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Highlights

- AI-designed souvenirs reflect concerns about authenticity in tourism products.
- Authenticity explains the impacts of AI-designed souvenirs on purchase intention.
- Verification cues mitigate tourists' skepticism towards AI-designed products.
- Time scarcity cues alleviate the negative outcomes of AI-designed souvenirs.

Enhancing the authenticity of AI-designed souvenirs

Abstract: As AI continues to play a growing role in souvenir design, concerns about the authenticity of AI-designed souvenirs remain a challenge in the hospitality and tourism industry. This research investigates the impact of AI-designed souvenirs, particularly focusing on art-infused ones, on the perceived authenticity of souvenirs and purchase intention. Across two preliminary and four experimental studies, the findings demonstrate that AI-designed souvenirs are perceived as less authentic and desirable than their human-designed ones. However, strategic interventions, including verification and time scarcity cues, can enhance perceived authenticity and consumer' willingness to purchase AI-designed souvenirs. This research contributes to the understanding of authenticity in AI-designed products and offers strategies to mitigate consumer' skepticism of AI-designed products in the hospitality and tourism context.

Keywords: Artificial intelligence (AI), AI-designed souvenirs, authenticity, art-infusion effect

1. INTRODUCTION

Purchasing souvenirs has been a long-standing tradition in hospitality & tourism (H&T). Souvenirs are deeply connected to the cultural and emotional aspects of travel, capturing the essence of a place and evoking enduring memories (Su et al., 2024). Moreover, souvenir shopping plays a crucial role in supporting local economies (Lv et al., 2024). For example, the souvenir market has grown since 2018, with an average annual growth rate of around 4.7%, and is projected to reach 209 billion U.S. dollars by 2032 (Gupta, 2025). By sustaining livelihoods and promoting traditional craftsmanship, souvenirs help to preserve cultural heritage and maintain authenticity at tourism destinations

Recognizing the symbolic significance of souvenirs, H&T organizations have endeavored to enhance the aesthetic appeal and cultural value of their products (Anastasiadou & Vettese, 2021). Notably, the art-infusion effect demonstrates that integrating visual art into products enhances their authenticity in consumers' perception (Hagtvedt & Patrick, 2008; Seo et al., 2022). This effect is especially relevant in H&T, where souvenirs function as reminiscence of travel memories as tangible representations of a destination's identity and heritage. Art-infused designs thus cater to the increasing demand for original items, attracting consumers who value authenticity and seek deeper personal connections through their purchases (Gupta et al., 2024; Naletelich & Paswan, 2018).

With the growing demand for artistic innovation in design, artificial intelligence (AI) has been utilized in the process of designing art-infused souvenirs, from replication and augmentation, and even to creation of original artworks. AI, defined as "the use of any kind of algorithm or statistical model to perform perceptual, cognitive, and conversational functions typical of the human mind, such as visual and speech recognition, reasoning, and problem solving" (Longoni et al., 2019, p. 5), is becoming integral to the design and development of different types of products, such as artifacts and gifts (Lee & Kim 2024; Xu & Mehta, 2022). For example, fashion brands like Revolve and Lululemon use AI to inspire designers, while Nike employs AI to personalize sports gear by extracting consumer opinions online (Bain, 2023; Goyal & Goodman, 2024). Consequently, businesses across industries have embraced AI to enhance aesthetics, drive innovation, and expand creative expression (Booth et al., 2024).

Despite the potential advantages of utilizing AI in souvenir design, AI-designed souvenirs, even those incorporating art infusion, may be perceived as lacking the cultural depth

and authenticity of items. Traditionally, souvenirs designed by humans, who possess the capacity for emotional functions such as sensing and feeling (Gray et al., 2007), are believed to embody local traditions and narratives, offering consumers a meaningful connection to a destination's heritage (Lv et al., 2024; Su et al., 2024). We thus argue that AI-designed souvenirs can diminish the perceived authenticity due to the lay beliefs about AI's inability to experience emotions. While the art-infusion effect has effectively enhanced authenticity in various merchandise, such as eyeglasses (Naletelich & Paswan, 2018), t-shirts (Park et al., 2023), and handbags (Logkizidou et al., 2019), this research suggests that AI-designed souvenirs, even those with art infusion, reduce perceptions of authenticity and purchase intention. Considering the vital role of perceived authenticity in souvenirs, it is essential to explore whether AI-designed souvenirs can fully capture the distinctive cultural essence of their origin.

Drawing on the theory of mind (Gray et al., 2007) and algorithm aversion (Dietvorst et al., 2015), this research conducted two preliminary studies and four main experiments to examine the impact of souvenir designers (AI vs. human) on perceived authenticity and purchase intention, particularly focusing on art-infused souvenirs, and why AI-designed souvenirs led to negative consumer evaluations. The findings demonstrated that AI-designed souvenirs are often viewed as lacking the originality inherent in hand-designed artifacts, leading consumers to perceive such products as inauthentic. Finally, two moderators (i.e., verification and time scarcity cues) were tested to mitigate the negative effects of AI-designed souvenirs infused with artistic elements.

The findings of this research expand the understanding of individuals' skepticism toward technological solutions (i.e., AI-designed souvenirs) by examining their impact on consumer perceptions. The findings of this research also help to manage AI integration in the design process by addressing authenticity concerns and implementing strategies such as verification and time scarcity to maintain the cultural significance of souvenirs. Ultimately, the research contributes to the ongoing discourse on balancing technological innovation with cultural preservation, ensuring AI enhances rather than compromises souvenir authenticity in H&T.

2. LITERATURE REVIEW

2.1. The art-infusion effect

The art-infusion effect refers to "a positive influence of art on consumers' perception and evaluation of associated products" (Gupta et al., 2024, p. 472). Since its introduction by Hagtvedt and Patrick (2008), it has become a pivotal concept in consumer research, demonstrating significant influence across various product categories (Seo et al., 2022). While initial studies primarily explored how art enhances luxury perceptions, subsequent research has expanded its scope to encompass a wide range of applications, including commercial products (Kim et al., 2020) and vintage items (Schibik et al., 2024). The art-infusion effect has been shown to drive several benefits, such as heightened product evaluations, increased purchase intention, and stronger brand loyalty, reinforcing its commercial significance across diverse market contexts (Peluso et al., 2017; Quach et al., 2022).

Although the art-infusion effect has been widely investigated in consumer markets, its potential in H&T research remains largely unexplored. Yet, in the context of H&T, where authenticity plays a crucial role in shaping consumer perceptions and experiences at tourism destinations (Skandalis et al., 2024), the art-infusion effect holds significant promise. By integrating artistic elements that showcase cultural heritage, originality, and local craftsmanship, souvenirs can go beyond mere commercial products to become cultural artifacts, capture a

place's essence, and create lasting H&T experiences (Anastasiadou & Vettese, 2021; Lei et al., 2020). Through this artistic integration, souvenirs can be tangible representations of a destination's cultural identity, enriching the consumer experience and fostering a deeper appreciation for their cultural and historical significance (Soukhathammavong & Park, 2019; Walters et al., 2021).

2.3. AI-designed souvenirs: Insights from the theory of mind and algorithm aversion

Despite AI's capability to design art-infused souvenirs as humans do, this research posits that consumers may perceive AI-designed souvenirs less favorably than those designed by humans. The theory of mind, rooted in decades of cognitive psychology research (Gray et al., 2007), explains why individuals might distrust AI-designed souvenirs in representing a destination's identity and heritage. Based on the theory of mind, a perceiver implicitly evaluates the extent to which an entity has a mind and then determines the entity's state of mind (Srinivasan & Sarial-Abi, 2021). Humans typically conceptualize the mind in two distinct dimensions: agency and experience. Agency involves the ability to plan and act, while experience relates to the capacity to feel and sense (Gray & Wegner, 2010). Humans are typically perceived as having high levels of both agency and experience, while non-human entities, such as animals, gadgets, or software, are viewed as possessing differing degrees of each (Kim et al., 2023). People perceive AI as incapable of fully experiencing emotions, so machines are rated significantly lower than humans in subjective experiences such as emotions and consciousness (Srinivasan & Sarial-Abi, 2021). As a result, prior studies have shown that AI is perceived to have moderate levels of agency but relatively low levels of experience (Gray & Wegner, 2010; Sullivan et al., 2022).

