with an optional final question, aimed at obtaining an understanding of the sentiment of participants, regardless of whether they encountered an advertisement with an AI label:

How did you first react when you saw the AI label?

Subsequently, exploratory factor analysis was performed. The analysis used promax rotation, to account for possible relationships between the factors. Ultimately, a five-factor model was identified. The model's overall fit was good, and the fit index was 2.01, while it accounted for 54.3% of the variance between the items. The first factor, purchase intention, consisting of item PI1 to PI5 accounted for the highest percentage of variance with 15.3%, followed by the second factor, perceived credibility (items PCA1 to PCA5) of the advertisement with 14.1%, and the third factor, attitude toward the advertisement with 9.4% (items AAD1 to AAD5). Factor 4, perceived transparency (items PT1 to PT5), and factor 5, attitude towards AI (AI1 to AI5), accounted for 8.3% and 7.2%, respectively. Table 2 shows that factor loadings tended to be high across the majority of the items, although some items, such as the AAD5, and AI5 items, had weaker factor loadings. The moderate negative factor loadings on the AI2 item, on its factor could be explained by this item being an inverse item: "I think the risks associated with AI systems outweigh their benefits".

**Table 2***Factor Loadings*

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
PI1	0.96			-0.10	
PI2	1.05	-0.14			
PI3	0.77				
PI4	0.83				
PI5	0.51	0.26			-0.18
AAD1	0.11	0.25	0.55		
AAD2	-0.12	-0.13	0.99	0.15	
AAD3		-0.13	0.72	0.20	
AAD4	0.11	0.24	0.58		
AAD5	0.11	0.13		0.26	
PCA1		0.74	0.14	-0.13	
PCA2		0.62		0.17	
PCA3		0.54	-0.14	0.13	
PCA4		0.88			
PCA5		1.07		-0.13	
PT1	-0.13	0.10		0.62	
PT2		-0.16	-0.13	0.71	0.10
PT3	0.16			0.46	
PT4		-0.15	0.29	0.79	
PT5	0.25			0.32	
AI1					0.89
AI2	0.15	-0.19	0.12		-0.55
AI3	0.20				0.52
AI4			0.15		0.54
AI5	0.14			0.16	0.24

*Note.* Factor Loadings

The factor correlations, illustrated in Table 3, suggested moderate to high associations between the factors. For example, purchase intention had high positive associations with attitude towards the advertisement ( $r = 0.68$ ), while attitude toward the advertisement had a moderate positive association with perceived transparency ( $r = 0.41$ ).

**Table 3***Factor Correlations Matrix*

Factor	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	1.00	-0.66	0.68	0.41	-0.24
Factor 2	-0.66	1.00	-0.61	-0.51	0.27
Factor 3	0.68	-0.61	1.00	0.35	-0.31
Factor 4	0.41	-0.51	0.35	1.00	-0.09
Factor 5	-0.24	0.27	-0.31	-0.09	1.00

*Note.* Factor Correlations Matrix

After factor analysis, the next step was to examine the reliability of the scales used in the study and to subsequently finalize the scales. The Purchase Intention Scale showed excellent internal consistency, with a Cronbach's alpha of .89, while analysis of the Attitude toward the Advertisement Scale showed good reliability ( $\alpha = .82$ ). During scale reliability analysis it was found that deleting the item "This advertisement gives me a good feeling" (AAD5) would increase the Cronbach's alpha from .82 to .88. As this item also had a weak factor loading, this item was excluded from the Attitude toward the Advertisement scale during data analysis. The final measurement tool was a 7-point Likert scale ranging from a score of 1 (Strongly Disagree) to a score of 7 (Strongly Agree). The adapted scale included 9 items, of which 5 items measured purchase intention and 4 items measured attitude toward the advertisement. To illustrate, the item "The advertisement was clear and easy to understand." measured attitude toward the advertisement, while the item "I can see myself using this product" measured purchase intention.

The final Perceived Credibility of the Advertisement Scale, which demonstrated good reliability ( $\alpha = .85$ ), included 5 items. One item that was used in this scale was: "This advertisement appears reliable and accurate." Using the three scales above, the questionnaire examined both overall views and the level of active participation produced by advertising. For the Perceived Transparency scale, which included 5 items on a 7-point Likert scale, the Cronbach's alpha of .72 indicated acceptable reliability. In this scale, respondents were asked whether the advertisement seemed clear, honest, and explanatory about its use of AI and data. One item that was used in this scale was "I can see evidence of how this advertisement was personalized or distributed.". For the final scale, the Attitude toward AI scale, the item "I understand enough about AI to judge its results accurately" (AI 5) was retained, as it served to capture an additional perspective on the AI scale. The final scale consisted of 5 items,

calculation of Cronbach's alpha revealed acceptable reliability ( $\alpha = .70$ ). One of the items was: "AI technology is generally beneficial to society."

### **Procedure**

Data was collected between May 9 and May 17, 2025, via a Qualtrics survey, which began with an informed consent form. Participants were first shown a form that explained the purpose of the study, what they were expected to do, and how their information would be kept private. They were also told they could withdraw from the study at any moment. After they agreed to participate, participants were randomized by Qualtrics into either the control group or one of the experimental groups.

Once Qualtrics set the groups, the survey itself was sent out with instructions. First of all, several demographic questions were asked of the participants, also to categorize them into a certain category of product advertisements. After these demographic questions, participants were shown an advertisement relating to the product category they selected during the demographic questions. After viewing the advertisement, participants were first asked several questions relating to how likely they would be to have the intention to purchase the advertised product, followed by several items relating to their general attitude toward the advertisement, how credible they perceived the advertisement to be, and to what extent they perceived the advertisement to be transparent.