Due to AI's perceived lack of experience, AI-designed souvenirs may challenge conventional notions of the authenticity of souvenirs, which is a critical factor influencing consumer perception and purchasing behavior in H&T. Authenticity is typically defined as genuine and original, in contrast to being imitable (Canavan & McCamley, 2021; Moore et al., 2021). Souvenirs are deeply valued for their connection to local craftsmanship, originality, and cultural heritage, serving as tangible symbols of unique traditions and personal travel experiences (Su et al., 2024). Unlike human designers, who infuse their work with personal experiences, cultural heritage, and emotional expression, AI is often seen as relying solely on pattern recognition and algorithmic processes, lacking the cultural and historical depth that defines handmade artifacts (Zhang et al., 2024). This perceived detachment from authentic craftsmanship can lead to skepticism, making AI-designed souvenirs feel inauthentic and less culturally meaningful.

Our argument is further supported by the concept of algorithm aversion (Clegg et al., 2023; Dietvorst et al., 2015), which suggests that individuals often resist technological solutions, even when they demonstrate superior performance compared to human alternatives. Such resistance arises from skepticism about AI's ability to replicate the intuitive and culturally embedded qualities intrinsic to human creativity (Longoni & Cian, 2022). Recent research has shown that people tend to devalue art labeled as AI-created, even when they claim it is indistinguishable from art made by humans (Horton et al., 2023; Ragot et al., 2020). Drawing from their firsthand experiences of a destination, human designers bring novelty and artistic intuition to their designs (Lv et al., 2024). In contrast, AI-designed souvenirs, though capable of designing artistic visual patterns and aesthetics, often fail to fully capture the deeper symbolism that makes these items meaningful and desirable. In other words, persistent biases against machine-generated creativity (Clegg et al., 2023; Longoni & Cian, 2022), coupled with doubts

about AI's ability to capture the intangible essence of cultural heritage, may limit the commercial viability of AI-driven souvenir design (Horton et al., 2023; Magni et al., 2024). Consequently, while AI-designed souvenirs can visually replicate human-designed counterparts by incorporating artistic elements, consumers believe that AI-designed souvenirs may still fall short in conveying the deep-rooted cultural narratives that make human-designed souvenirs desirable and authentic. Following this reasoning, we thus propose the following hypotheses:

H1. Consumers are less inclined to purchase art-infused souvenirs designed by AI (vs. humans).

H2. Perceived authenticity mediates the relationship between the designer of art-infused souvenirs and purchase intention.

2.3. Moderating role of verification cues

Consumers tend to associate authenticity with products that embody local communities' craftsmanship, cultural knowledge, and artistic expressions (Anastasiadou & Vettese, 2021). However, the involvement of AI in the design process often triggers skepticism (Campbell et al., 2022), as even AI-designed art-infused souvenirs may be perceived as lacking the originality and cultural depth that traditionally define heritage artifacts. This concern stems from the belief that AI-designed products, while efficient and sometimes innovative, may not fully capture the nuanced storytelling, emotional resonance, and artisanal craftsmanship that contribute to the authenticity of culturally significant creations (Xu & Mehta, 2022).

To mitigate the negative impact of AI-designed souvenirs on authenticity perceptions of souvenirs, this research incorporates verification cues (i.e., endorsements from cultural organizations) as strategic trust-enhancing mechanisms (Darnall et al., 2018). In the context of H&T, verification cues can serve as authoritative validations, reassuring consumers that AI-designed souvenirs remain rooted in cultural heritage despite their technology-based designs. For example, focusing on AI-powered retail stores, Pillai et al. (2020) identified security issues arising from the absence of human staff as a significant challenge in attracting consumers. They emphasized the importance of addressing these concerns by providing relevant information cues, such as certificates of data security systems or verification of data protection systems. Accordingly, through explicitly affirming AI-designed products' artistic and cultural significance, verification cues can alleviate authenticity concerns, influence consumer perceptions, and promote greater acceptance of AI-driven design in cultural craftsmanship. We thus propose the following hypothesis:

H3. The adverse effect of AI designers on purchase intention is likely to be mitigated when a verification cue is present (vs. absence).

2.4. Moderating role of time scarcity cues

Tourism-related products and experiences under time-based scarcity (i.e., available only for a limited time period) enhance their exclusivity and drive a heightened sense of urgency among travelers (Liu et al., 2021). This effect is particularly evident in seasonal items, such as Japan's cherry blossom-themed sweets, Germany's Oktoberfest beer steins, and Europe's Christmas market handicrafts, where limited availability drives strong demand (Huang et al., 2020). The temporary nature of these products attracts heightened interest and fosters competition among consumers eager to acquire them before they disappear, strengthening their cultural significance

and originality (Barton et al., 2022). As a result, time scarcity transforms these products into highly desirable souvenirs, enhancing their perceived authenticity and making them integral to the consumer experience (Li et al., 2021).

By framing AI-designed souvenirs as exclusive, time-sensitive souvenirs tied to specific events or travel seasons, such as an AI-designed artwork available only during a particular season (e.g., winter), consumers may shift their focus from skepticism about AI involvement in design to appreciating the authentic nature of the item. For example, Choi and Lee (2024) demonstrated that consumers perceive AI-designed clothing less negatively when the product becomes less available for purchase. Although a significant benefit of using AI is its capacity to generate a large volume of souvenir designs in mere seconds, time scarcity can redirect consumers' attention to a product's exclusivity, likely enhancing its authenticity. Accordingly, effectively utilizing time-based scarcity can strengthen perceptions of the authenticity of souvenirs and cultural relevance, encouraging consumers to see AI-designed souvenirs as meaningful mementos that encapsulate a specific moment in their journey. We thus propose the following hypothesis:

H4. The negative effect of AI designers on purchase intention is likely to be attenuated when a time scarcity cue is present (vs. absence).

3. EMPIRICAL OVERVIEW

This research consisted of two preliminary and four main experimental studies that explored how AI-designed souvenirs influenced consumer purchase intention, with perceived authenticity as a key mediator and two contextual factors (verification and time scarcity cues) as moderators (see Table 1 and Figure 1). Preliminary studies were conducted to examine consumers' perceptions of non-art-infused souvenirs (Preliminary 1a) and to explore lay beliefs regarding AI's perceived capability to experience emotions (Preliminary 1b). Based on initial evidence regarding the impact of art infusion in souvenir design and AI's perceived low levels of experiential capability, we conducted four experimental studies. Study 1 investigated whether AI-designed souvenirs reduced perceived authenticity and purchase intention, using a Taj Mahal-themed mug, compared to human-designed ones. Study 2 ruled out alternative explanations (i.e., perceived uniqueness and perceived functional value) using a New York-themed keyring. In Study 3, using a generic tourism-themed mug, a verification cue (present vs. absent) was introduced as a moderator to mitigate the negative impact of AI-designed souvenirs on perceived authenticity and purchase intention. Study 4 examined the moderating role of time scarcity cues (present vs. absent) using a winter-themed magnet to attenuate the negative impact of AI-designed souvenirs on consumer evaluations.

Table 1. Research overview

Study	Purpose	Study design	Participants	Context	Findings
Preliminary Study 1a	Evaluate consumers' perception of the non-art-infused souvenirs	A single-factor (souvenir designer: AI vs. human) between-subjects experiment	187 participants (M _{age} = 34, male = 55%)	Taj Mahal-themed mug	In the context of non-art-infused souvenirs, both conditions exhibit reduced purchase intention and perceived authenticity.
Preliminary Study 1b	Explore lay beliefs about AI's perceived ability to experience emotions	A one-sample t-test	87 participants (M _{age} = 32, female = 51%)	General context	Participants viewed AI as lacking the capacity to experience emotions.
Study 1	Examine the effect of AI-designed souvenirs on purchase intention, mediated by perceived authenticity	A single-factor (souvenir designer: AI vs. human) between-subjects experiment	198 participants (M _{age} = 32, male = 51%)	Taj Mahal-themed mug	AI-designed souvenirs are less likely to lead to purchase intention (H1 supported). Also, this effect is mediated by perceived authenticity (H2 supported).
Study 2	Investigate the main and mediation effects and further rule out alternative explanations (i.e., perceived uniqueness and perceived functional value)	A single-factor (souvenir designer: AI vs. human) between-subjects experiment	194 participants (M _{age} = 32, female = 51%)	New York-theme keyring	Consumers' purchase intention is higher with AI-designed (vs. human-designed) souvenirs (H1 supported), mediated by perceived authenticity (H2 supported).
Study 3	Investigate the moderating role of verification cues in the relationship between souvenir designers and purchase intention	A 2 (souvenir designer: AI vs. human) × 2 (verification cue: present vs. absence) between-subjects experiment	393 participants (M _{age} = 35, female = 50%)	Non-specific tourism destination-themed mug	The negative perception of AI-designed souvenirs is diminished when a verification cue is present compared to when it is absent (H3 supported).

Study 4	Examine the moderating role of time scarcity cues in the relationship between souvenir designers and purchase intention	A 2 (souvenir designer: AI vs. human) × 2 (time scarcity cue: present vs. absence) between-subjects experiment	373 participants (M _{age} = 33, female = 61%)	Winter-themed magnet	The negative perception of AI-designed souvenirs is attenuated when a time scarcity cue is present compared to when it is absent (H4 supported).
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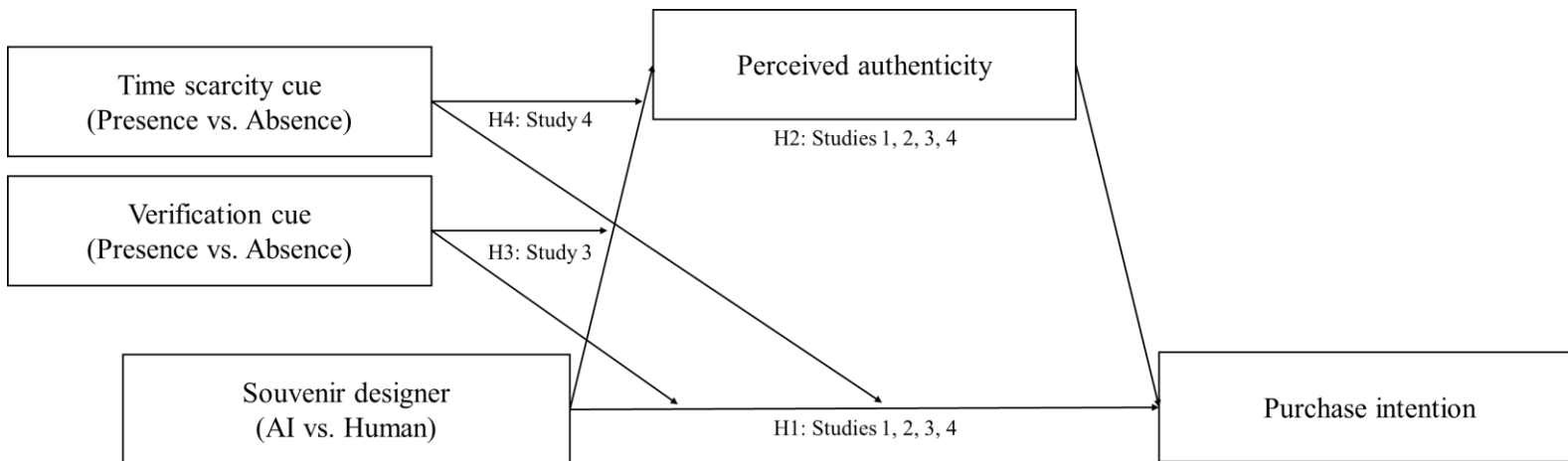


Figure 1. Conceptual framework

4. PRELIMINARY STUDIES

4.1. Preliminary Study 1a: Design and results

Preliminary Study 1a was to evaluate consumers' perception of non-art-infused souvenirs. Given the importance of the art-infusion effect (Hagtvedt & Patrick, 2008; Seo et al., 2022), we expected that souvenirs lacking artistic infusion would be perceived as lacking authenticity and purchase intention, regardless of whether AI or humans designed them.

We conducted a single-factor (non-art-infused souvenir designer: AI vs. human) between-subjects experiment. A total of 187 participants were recruited from the Prolific consumer panel ($M_{\text{age}} = 34$, male = 55%). The participants were randomly assigned to one of the two conditions. In particular, the participants were asked to imagine visiting the Taj Mahal in India, and as they are interested in the Taj Mahal-themed mugs, the owner of the souvenir shop recommends a mug designed by AI (vs. human) (see Web Appendix A for details; ChatGPT-4o, a generative AI tool, entirely created the mug).

The findings indicated that the participants perceived the mug as less artistic ($M = 2.29$, $SD = .74$ vs. a scale midpoint of 4; $M = 2.29$, $t(186) = -31.53$, $p < .001$). A one-way ANOVA showed no significant effect of souvenir designers on purchase intention ($M_{\text{AI}} = 3.46$, $SD = 1.94$ vs. $M_{\text{Human}} = 3.44$, $SD = 1.72$; $F(1, 185) = .01$, $p = .94$) and perceived authenticity ($M_{\text{AI}} = 3.37$, $SD = 1.69$ vs. $M_{\text{Human}} = 3.64$, $SD = 1.33$; $F(1, 185) = 1.50$, $p = .22$). Both conditions showed lower purchase intention ($M = 3.44$, $SD = 1.82$ vs. a scale midpoint of 4 ($t(185) = -4.12$, $p < .001$)) and perceived authenticity ($M = 3.50$, $SD = 1.83$ vs. a scale midpoint of 4 ($t(185) = -4.46$, $p < .001$)), underscoring the importance of integrating visual art into products.

4.2. Preliminary Study 1b: Design and results

Preliminary Study 1b was conducted to explore lay beliefs about AI's perceived ability to experience emotions. Based on our reasoning from the theory of mind (Gray et al., 2007) and algorithm aversion (Clegg et al., 2023; Dietvorst et al., 2015), we anticipated that consumers would likely view AI as lacking experience. This perception serves as a fundamental reason why AI-designed souvenirs may still fall short in conveying profound cultural depth and authenticity, even though they can visually replicate human-designed counterparts by incorporating artistic elements.

A total of 87 participants from the Prolific consumer panel ($M_{\text{age}} = 32$, female = 51%) were recruited to determine how well AI can perceive and interpret various situations emotionally. Utilizing two items derived from prior research, our results highlighted AI's perceived inability to experience emotions. One item stated, "*AI lacks the ability to experience emotions as humans do,*" resulting in a mean of 5.13 against a scale midpoint of 4 ($t(86) = 6.66$, $p < .001$). Another item, "*AI experiences emotions in the way humans do,*" showed a mean of 2.33 compared to the scale midpoint of 4 ($t(86) = -16.59$, $p < .001$).