Having answered these questions, the general attitudes of participants towards AI were measured, and the manipulation was checked with the following item: "Did the advertisement you saw include an AI label?" The results of this manipulation check showed that 78% of the individuals who were shown an advertisement with an AI label also remembered seeing it, suggesting that the label was generally effective in catching attention.



A chi-square test for independence was used in addition to the aforementioned, and the results indicated a significant relationship between the conditions and whether the label was noticed. This implies that participants were significantly more likely to report seeing the label when it was actually part of the advertisement ( $\chi^2(2, N = 126) = 72.17, p < .001$ ). Although these results suggest that the manipulation worked as intended, it should be noted that not everyone noticed it, a notion that should be taken into account when analyzing the results. Finally, at the end of the survey, participants were given the option to ask questions and provide comments to the researcher.

### **Analysis**

For H1-H3 and the subquestion, the “This advertisement was brought by AI” and “This advertisement was created and brought by AI” conditions were combined and compared against the no label condition. The results from the overall attitude toward AI scale were used for extra context of the relationship between AI labels and the dependent variables in this study. Finally, the sentiment of the responses to the optional open-ended question was analyzed with a sentiment analysis. For this analysis, participants’ responses were coded as positive, negative, or neutral.

## Results

### Hypothesis Testing

Analyses were conducted in RStudio (version 4.5.0). During data analysis, assumption checks for normality and homogeneity of variances were conducted for all analyses. In case assumptions were met, they were not mentioned in the main text. The full results of all assumption checks can be found in the appendices. Moving over to H1, attitude towards the advertisement scores were compared between the Label ( $n = 83$ ), a combination of the groups that saw an advertisement with an AI label, and No Label ( $n = 43$ ) conditions (Label:  $M = 3.48$ ,  $SD = 1.40$ ; No Label:  $M = 3.56$ ,  $SD = 1.42$ ). A two-sample t-test was conducted to compare the scores on the attitude towards the advertisement scale for the Label ( $n = 83$ ) and No Label ( $n = 43$ ) groups. The attitudes of people who saw an AI label regarding the advertisement were not significantly distinct from those of those who did not ( $t(124) = -0.28$ ,  $p = .783$ , Mean difference 95% CI  $[-0.28, 0.45]$ ). In light of this information, H1 was rejected.

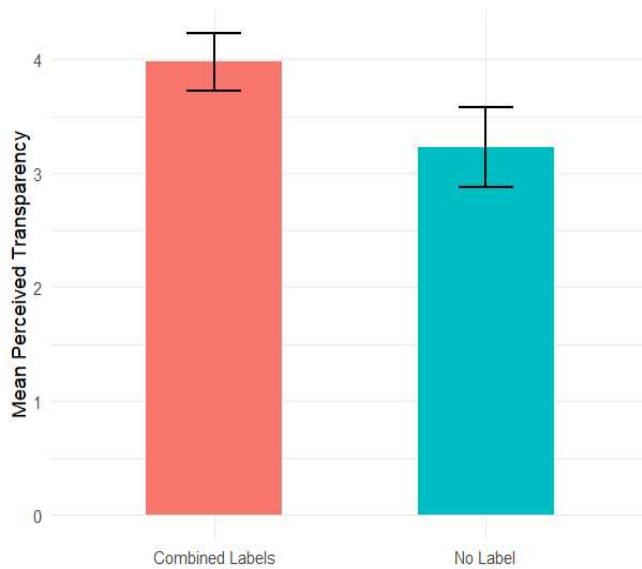
For perceived credibility (H2), a Shapiro-Wilk normality test demonstrated that the results were not completely normally distributed for the Label group, while the results for the No Label group were normally distributed (Label:  $W = .967$ ,  $p = .027$ ,  $M = 4.06$ ,  $SD = 1.18$ ; No Label:  $W = .953$ ,  $p = .080$ ,  $M = 4.14$ ,  $SD = 1.07$ ). Because of the data not being normally distributed, a Mann-Whitney U test was performed, which showed that individuals who encountered an advertisement with an AI label did not score the perceived credibility of the advertisement significantly differently from those who did not see a label on the advertisement they received during the experiment ( $W = 1726.5$ ,  $p = .767$ ). Based on this notion, the hypothesis that adding an AI label to an advertisement would have a negative

effect on perceived credibility compared to an advertisement without an AI label was rejected.

Purchase intention (H3) was analyzed using the same approach. A Shapiro-Wilk test indicated that the results were not fully normal for the label ( $W = .963, p = .018, M = 2.75, SD = 1.15$ ) and the no label group ( $W = .912, p = .003, M = 2.94, SD = 1.41$ ). Therefore, a Man-Whitney U test was performed, which indicated that the presence of an AI label did not significantly change purchase intention in comparison with the group that did not see an AI label on the advertisement ( $W = 1735, p = 0.801$ ). Based on these results, H3 was rejected.

The data for the subquestion "Does an AI label on an advertisement improve consumers' perceived transparency of the advertisement?" was analyzed with a t-test. The individuals who saw an advertisement without a label and those who saw one with a label differed significantly in how transparent they perceived the advertisement to be, according to the t-test ( $t(124) = 3.47, p < .001$ , Mean difference 95% CI (95% CI [0.32, 1.18])). The label group reported greater transparency ( $M = 3.98, SD = 1.15$ ) than the label group ( $M = 3.23, SD = 1.15$ ), while Cohen's d indicates a medium effect size ( $d = 0.65, 95\% \text{ CI } [0.27, 1.03]$ ).

Figure 1 visualizes the above results.

**Figure 1***Mean Transparency  $\pm$  95% CI by Label Condition**Figure 1. Mean Transparency  $\pm$  95% CI by Label Condition*

To evaluate the difference in attitude towards the advertisement between the label indicating that the advertisement was AI-created ( $n = 40$ ) and the label indicating that the advertisement was not only AI-created but also AI-distributed ( $n = 43$ ) groups, a t-test was performed (brought label:  $M = 3.56$ ,  $SD = 1.49$ ; created and brought label:  $M = 3.41$ ,  $SD = 1.33$ ). The aforementioned test revealed that individuals who saw the AI-created label did not have significantly different attitudes towards the advertisement than individuals who saw the label indicating that the advertisement was created and distributed by AI ( $t(81) = 0.48$ ,  $p = .630$ , Mean difference 95% CI [0.47, 0.77]). This finding led to the rejection of H4. Next, the difference in perceived credibility between the two labels (H5) was analyzed (brought label:  $M = 4.27$ ,  $SD = 1.17$ ; created and brought label:  $M = 3.86$ ,  $SD = 1.17$ ). A t-test found that individuals who saw that the advertisement was brought to them by AI did not perceive the advertisement to be less credible than what individuals that saw that the advertisement was

brought to them and created by AI ( $t(81) = 1.58, p = .112$ , Mean difference 95% CI [0.10, 0.93]). For this reason, H5 could not be accepted.

Finally, for the difference in Purchase Intention between the two labels (H6), a Shapiro-Wilk normality test indicated that the data were not completely normal (brought label:  $W = .956, p = .118, M = 2.84, SD = 1.12$ ; created and brought label:  $W = .941, p = .028, M = 2.67, SD = 1.18$ ). For this reason, a Mann-Whitney U test was performed, which did not show that purchase intention was significantly lower for the Created and Brought Label condition, in comparison with the Brought label condition ( $W = 922.5, p = .571$ ), ultimately leading to H6 being rejected.

### **General Attitudes Toward Artificial Intelligence**

Overall, the attitude of respondents toward AI was moderately positive ( $M = 4.16, SD = 0.87$ ). Shifting focus to specific groups within the data, a t-test between male ( $n = 63$ ) and female respondents ( $n = 63$ ) showed that female respondents did not have a significantly more positive attitude toward AI compared to male respondents (Male:  $M = 4.04, SD = 0.69$ ; Female:  $M = 4.28, SD = 1.01$  ).

However, as shown in Table 2, when looking into different age groups, a significant difference emerged. Linear regression analysis revealed that as age increased, the general attitude towards AI tended to decrease. While age explained a relatively small percentage of the variance (3%) in attitudes toward AI in this study, it should be noted that the sample of this study ( $n = 126$ ) was not large enough to take this as hard evidence for a relationship between age and attitude toward AI. Adding the fact that most of the participants were between the ages of 18 and 24 (Table 1) this finding should be taken mindfully. More substantively, Table 2 also shows that attitude toward AI was consistently able to predict their

reactions to the advertisement. Specifically, those who held more positive AI attitudes not only rated the ad more favorably but also judged it as more credible, expressed stronger purchase intentions, and perceived it as more transparent.

**Table 4***Linear Regression Analyses Results*

Model	Predictor	Outcome	$\beta$	R <sup>2</sup>	F (1, 124)	p
1	Age	Attitude toward AI	-0.009	.031	4.03	.047
2	Attitude toward AI	Attitude toward the advertisement	0.693	.183	27.69	<.001
3	Attitude toward AI	Perceived credibility	0.392	.088	12.01	<.001
4	Attitude toward AI	Purchase intention	0.511	.127	18.00	<.001
5	Attitude toward AI	Perceived transparency	0.299	.047	6.09	.015

*Note.* All regression models are based on a sample of  $n = 126$ .

### Qualitative Reactions to AI-labeling

At the end of the experiment, participants encountered the optional open-ended question, “Please describe your initial reaction when you saw the AI label on the advertisement. If you did not see an AI label, please describe what you would think if you saw an advertisement with an AI label.” which provided additional qualitative findings ( $n = 46$ ), which were analyzed with a sentiment analysis. Before conducting the sentiment analysis, responses that failed to address the question, such as “meh”, were removed. However, it should be kept in mind that, because this was an optional question, only 46 participants actually answered this question. The comments that were left on this question revealed a mix of reactions to AI labels. 39% of respondents indicated that they barely reacted to the label, treating it as unremarkable: as one explained, “*I did not think much of it,*” reflecting a sense that AI involvement in advertising was already expected or not important enough for the individual to care about it. 24 % of the responses were more positive, and for example, appreciated the transparency afforded by the AI label, viewing it as useful

information. For example, one respondent noted it was "*nice to know these are not real persons, but AI generated,*" which in their view "*makes the advertisement more reliable,*" which suggests that clearly labeling AI-generated content can enhance trust by acknowledging its artificial nature.

In contrast, 37% of the responses had a negative tone towards advertisements with an AI label, expressing concerns about authenticity, credibility, and the company's intentions. One respondent stated that their "*immediate response ... is to distrust the ethics and values of that company*" upon seeing an AI label. Similarly, others perceived AI-created advertisements as less genuine. A few respondents even said they would actively avoid or "skip" such advertisements out of skepticism. Overall, these qualitative reactions provide contextual depth to the quantitative results, illustrating how AI labeling can evoke diverse individual perceptions without overriding the broader findings.