4.3. Discussion

The results of Preliminary Studies 1a and 1b provide valuable insights into the effects of art infusion and consumer perceptions of AI's ability to experience emotions. These studies collectively underscore the necessity of incorporating artistic elements into souvenir design to enhance consumer appeal while addressing widespread skepticism about AI's emotional capabilities. As a result, the subsequent main studies focus on art-infused souvenirs to explore whether and how consumers perceive AI-designed souvenirs.

5. STUDY 1

5.1. Design and procedure

The purpose of Study 1 was to examine the main and the mediation effects. We conducted a single-factor (souvenir designer: AI vs. human) between-subjects experiment. One hundred and ninety-eight participants were recruited from the Prolific consumer panel ($M_{\text{age}} = 32$, male = 51%). The participants were randomly assigned to one of the two conditions, which were consistent with those in Preliminary Study 1a (see Web Appendix B for details; ChatGPT-4o, a generative AI tool, entirely created the mug with art-infusion). After the scenario, the participants reported their purchase intention ($\alpha = 0.91$; adapted from Lude & Prügl, 2018) and perceived authenticity ($\alpha = 0.93$; adapted from Wang et al., 2023) (see Web Appendix C for details). Manipulation check and realism check items were included in the next section, followed by questions asking the participants' demographic information.

5.2. Results

5.2.1. Manipulation check

We evaluated the effectiveness of the souvenir designer manipulation (“who designed the mug?”). The participants indicated that the souvenir artistically depicted the destination in both conditions surpassing the scale midpoint of 4 ($M = 4.90$, $t = 6.92$, $p < .001$). The participants in the AI condition were more likely to agree that the mug was designed by AI rather than humans ($M_{\text{AI}} = 6.28$, $SD = 1.13$ vs. $M_{\text{Human}} = 3.32$, $SD = 1.90$, $p < .001$). Similarly, the participants in the human condition were more inclined to agree that the mug was designed by humans rather than AI ($M_{\text{AI}} = 2.18$, $SD = 1.74$ vs. $M_{\text{Human}} = 5.21$, $SD = 1.86$, $p < .001$). Across both conditions, the participants found the scenario realistic (compared with the scale midpoint of 4; $M = 5.35$, $t(197) = 13.06$, $p < .001$) and the mug artistic (compared with the scale midpoint of 4; $M = 4.90$, $t(197) = 6.92$, $p < .001$). Thus, the manipulation in Study 1 was deemed successful.

5.2.2. Purchase Intention

A one-way ANOVA revealed a significant effect of souvenir designers on purchase intention ($F(1, 196) = 7.98$, $p < .01$, $\eta^2 = .10$). As expected, the participants in the AI condition showed a lower purchase intention than those in the AI condition ($M_{\text{AI}} = 4.30$, $SD = 1.93$ vs. $M = 5.01$, $SD = 1.60$, $p < .01$).

5.2.3. Perceived Authenticity

A one-way ANOVA revealed a significant effect of souvenir designers on perceived authenticity ($F(1, 196) = 12.45$, $p < .001$, $\eta^2 = .10$). The participants in the human condition perceived a higher degree of authenticity than those in the AI condition ($M_{\text{AI}} = 3.94$, $SD = 1.91$ vs. $M_{\text{Human}} = 4.80$, $SD = 1.52$, $p < .001$).

5.2.4. Mediation Analysis

To test the mediating role of perceived authenticity, we used PROCESS Model 4 with 5,000 bootstrap samples (Hayes, 2017). The analysis revealed that perceived authenticity significantly affected purchase intention ($\beta = .76$, $t = 15.72$, $p < .001$). Furthermore, the influence of AI-designed souvenirs on purchase intention is mediated by perceived authenticity ($a \times b = -.65$, 95% CI [-1.07, -.27]), which supports H2.

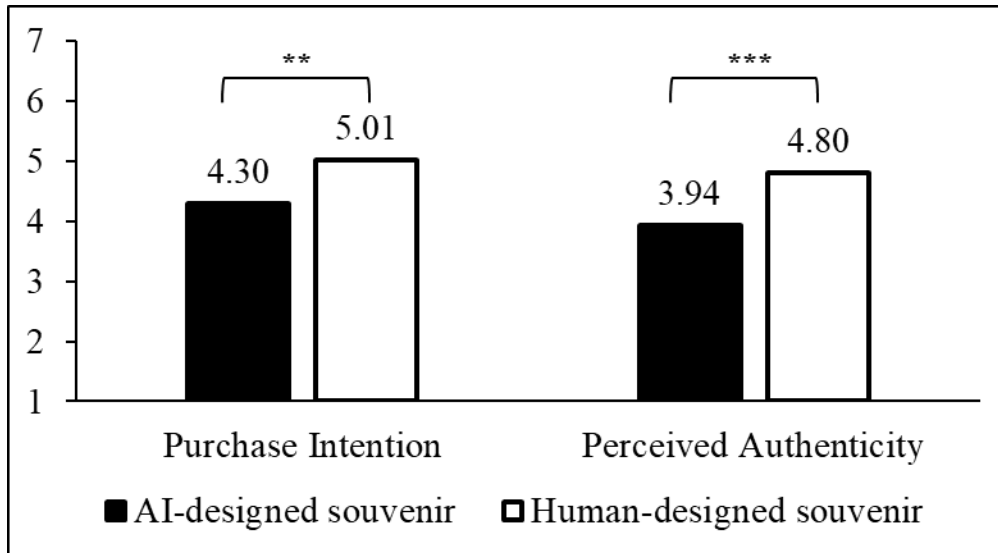


Figure 2. Results of Study 1

5.2.5. Discussion

Study 1 found that AI-designed souvenirs were perceived as less authentic than those designed by human designers, leading to decreased consumer purchase intention. The Taj Mahal, used as the context for Study 1 due to its cultural and artistic significance (National Geography, 2021), may have heightened consumer sensitivity to authenticity issues. By exploring a different type of souvenir in a distinct cultural context, Study 2 evaluated whether the negative effects of AI-designed souvenirs on perceived authenticity and purchase intention remained consistent, further ruling out alternative explanations (i.e., perceived uniqueness and perceived functional value; Fan et al., 2024; Kolbl et al., 2020).

6. STUDY 2

6.1. Design and procedure

Consistent with Study 1, we employed a single-factor (souvenir designer: AI vs. human) between-subjects experiment. A total of 194 participants were recruited from the Prolific consumer panel ($M_{age} = 32$, female = 51%). New York City was chosen as the study context as it is a more commercialized destination (World Economic Forum, 2024). Rather than a mug (Study 1), Study 2 chose a keyring, which is another popular souvenir (Hughes, 2024), to increase the generalizability of the findings (see Web Appendix D for complete stimuli; the keyring with art-infusion was completely created by ChatGPT-4o). The participants were asked to assess the same measurement items used in Study 1, including purchase intention ($\alpha = 0.90$) and perceived authenticity ($\alpha = 0.92$). Additionally, perceived uniqueness ($\alpha = 0.92$; adapted from Fan et al., 2024) and perceived functional value ($\alpha = 0.89$; adapted from Kolbl et al., 2020) were evaluated to rule out alternative explanations (refer to Web Appendix B for details).

6.2. Results

6.2.1. Manipulation check

Similar to the results of Study 2, the participants in the AI condition were more likely to agree that the mug was designed by AI rather than humans ($M_{AI} = 6.47$, $SD = 1.00$ vs. $M_{Human} = 3.72$, $SD = 2.23$, $p < .001$). Also, the participants in the human condition were more inclined to agree that the mug was designed by humans rather than AI ($M_{AI} = 1.96$, $SD = 1.48$ vs. $M_{Human} = 4.71$, $SD = 2.17$, $p < .001$). The souvenir was perceived as an art-infused representation of the destination in both conditions, surpassing the scale midpoint of 4 ($M = 5.04$, $t = 7.97$, $p < .001$). Across both conditions, the participants found the scenario realistic (compared to the scale midpoint of 4; $M = 5.24$, $t(193) = 11.27$, $p < .001$) and the keyring artistic (compared to the scale midpoint of 4; $M = 5.04$, $t(193) = 5.04$, $p < .001$). Thus, the manipulation in Study 2 was deemed successful.