## Discussion

The research question on how AI labels affect people's views of advertisements, their credibility, and their intent to make purchases revealed several unexpected findings. In the following section, the study's hypotheses and subquestions are revisited to expand on these findings, offering an additional review of their theoretical implications and application in real-world settings.

### **Impact of AI Labeling on Attitudes, Credibility, Purchase Intention, and Transparency**

In contrast to the expectations that were set at the start of the research, the effects of adding an AI label to an advertisement on consumer attitudes toward the advertisement, perceived advertisement credibility, or purchase intention did not reach significance. Although this result came as a surprise, sentiment analysis of the responses to the optional open-ended question highlighted considerable variation, which indicates that many participants likely did not perceive the AI label as significantly compromising their autonomy - a major factor in Psychological Reactance Theory (Brehm, 1966) - ultimately leading to the absence of a significant negative effect.

These findings also diverge from other studies that documented negative effects of AI labels. Wortel et al. (2024) found that Instagram posts with an “Made with AI” label were viewed more negatively than posts without any label. Additionally, Schöning (2025) discovered that marking a LinkedIn post as “AI-generated” harmed the perceived credibility of the post. The contrast with these findings may originate from differences in the context and the mindset of the audience, as users of platforms like Instagram and LinkedIn could heavily associate these platforms with human-made content, an expectation which would then be violated by an AI label. In contrast, in an online survey, presenting standalone product



advertisements, this expectation could be less apparent, as participants knew they were evaluating an advertisement, so an AI label might have registered as a minor technical detail rather than as a red flag.

### **“Brought to You by AI” vs. “Created and Brought to You by AI”**

Moreover, the effects of explicitly stating that an advertisement was not only delivered by AI but also created by AI were examined. In contrast to Wu et al. (2024), who found that consumers were less likely to share an advertisement labeled as “created by AI” than advertisements labeled “placed by AI”, no significant negative effects were found on attitude towards the advertisement, perceived credibility of the advertisement, or purchase intention. While Pezzuti et al. (2020) found that, in a social media context, small wording differences can significantly influence consumer engagement, this study did not reinforce this finding in an advertising context. A possible explanation lies in the participants’ general beliefs about AI, as the AI Attitude Scale scores showed that respondents generally viewed AI positively. Linear regression analyses revealed that those with favorable AI attitudes were also more likely to have positive responses to the advertisements, suggesting that preexisting beliefs may have led participants to interpret both AI label versions in a similar way.

Beyond these hypotheses, the subquestion “Does an AI label on an advertisement improve a consumer’s perceived transparency?” was also analyzed. Interestingly, the results indicate that participants who saw an AI-labeled advertisement reported significantly higher perceived transparency than those who received an advertisement without an AI label. Since consumers value transparency, even if it doesn't immediately increase ad liking, this finding supports the previously stated argument that AI disclosure in the form of AI-labels could be a low-risk approach, while it implies that the benefit could rest in long-term trust and brand reputation.

### Theoretical and Practical Implications

The results indicate that adding an AI label to an advertisement does not significantly change how consumers feel about the advertisement, how believable they find it, or their purchase intention toward the advertised product. However, the results show that putting an AI label in an advertisement could actually be a smart move for advertisers, as advertisements with such a label were perceived to be more transparent. However, it should be noted that although the present study shows no significant negative effect, people who hold strong beliefs against AI technology might lose their trust upon encountering an advertisement in which a label states that AI was involved in the advertisement. Therefore, briefly explaining the underlying reasons for using AI in the advertisement in question could help mitigate consumer concerns.

From a theoretical standpoint, these findings offer a more nuanced understanding of how consumers respond to advertisements with an AI label. Statistical data analysis revealed no strong negative feelings towards the AI label, while sentiment analysis revealed that participants, at times, treated the AI label as unremarkable, indicating that AI disclosure alone is not always guaranteed to cause resistance. Labeling advertisements as “Brought to you by AI” or “Created and brought to you by AI” does not automatically trigger skepticism or defensiveness, rather, it seems that such resistance also depends on beliefs towards AI and the larger context in which it is received. Corresponding with the Elaboration Likelihood Model (Petty & Cacioppo, 1986), the results from the sentiment analysis suggested that people sometimes focused more on the main points of the message, such as the product's relevance and value, than on peripheral cues like an AI label when they engaged with the advertisement content. Because of this, the inclusion or wording of an AI label is unlikely to

have had a significant impact on the advertisement's overall rating, especially if the AI label was seen as unremarkable.

### **Limitations & Future Research**

While these findings provide insights on how consumers interpret AI-labeled advertisements in real time, they also raise a number of significant unresolved questions, particularly when it comes to how these labels may work over time and across several audiences. Regarding limitations and areas for future research, the sample consisted mainly of young adults via convenience sampling, without specifically targeting individuals who are used to online advertisements and AI technology to a set level, or individuals from different age groups. For this reason, future research should dive into the differences in types of audiences to examine if individuals from different age groups or individuals with differing levels of familiarity with advertising practices and AI technology react differently to the cues presented in this experiment. Exploring these differences matters because of the fact that individuals might react differently to AI labels depending on their comfort with AI technology or worries about privacy, or personal background. For advertisers, knowing this could help them to be clearer and more respectful toward their audience, which, for consumers, could lead to advertising feeling less intrusive and more trustworthy.

Moreover, other than aligning each advertisement with a specific product category, this study did not experimentally alter the level of personalization or the visual design of the stimuli. In order to investigate whether deeper personalization increases or decreases the effects of an AI label, future research could explicitly manipulate levels of personalization, for example, by showing a generic ad to one group and a fully customized ad based on user data to another. Furthermore, we were unable to record participants' immediate, visible emotions when they initially saw the AI label, as data collection was solely conducted

through online survey software. Real-time behavioral metrics might reveal immediate cognitive or emotional responses that self-report scales alone cannot detect. Therefore, observational techniques could potentially be used in future studies to document participants' immediate responses to AI-labeled advertisements.