6.2.2. Purchase Intention

A one-way ANOVA revealed a significant effect of souvenir designers on purchase intention ($F(1, 192) = 9.96$, $p < .01$, $\eta^2 = .05$). As expected, the participants in the human condition have a higher purchase intention than those in the AI condition ($M_{AI} = 3.51$, $SD = 1.95$ vs. $M_{Human} = 4.37$, $SD = 1.88$, $p < .01$).

6.2.3. Perceived Authenticity

A one-way ANOVA revealed a significant effect of souvenir designers on purchase intention ($F(1, 192) = 20.01$, $p < .001$, $\eta^2 = .10$). The results suggested that the perceived authenticity of the souvenir was higher when humans designed the souvenir than AI ($M_{AI} = 3.37$, $SD = 1.57$ vs. $M_{Human} = 4.40$, $SD = 1.62$, $p < .001$).

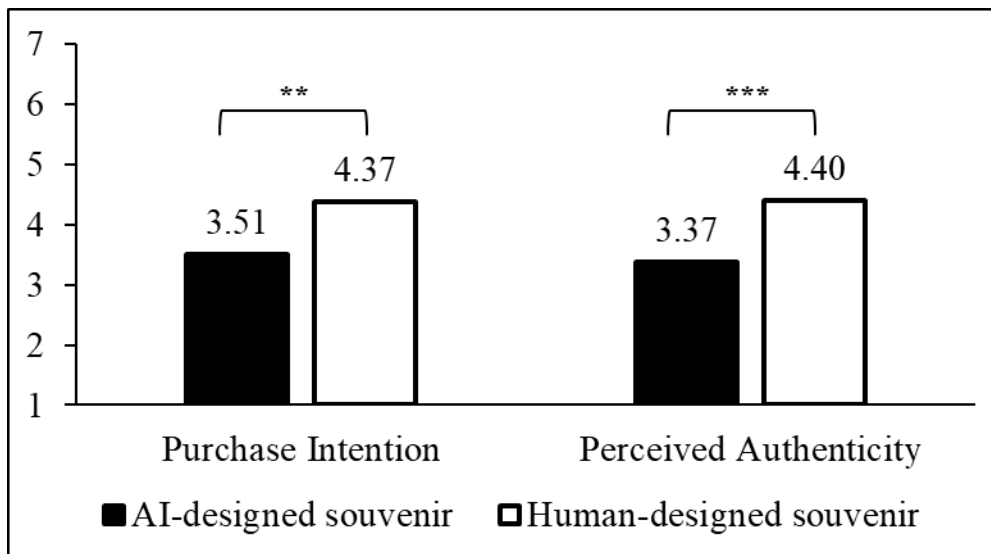


Figure 3. Results of Study 2

6.2.4. Mediation Analysis

A mediation analysis was conducted using PROCESS Model 4 with 5,000 bootstrap samples (Hayes, 2017). The analysis revealed that perceived authenticity significantly affected purchase intention ($\beta = .99, t = 21.42, p < .001$). Furthermore, the influence of AI-designed souvenirs on purchase intention is mediated by perceived authenticity ($a \times b = -1.02, 95\% \text{ CI}[-1.50, -.58]$), which supports H2.

6.2.5 Robustness check

To rule out alternative explanations, we investigated whether the potential factors, including perceived uniqueness (Fan et al., 2024) and perceived functional value (Kolbl et al., 2020), could influence the observed effect. A mediation analysis was performed using PROCESS Model 4 with 5,000 bootstrap samples (Hayes, 2017), indicating non-significant indirect effects of perceived uniqueness ($\beta = .08, 95\% \text{ CI}[-.09, .24]$) and perceived functional value ($\beta = .07, 95\% \text{ CI}[-.13, .27]$). The findings indicated that these factors did not account for the effect of souvenir designers on purchase intention, thereby successfully ruling out these alternative explanations.

6.2.6. Discussion

Despite these contextual differences against Study 1, Study 2 produced similar results, reinforcing the notion that AI-designed souvenirs were perceived as less authentic and, therefore, less desirable, regardless of the specific souvenir type (i.e., keyring) or destination representation (i.e., New York City). Our findings suggested that the relationship between authenticity and purchase intention was not confined to a single cultural or artistic context but reflected a broader skepticism toward AI-designed artifacts in H&T. Furthermore, Study 2 ruled out alternative explanations (i.e., perceived uniqueness and perceived functional value), demonstrating that consumers are less inclined to purchase art-infused souvenirs designed by AI compared to those designed by humans. This reluctance is not due to AI-designed souvenirs being perceived as less unique or having lower functional value but rather because they are viewed as less authentic.

7. STUDY 3

7.1. Methods

The purpose of Study 3 was to examine the moderating role of verification cues in the relationship between souvenir designers and perceived authenticity. We conducted a 2 (souvenir designer: AI vs. human) \times 2 (verification cue: absence vs. presence) between-subjects factorial design experiment. Three hundred ninety-three complete and usable responses were collected from the Prolific consumer panel ($M_{\text{age}} = 35, \text{ female} = 50\%$).

Different from Studies 1 and 2, Study 3 did not specify the destination itself to reduce potential confounding effects from the destination itself. The participants were asked to imagine a tourism destination they had never been. In the scenarios, they visit a souvenir shop at the destination and express their interest in mugs. The souvenir shop owner introduces a mug designed by AI (vs. human) to artistically represent the destination. An additional explanation about the store was given for those participants assigned to the verification cue (presence) condition. More specifically, the participants in the presence condition were informed that the fictitious endorser (i.e., Local Chambers of Commerce) recognized the store's status as a verified vendor of local souvenirs (Soukhathammavong & Park, 2019; Su et al., 2024; see Web Appendix E for details; the mug with art-infusion as well as the verification cue were completely

created by ChatGPT-4o). After the scenarios, the participants reported their purchase intention ($\alpha = 0.89$) and perceived authenticity ($\alpha = 0.92$), followed by manipulation, art-infusion effect, and realism check items. The survey ended with questions asking the participants' demographic information (see Web Appendix B for details).

7.2. Results

7.2.1. Manipulation check

A two-way ANOVA revealed that only the main effect of souvenir designers was significant ($F(1, 389) = 235.41, p < .001, \eta^2 = .38$). The participants in the AI condition were more likely to agree that the mug was designed by AI rather than humans ($M_{AI} = 6.36, SD = 1.15$ vs. $M_{Human} = 3.63, SD = 2.20, p < .001$). However, the main effect of verification cues ($F(1, 389) = .17, p = .68$) and the interaction effect ($F(1, 389) = .01, p = .94$) were not significant. Thus, the souvenir designer manipulation was considered successful. Similarly, a two-way ANOVA indicated that only the main effect of verification cues was significant ($F(1, 389) = 172.44, p < .001, \eta^2 = .12$). There was a significant difference between the absence and presence of verification cues ($M_{Absence} = 3.68, SD = 1.57$ vs. $M_{Presence} = 6.18, SD = 1.18, p < .001$). However, the main effect of souvenir designers ($F(1, 389) = 1.25, p = .27$) and the interaction effect ($F(1, 389) = .54, p = .46$) were not significant. Additionally, the participants reported that the souvenir artistically represented the destination across all conditions, surpassing the scale midpoint of 4 ($M = 5.66, t = 13.9, p < .001$). Thus, the verification cue manipulation was deemed successful.

7.2.2. Purchase Intention

We conducted a two-way ANOVA on purchase intention. The main effects of both souvenir designers ($M_{AI} = 4.13, SD = 2.15$ vs. $M_{Human} = 4.76, SD = 1.78, F(1, 389) = 10.62, p < .001, \eta^2 = .03$) and verification cues ($M_{Absence} = 4.14, SD = 2.07$ vs. $M_{Presence} = 4.74, SD = 1.88, F(1, 389) = 9.08, p < .01, \eta^2 = .02$) were significant. A significant interaction effect of souvenir designers and verification cues on purchase intention was found ($F(1, 389) = 10.74, p < .01, \eta^2 = .03$). Additional planned contrast revealed that, in the presence of verification cues, the negative consequences of AI-designed souvenirs were mitigated ($M_{AI\&Presence} = 4.75, SD = 1.98$ vs. $M_{Human\&Presence} = 4.73, SD = 1.78, F(1, 389) = .002, p = .96$). However, the effect of souvenir designers was significant when the verification cue was absent ($M_{AI\&Absence} = 3.52, SD = 2.14$ vs. $M_{Human\&Absence} = 4.78, SD = 1.78, F(1, 389) = 21.01, p < .001, \eta^2 = .05$).

7.2.3. Perceived Authenticity

We conducted another two-way ANOVA on perceived authenticity. The main effects of both souvenir designers ($M_{AI} = 3.63, SD = 1.99$ vs. $M_{Human} = 4.42, SD = 1.75, F(1, 389) = 17.82, p < .001, \eta^2 = .04$) and verification cues ($M_{Absence} = 4.14, SD = 2.07$ vs. $M_{Presence} = 4.74, SD = 1.88, F(1, 389) = 7.84, p < .01, \eta^2 = .02$) were significant. A significant interaction effect of souvenir designers and verification cues on perceived authenticity was found ($F(1, 389) = 9.55, p < .01, \eta^2 = .02$). Additional planned contrast revealed that, in the presence of verification cues, the negative consequences of AI-designed souvenirs were mitigated ($M_{AI\&Presence} = 4.19, SD = 2.07$ vs. $M_{Human\&Presence} = 4.39, SD = 1.79, F(1, 389) = .594, p = .44$). However, the effect of souvenir designers was significant when the verification cue was absent ($M_{AI\&Absence} = 3.10, SD = 1.76$ vs. $M_{Human\&Absence} = 4.45, SD = 1.72, F(1, 389) = 26.35, p < .001, \eta^2 = .06$).

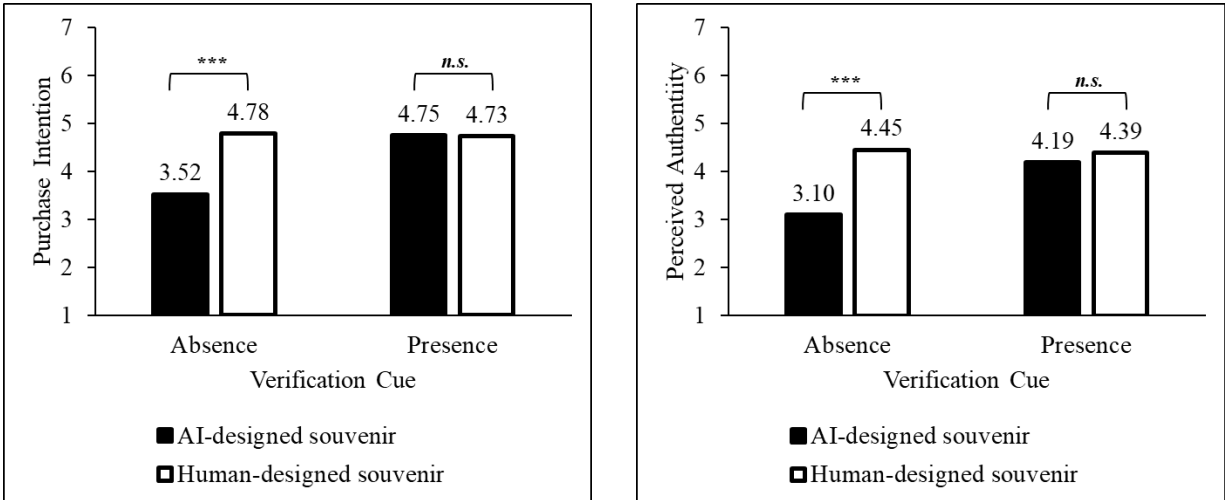


Figure 3. Results of Study 3

7.2.4. Moderated Mediation Analysis

Finally, we conducted a moderated mediation analysis (PROCESS Model 8, 5,000 bootstrapped samples; Hayes, 2017) with purchase intention as the dependent variable, souvenir designers (0 = human, 1 = AI) as the independent variable, verification cue (0 = absence, 1 = presence) as the moderator, and perceived authenticity as the mediator. The index of moderated mediation was statistically significant ($\beta = .98$, 95% CI[.36, 1.60]). Specifically, the indirect impact of souvenir designers on purchase intention via perceived authenticity was significant when a verification cue was absent ($a \times b = -1.15$, 95% CI[-1.57, -.73]), whereas it was insignificant when a verification cue was present ($a \times b = -.17$, 95% CI[-.63, .29]).

7.2.5. Discussion

The findings from Study 3 provided insights into how verification cues attenuated the negative effects of AI-designed souvenirs on perceived authenticity and purchase intention. Our findings suggested that the presence of verification cues reduced skepticism toward AI-designed products, thereby mitigating their negative impact on perceived authenticity and consumers' purchase intention. Given that AI-designed souvenirs were often perceived as lacking human craftsmanship and originality, a verification cue acted as a trust signal, validating the credibility of the design process and enhancing consumer purchase intention. In the subsequent study, another key moderator (i.e., time scarcity cues) was examined to mitigate the negative effects of AI-designed souvenirs.

8. STUDY 4

8.1. Methods

The purpose of Study 4 was to examine the moderating role of time scarcity cues in the relationship between souvenir designers and perceived authenticity. We employed a 2 (souvenir designer: AI vs. human) \times 2 (time scarcity cue: presence vs. absence) between-subjects factorial design experiment. A total of 373 participants were recruited from the Prolific consumer panel ($M_{age} = 33$, female = 61%). The participants were asked to imagine they were traveling to a destination they had never been to in December, and they were looking for a magnet as a

souvenir. The souvenir shop owner recommends a magnet sophisticatedly designed to represent the destination, which is designed by AI (vs. human). While the participants in the condition of time scarcity cue absence were not informed, those in the condition of time scarcity cue presence were given that the magnet is only available in December (see Web Appendix F for complete stimuli; the magnet with art-infusion was entirely created by ChatGPT-4o). Then, the participants reported their purchase intention ($\alpha = 0.93$) and perceived authenticity ($\alpha = 0.92$), followed by a section for manipulation check, art-infusion effect check, and realism check. The last section included questions asking the participants' demographic information (see Web Appendix B for details).

8.2. Results

8.2.1. Manipulation check

A two-way ANOVA revealed that only the main effect of souvenir designers was significant ($F(1, 369) = 263.35, p < .001, \eta^2 = .42$). The participants in the AI condition were more likely to agree that the mug was designed by AI rather than humans ($M_{AI} = 6.46, SD = .98$ vs. $M_{Human} = 3.67, SD = 2.12, p < .001$). However, the main effect of time scarcity cues ($F(1, 369) = 2.28, p = .13$) and the interaction effect ($F(1, 369) = 1.93, p = .17$) were not significant. Thus, the souvenir designer manipulation was considered successful. Similarly, a two-way ANOVA indicated that only the main effect of time scarcity was significant ($F(1, 369) = 427.83, p < .001, \eta^2 = .54$). There was a significant difference between the absence and presence of time scarcity cues ($M_{Absence} = 3.40, SD = 1.91$ vs. $M_{Presence} = 6.65, SD = .91, p < .001$). However, the main effect of souvenir designers ($F(1, 369) = .01, p = .91$) and the interaction effect ($F(1, 369) = .11, p = .11$) were not significant. Thus, the time scarcity cue manipulation was deemed successful. Additionally, the participants considered that the souvenir artistically represented the destination across all conditions, surpassing the scale midpoint of 4 ($M = 5.07, t = 22.6, p < .001$).