Additionally, participants only saw one advertisement, while in reality, people might see lots of these ads repeatedly. Seeing AI labels again and again could eventually make people numb to them, reducing their impact rather than making people react strongly or positively. Therefore, future research could investigate how AI labels in advertisements have an impact over a longer period of time, and over multiple exposures. Finally, in this experiment, only two plain black text label fonts were tested. Other elements within AI labels, such as the color, the font, and the font size, merit examination to determine how the involvement of AI is perceived differently across different design elements.

## Conclusion

In addition to advantages such as advanced real-time personalization, the growing use of AI in advertising raises questions about consumer reactions, transparency, and privacy. This study explored how labeling advertisements with an AI label influences consumer attitudes toward the advertisement, perceived credibility of the advertisement, and purchase intentions. No negative effects were found between advertisements with and without an AI label, or between the wording of the AI labels. Interestingly, the results suggested that individuals with a more positive attitude toward AI also tended to be more positive towards the dependent variables.

Nevertheless, it was found that people's perceptions of how transparent an advertisement was were improved significantly when they saw an AI label on it. They perceived the advertiser as being transparent and truthful in their communication on the use of AI in the advertisement, and they felt more informed about the creation and/or delivery of the advertisement, implying that making effective use of AI labels could make a brand be seen as more transparent. In a quickly evolving digital environment, this finding could serve both as a foundation for future research as well as a practical guidepost for ethical communication methods in marketing.

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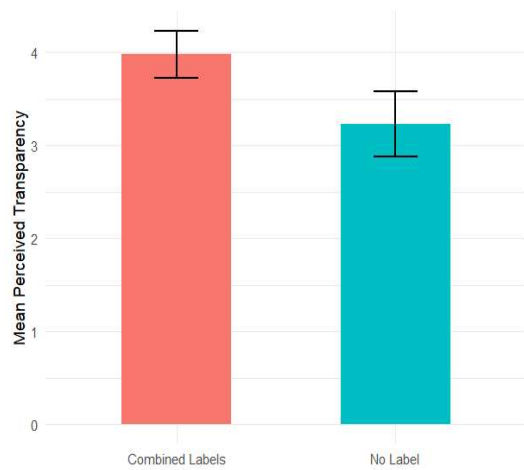
## **Appendices**

### **Appendix A: AI Statement**

During the preparation of this work the author used Grammarly in order to rewrite some sentences with the goal of correcting spelling errors. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the work.

**Appendix B: Figures****Figure 1**

*Mean Transparency  $\pm$  95% CI by Label Condition*



*Figure 1. Mean Transparency  $\pm$  95% CI by Label Condition*

## Appendix C: Tables

**Table 1***Sample Age Division*

Age Group	Number of Participants	% of Total
18-24	70	56%
25-34	13	10%
35-44	7	6%
45-54	14	11%
55-64	16	13%
65+	6	5%

*Note.* Sample Age Division**Table 2***Factor Loadings*

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
PI1	0.96			-0.10	
PI2	1.05	-0.14			
PI3	0.77				
PI4	0.83				
PI5	0.51	0.26			-0.18
AAD1	0.11	0.25	0.55		
AAD2	-0.12	-0.13	0.99	0.15	
AAD3		-0.13	0.72	0.20	
AAD4	0.11	0.24	0.58		
AAD5	0.11	0.13		0.26	
PCA1		0.74	0.14	-0.13	
PCA2		0.62		0.17	
PCA3		0.54	-0.14	0.13	
PCA4		0.88			
PCA5		1.07		-0.13	
PT1	-0.13	0.10		0.62	
PT2		-0.16	-0.13	0.71	0.10
PT3	0.16			0.46	
PT4		-0.15	0.29	0.79	
PT5	0.25			0.32	
AI1					0.89
AI2	0.15	-0.19	0.12		-0.55
AI3	0.20				0.52
AI4			0.15		0.54
AI5	0.14			0.16	0.24

*Note.* Factor Loadings

**Table 3***Factor Correlations Matrix*

Factor	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	1.00	-0.66	0.68	0.41	-0.24
Factor 2	-0.66	1.00	-0.61	-0.51	0.27
Factor 3	0.68	-0.61	1.00	0.35	-0.31
Factor 4	0.41	-0.51	0.35	1.00	-0.09
Factor 5	-0.24	0.27	-0.31	-0.09	1.00

*Note.* Factor Correlations Matrix**Table 4***Linear Regression Analyses Results*

Model	Predictor	Outcome	$\beta$	R <sup>2</sup>	F (1, 124)	p
1	Age	Attitude toward AI	-0.009	.031	4.03	.047
2	Attitude toward AI	Attitude toward the advertisement	0.693	.183	27.69	<.001
3	Attitude toward AI	Perceived credibility	0.392	.088	12.01	<.001
4	Attitude toward AI	Purchase intention	0.511	.127	18.00	<.001
5	Attitude toward AI	Perceived transparency	0.299	.047	6.09	.015

*Note.* All regression models are based on a sample of n = 126.

## Appendix D: Homogeneity of Variances Checks

For all hypotheses and the subquestion, the assumption of homogeneity of variance was checked using Levene's test. The results of these tests were all non-significant, as can be seen below.