8.2.2. Purchase Intention

We conducted a two-way ANOVA on purchase intention. The main effects of both souvenir designers ($M_{AI} = 4.75, SD = 1.83$ vs. $M_{Human} = 5.16, SD = 1.48, F(1, 369) = 4.49, p < .05, \eta^2 = .03$) and time scarcity cues ($M_{Absence} = 4.76, SD = 1.76$ vs. $M_{Presence} = 5.18, SD = 1.54, F(1, 369) = 6.22, p < .05, \eta^2 = .02$) were significant. A significant interaction effect of souvenir designers and time scarcity cues on purchase intention was found ($F(1, 369) = 9.41, p < .01, \eta^2 = .03$). Additional planned contrast revealed that, in the presence of time scarcity cues, the negative consequences of AI-designed souvenirs were mitigated ($M_{AI\&Presence} = 5.27, SD = 1.18$ vs. $M_{Human\&Presence} = 5.11, SD = 1.17, F(1, 369) = .429, p = .51$). However, the negative effect of souvenir designers on purchase intention was significant when the time scarcity cue was absent ($M_{AI\&Absence} = 4.33, SD = 1.16$ vs. $M_{Human\&Absence} = 5.21, SD = 1.21, F(1, 369) = 14.14, p < .001, \eta^2 = .04$).

8.2.3. Perceived Authenticity

We conducted another two-way ANOVA on perceived authenticity. The main effects of both souvenir designers ($M_{AI} = 4.05, SD = 1.75$ vs. $M_{Human} = 4.66, SD = 1.49, F(1, 369) = 11.82, p < .001, \eta^2 = .03$) and time scarcity cues ($M_{Absence} = 4.19, SD = 1.68$ vs. $M_{Presence} = 4.56, SD = 1.59, F(1, 369) = 4.82, p < .05, \eta^2 = .01$) were significant. A significant interaction effect of souvenir designers and time scarcity cues on perceived authenticity was found ($F(1, 369) = 8.42,$

$p < .01$, $\eta^2 = .02$). Additional planned contrast revealed that, in the presence of verification cues, the negative consequences of AI-designed souvenirs were mitigated ($M_{AI\&Presence} = 4.52$, $SD = 1.17$ vs. $M_{Human\&Presence} = 4.60$, $SD = 1.16$, $F(1, 369) = .137$, $p = .712$). However, the negative effect of souvenir designers on perceived authenticity was significant when the verification cue was absent ($M_{AI\&Absence} = 3.67$, $SD = 1.16$ vs. $M_{Human\&Absence} = 4.72$, $SD = 1.63$, $F(1, 369) = 21.13$, $p < .001$, $\eta^2 = .05$)

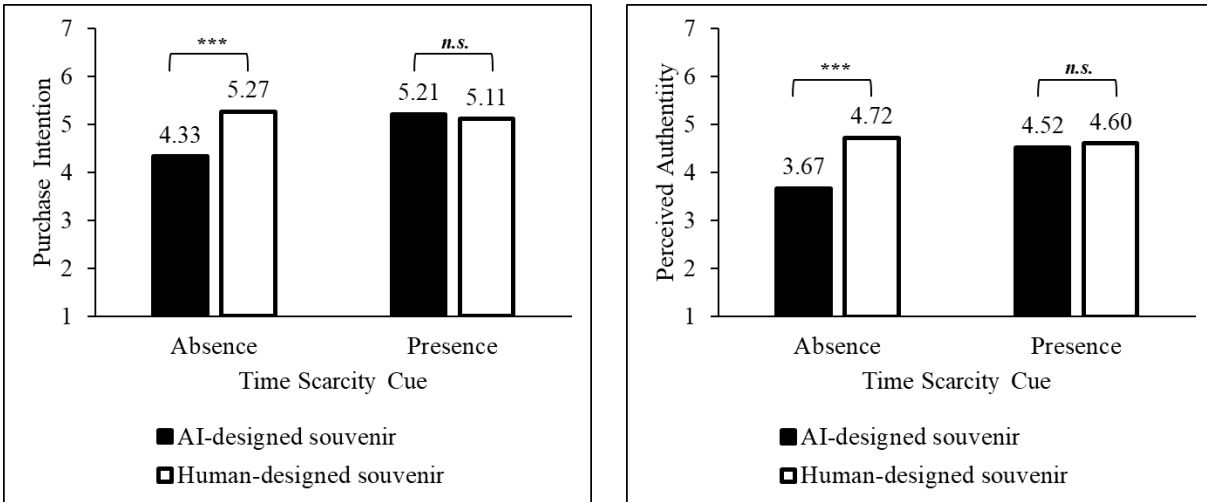


Figure 4. Results of Study 4

8.2.4. Moderated Mediation Analysis

We further conducted a moderated mediation analysis (PROCESS Model 8, 5,000 bootstrapped samples; Hayes, 2017) with purchase intention as the dependent variable, souvenir designers (0 = human, 1 = AI) as the independent variable, scarcity cue (0 = absence, 1 = presence) as the moderator, and perceived authenticity as the mediator. The index of moderated mediation was statistically significant ($\beta = .72$, 95% CI [.23, 1.24]). In particular, the indirect impact of souvenir designers on purchase intention via perceived authenticity was significant when the time scarcity cue was absent ($a \times b = -.78$, 95% CI [-1.15, -.45]), whereas it was insignificant when the time scarcity cue was present ($a \times b = -.07$, 95% CI [-.42, .29]).

8.2.5. Discussion

Study 4 enhanced the understanding of consumer decision-making regarding AI-designed souvenirs by highlighting the moderating role of time scarcity cues. Using a winter-themed magnet, the study found that consumers were more likely to alleviate authenticity concerns under time constraints, reducing the negative impact of AI-designed souvenirs on purchase intentions. These findings suggested that situational factors, such as product scarcity due to limited production, significantly influenced consumer perceptions of AI-designed products.

9. DISCUSSION AND IMPLICATIONS

9.1. General discussion

Across two preliminary and four experimental studies, our findings provide insights into consumer perceptions of AI-designed souvenirs and suggest actional strategies to enhance perceived authenticity through contextual interventions (i.e., verification and time scarcity cues). As baseline studies, we demonstrated that AI-designed (vs. human-designed) souvenirs were perceived as less authentic and, consequently, less desirable, regardless of souvenir type or destination representation, as shown in Study 1 (Taj Mahal-themed mug) and Study 2 (New York City-themed keyring). This skepticism toward AI-designed artifacts reflects concerns about authenticity in H&T products, highlighting the challenge of integrating AI into souvenir design without diminishing perceived authenticity. To mitigate the unintended negative effects of AI-designed souvenirs, Study 3 showed that verification cues served as an effective strategy, reassuring consumers, reducing skepticism, and ultimately enhancing the perceived authenticity of souvenirs. By providing credible endorsements, such validations help bridge the gap between technological innovation and cultural authenticity, fostering greater consumer acceptance in H&T. Beyond verification cues, Study 4 revealed that time scarcity cues moderated consumer perceptions, making their focus from skepticism about AI involvement in design to appreciating the authentic nature of the item. These findings highlight the role of situational factors in shaping consumer attitudes toward AI-designed souvenirs, demonstrating that external conditions, particularly time-based scarcity (i.e., limited availability), can alter the weight placed on the perceived authenticity of souvenirs in purchasing decisions.