**Table 5**

*Levene's Homogeneity of Variances Test Results H1 – H3*

Hypothesis	F statistic (1, 124)	p-value	Homogeneity of variances
H1	.01	.914	Yes
H2	.83	.365	Yes
H3	2.19	.141	Yes

*Note.* Levene's Homogeneity of Variances Test Results H1–H3.

**Table 6**

*Levene's Homogeneity of Variances Test Results Subquestion*

Subquestion	F statistic (1, 124)	p-value	Homogeneity of Variances
Subquestion	.01	.909	Yes

*Note.* Levene's Homogeneity of Variances Test Results Subquestion.

**Table 7**

*Levene's Homogeneity of Variances Test Results H4 - H6*

Hypothesis	F statistic (1, 124)	p-value	Homogeneity of Variances
H4	.25	.620	Yes
H5	.00	.990	Yes
H6	.02	.877	Yes

*Note.* Levene's Homogeneity of Variances Test Results H4 - H6

## Appendix E: Normality Checks

For all hypotheses and the subquestion, the assumption of homogeneity of variance was checked using Levene's test. The results of these tests were all non-significant, as can be seen below.

**Table 8**

*Shapiro–Wilk Normality Test Results H1 – H3*

Hypothesis	W(No Label)	p-value (No Label)	W (Label)	p-value (Label)	Data Normality
H1	.972	.367	.972	.068	Yes
H2	.953	.080	.966	.027	No
H3	.912	.003	.963	.018	No

*Note.* Shapiro–Wilk Normality Test Results H1–H3.

**Table 9**

*Shapiro–Wilk Normality Test Results Subquestion*

Hypothesis	W(No Label)	p-value (No Label)	W (Label)	p-value (Label)	Data Normality
Subquestion	.984	.794	.976	.131	Yes

*Note.* Shapiro–Wilk Normality Test Results Subquestion.

**Table 10**

*Shapiro–Wilk Normality Test Results H4 – H6*

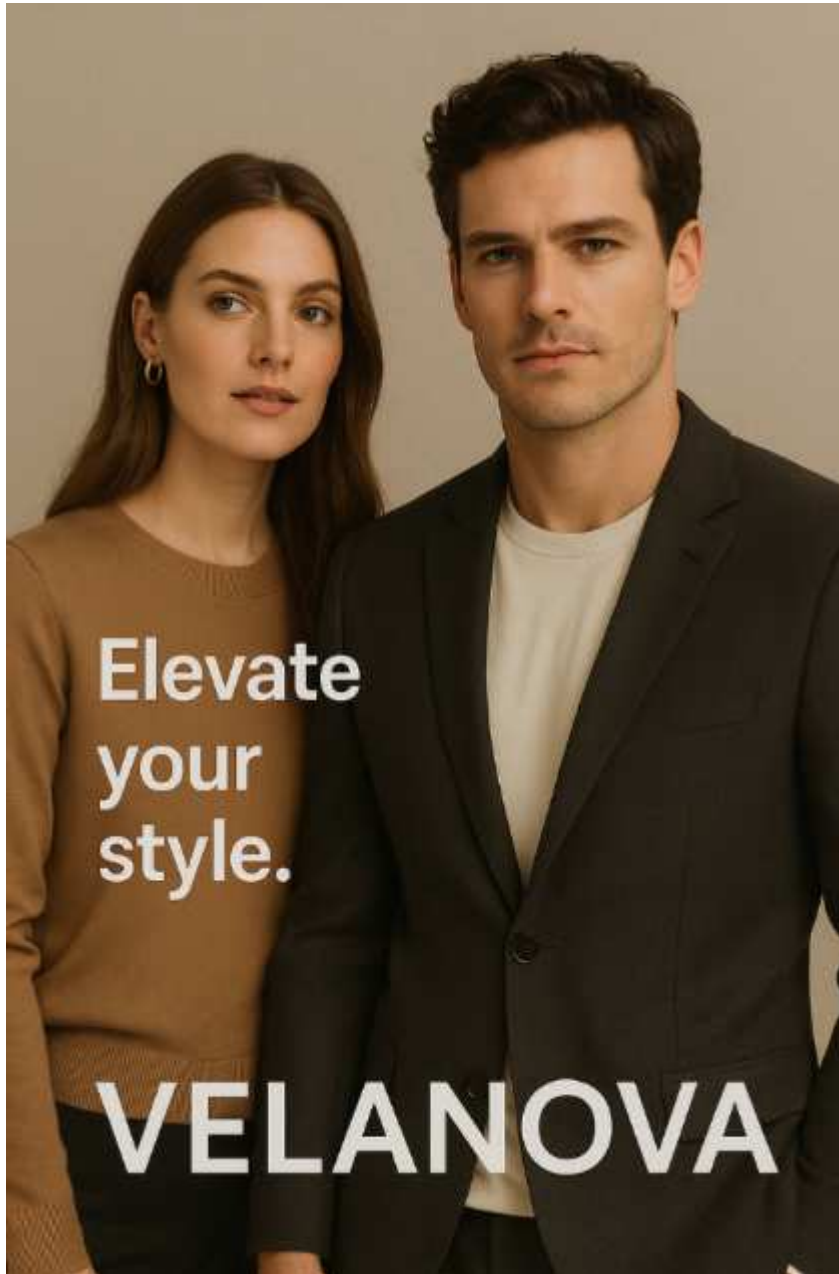
Hypothesis	W(Label Brought)	p-value (Label Brought)	W (Label CreBro)	p-value (Label CreBro)	Data Normality
H4	.975	.496	.956	.092	Yes
H5	.950	.076	.977	.544	Yes
H6	.956	.118	.941	.028	No

*Note.* Shapiro–Wilk Normality Test Results H4 – H6.

Appendix F: Stimuli

**Figure 2**

*Stimuli Clothing & Fashion No Label*



*Figure 2. Stimuli Clothing & Fashion No Label*



**Figure 3**

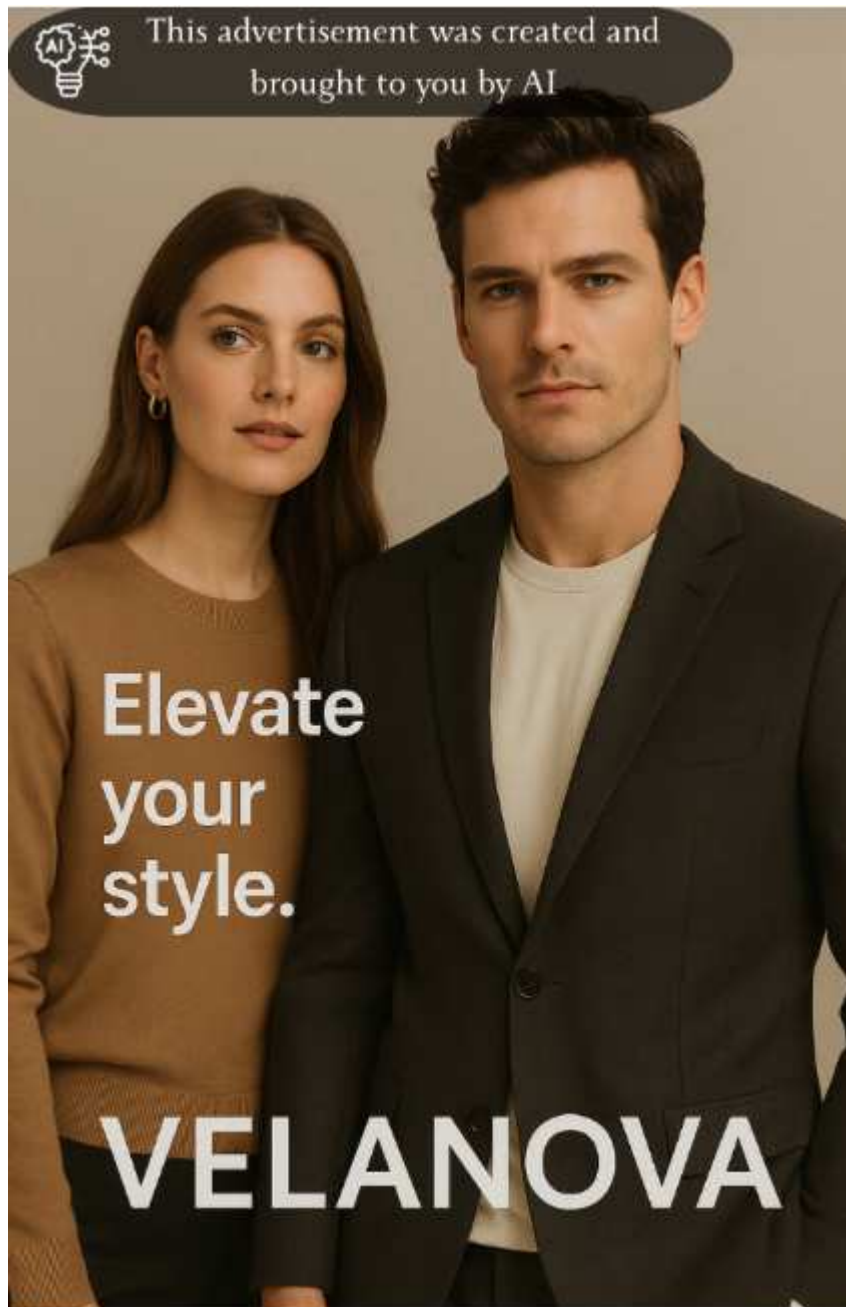
*Stimuli Clothing & Fashion Label Brought*



*Figure 3. Stimuli Clothing & Fashion Label Brought*

**Figure 4**

*Stimuli Clothing & Fashion Label Created and Brought*



*Figure 4. Stimuli Clothing & Fashion Label Created and Brought*

**Figure 5**

*Stimuli Electronics & Technology No Label*



*Figure 5. Stimuli Electronics & Technology No Label*

**Figure 6**

*Stimuli Electronics & Technology Label Brought*



*Figure 6. Stimuli Electronics & Technology Label Brought*

**Figure 7**

*Stimuli Electronics & Technology Label Created and Brought*



*Figure 7. Stimuli Electronics & Technology Label Created and Brought*

**Figure 8**

*Stimuli Food & Beverages No Label*



*Figure 8. Stimuli Food & Beverages No Label*

**Figure 9**

*Stimuli Food & Beverages Label Brought*



*Figure 9. Stimuli Food & Beverages Label Brought*



**Figure 10**

*Stimuli Food & Beverages Label Created and Brought*



*Figure 10. Stimuli Food & Beverages Label Created and Brought*



**Figure 11**

*Stimuli Health & Beauty No Label*



*Figure 11. Stimuli Health & Beauty No Label*

**Figure 12**

*Stimuli Health & Beauty Label Brought*



*Figure 12. Stimuli Health & Beauty Label Brought*

**Figure 13**

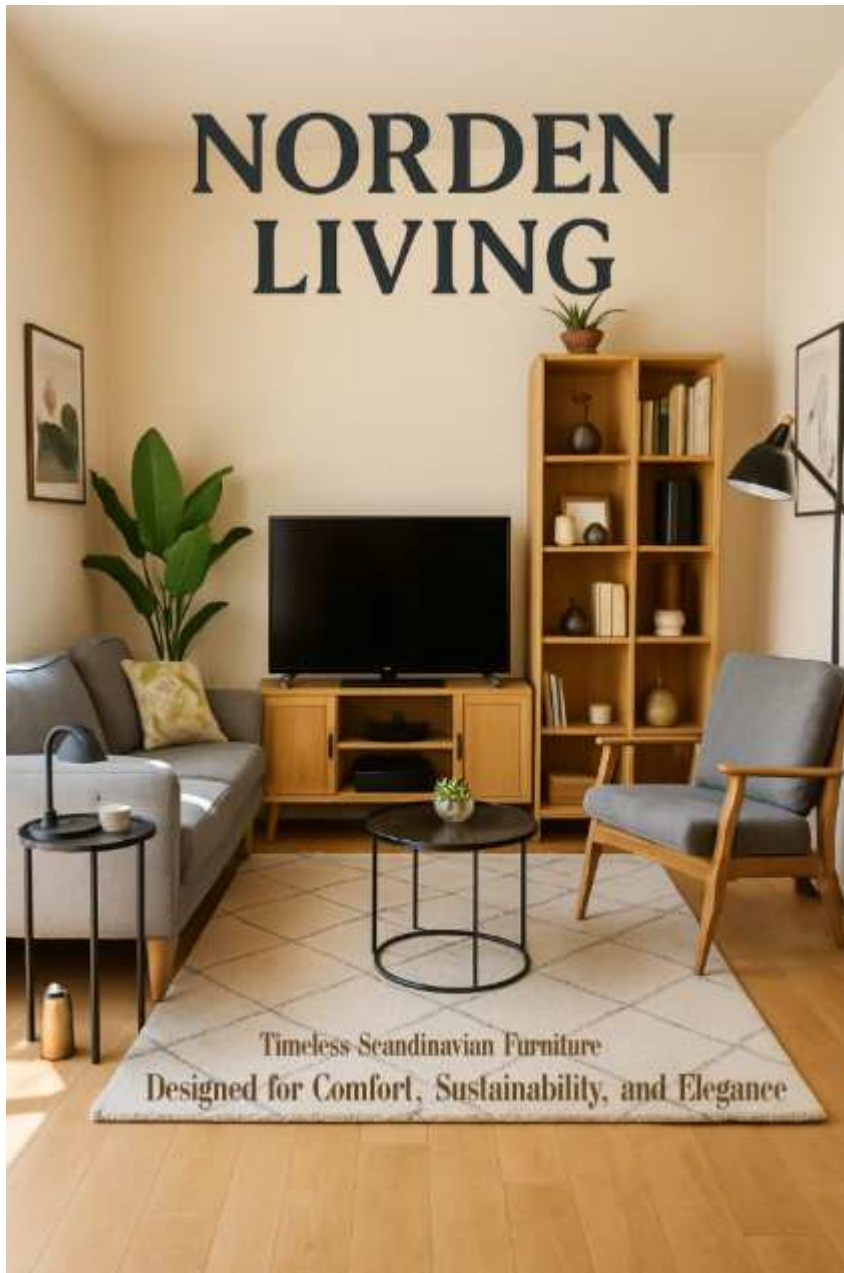
*Stimuli Health & Beauty Label Created and Brought*



*Figure 13. Stimuli Health & Beauty Label Created and Brought*

**Figure 14**

*Stimuli Home & Furniture No Label*



*Figure 14. Stimuli Home & Furniture No Label*



**Figure 15**

*Stimuli Home & Furniture Label Brought*



*Figure 15. Stimuli Home & Furniture Label Brought*

**Figure 16**

*Stimuli Home & Furniture Label Created and Brought*



*Figure 16. Stimuli Home & Furniture Label Created and Brought*

## Appendix G: Survey Scales

**Table 11**

*Attitude Toward the Advertisement and Purchase Intentions*

Number	Item
1	I am likely to purchase this product.
2	I would consider buying this product on my next shopping trip.
3	I will recommend this product to others.
4	I will definitely buy this product.
5	I can see myself using this product.
6	I find this advertisement appealing.
7	This advertisement grabs my attention.
8	This advertisement is persuasive.
9	This advertisement gives me a good feeling.

*Note.* This scale is an adaptation from the Attitude Toward the Advertisement scale (Spears & Singh, 2004).

**Table 12**

*Perceived Credibility of the Advertisement*

Number	Item
1	This advertisement seems credible.
2	The claims made in this advertisement are truthful.
3	The content of the advertisement is presented objectively.
4	I trust the information provided in this advertisement.
5	This advertisement appears reliable and accurate.

*Note.* This scale is an adaptation from the Advertisement Involvement Scale (Zaichkowsky, 1985).

**Table 13***Perceived Transparency of the Advertisement*

Number	Item
1	The advertisement provides clear information
2	The advertisement explains fully how it was created
3	I can see evidence of how this advertisement was personalized or distributed
4	This advertisement actively shares information with me
5	It is clear why this advertisement appeared for me at this time

*Note.* This scale is an adaptation from the Perceived Brand Transparency scale (Montecchi et al., 2024).

**Table 14***Attitude Toward AI*

Number	Item
1	AI technology is generally beneficial to society
2	I think that the risks associated with AI systems outweigh their benefits
3	I feel comfortable knowing that AI had a role in creating and/or selecting this advertisement
4	I trust AI to make fair and accurate decisions
5	I understand enough about AI to judge its results accurately

*Note.* Scale 4: Attitude Toward AI.