9.2. Theoretical implications

The findings of this research advance the understanding of AI-designed products and authenticity in H&T by highlighting how AI can be effectively integrated into souvenir design while addressing consumer concerns about authenticity. The key theoretical contributions are as follows.

This research contributes to the theoretical understanding of individuals' skepticism toward technological solutions (Dietvorst et al., 2015) by examining how AI-designed souvenirs influence consumer perceptions. Although prior research has emphasized the benefits of technological innovation, given the prevalence of algorithm aversion, our findings highlight the unique challenges posed by integrating AI-designed souvenirs that carry cultural and symbolic significance. In the H&T context, where cultural significance plays a crucial role in consumer perceptions and emotional connections (Fu et al., 2018; Lv et al., 2024; Su et al., 2024), this skepticism is likely intensified, as souvenirs function as tangible symbols of heritage and place identity. Accordingly, the findings of this research extend theoretical discussions on how emerging technologies can reshape traditional cultural consumption patterns in H&T.

Our findings also contribute to the H&T literature on authenticity by examining why AI-designed products are often perceived as lacking the essential qualities of authentic artifacts. Authenticity, associated with originality and cultural depth (Anastasiadou & Vettese, 2021; Xie et al., 2022), frequently conflicts with AI-driven creativity based on replication rather than lived experience. Our research demonstrates that even AI-designed souvenirs featuring artistic elements are perceived as lacking emotional resonance and cultural embeddedness (Zhang et al., 2024; Horton et al., 2023). This research thus significantly enriches the theory of mind (Gray et al., 2007) by empirically illustrating why AI-designed souvenirs can lead to unintended negative

consequences. The lay beliefs regarding AI's perceived emotional shortcomings have important implications for how these souvenirs are viewed in terms of authenticity, a critical factor influencing consumer decision-making and purchasing behavior.

This research also contributes to the theoretical discourse on overcoming algorithm aversion (e.g., Clegg et al., 2023; Longoni & Cian, 2022) by identifying strategies that reduce skepticism toward AI-designed designs, particularly in domains where cultural and artistic authenticity are highly valued. Our findings contribute to this discussion by introducing verification and time scarcity cues as key moderating factors influencing consumer perceptions. Specifically, our results provide empirical evidence that contextual interventions can redirect consumer focus from skepticism about AI involvement to an appreciation of the item's authenticity or toward immediate considerations such as uniqueness and exclusivity. These findings underscore the importance of a nuanced approach to AI integration in H&T product design, emphasizing that while AI offers efficiency and innovation, its acceptance depends on strategies that preserve perceived authenticity and cultural integrity.

9.3. Practical implications

The findings of this research offer valuable insights for businesses integrating AI into souvenir design, particularly within the H&T industry. The main practical implications are as follows.

H&T organizations using the art-infusion effect in culturally significant souvenirs should recognize that aesthetics alone may not ensure authenticity or consumer acceptance, especially when AI is involved. While art infusion enhances visual appeal, consumers may still question authenticity if the designs lack emotional resonance and cultural depth. H&T organizations can incorporate verification cues to enhance perceptions of authenticity, such as endorsements from cultural organizations or certifications from heritage institutions. These validations act as credible indicators, affirming the cultural significance of AI-designed souvenirs and assuring consumers that these products retain genuine artistic and cultural connections. Implementing valid verification mechanisms that emphasize the cultural legitimacy and artistic intent behind AI-designed souvenirs can significantly improve the perceived authenticity of souvenirs and boost purchase intention. Ultimately, positioning AI-designed products as both innovative and culturally meaningful can help bridge the gap between technological advancement and heritage preservation, ensuring that AI enhances rather than replaces traditional craftsmanship.

Time scarcity cues can be an effective strategy for enhancing the perceived authenticity of AI-designed souvenirs. By emphasizing limited-edition releases or exclusive availability, businesses can shift consumer focus away from authenticity concerns and toward attributes such as originality and exclusivity. This shift in perception can increase the appeal of AI-designed souvenirs, particularly in competitive markets where rarity adds value. Urgency-driven marketing strategies, such as limited seasonal sales, can prompt heuristic decision-making (Hmurovic et al., 2023), leading consumers to prioritize scarcity over skepticism about AI's role in product design. However, these strategies should be carefully executed. Excessive or artificially imposed scarcity can lead to consumer skepticism, potentially diminishing positive perceptions of the product (Goldsmith et al., 2020). To maintain authenticity, businesses should ensure that limited availability is based on genuine factors, such as exclusive collaborations, seasonal themes, or production constraints. When thoughtfully applied, time scarcity cues can be crucial in reinforcing the perceived authenticity and desirability of AI-designed souvenirs.

9.4. Limitations and future research directions

Despite its contributions, this research has several limitations that should be acknowledged. First, this study focused on three types of souvenirs, including mugs, magnets, and keyrings, which may limit the generalizability of the findings to other souvenir categories. While these items are widely available, they may not fully capture the diversity of the souvenir market, particularly those with greater cultural or artistic significance, such as handcrafted textiles, sculptures, or paintings. Future research could explore whether similar authenticity concerns arise in souvenir categories that are more traditionally linked to artisanal craftsmanship and regional heritage. Also, while this research examined verification and time scarcity cues as moderators, different types of these cues may influence consumer perceptions in distinct ways. For example, variations in verification cues, such as artisan collaborations or digital authentication methods, may affect the perceived authenticity of AI-designed souvenirs differently. Similarly, alternative forms of scarcity, such as demand-based scarcity (e.g., high consumer interest), may influence consumer decision-making differently by affecting a perception of authenticity tied to popularity. Future studies could investigate how these different cues interact with consumer attitudes and whether they affect perceived authenticity and purchase intent in varying ways.

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Web Supplementary Materials

Appendix A. Preliminary Study 1a Stimuli

[AI-designed souvenir condition]

Imagine visiting the Taj Mahal in India, a renowned tourist destination for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in mugs and ask to see their options. The owner then shows various types of mugs designed by AI-powered robots.

The owner explains that the mug was sophisticatedly designed AI-powered robots to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



[human-designed souvenir condition]

Imagine visiting the Taj Mahal in India, a renowned tourist destination for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in mugs and ask to see their options. The owner then shows various types of mugs designed by humans.

The owner explains that the mug was sophisticatedly designed by humans to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



Appendix B. Study 1 Stimuli

[AI-designed souvenir condition]

Imagine visiting the Taj Mahal in India, a renowned tourist destination for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in *mugs* and ask to see their options. The owner then shows various types of mugs designed AI-powered robots.

The owner explains that the mug was sophisticatedly designed AI-powered robots to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



[Human-designed souvenir condition]

Imagine visiting the Taj Mahal in India, a renowned tourist destination for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in *mugs* and ask to see their options. The owner then shows various types of mugs designed by humans.

The owner explains that the mug was sophisticatedly designed by humans to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



Appendix C. Measurements items

Constructs	Items	Reference
Purchase intention (Preliminary Study 1a, Main studies 1, 2, 3, 4)	Please select the option that best represents your opinions (1 = strongly disagree, 7 = strongly agree). <ul style="list-style-type: none"> • How likely is it that you would purchase the souvenir? • How willing are you to buy the souvenir? • How inclined are you to buy the souvenir? 	Lude & Prüggl (2018)
Perceived authenticity (Preliminary Study 1a, Main studies 1, 2, 3, 4)	Please select the option that best represents your opinions (1 = strongly disagree, 7 = strongly agree). <ul style="list-style-type: none"> • The souvenir is authentic. • The souvenir is true to its roots. • The souvenir does not seem to be artificial. • The souvenir is motivated by passion rather than profit. 	Wang et al. (2023)
Perception towards art (Preliminary Study 1a, Main studies 1, 2, 3, 4)	Please select the option that best represents your opinions (1 = strongly disagree, 7 = strongly agree). <ul style="list-style-type: none"> • Do you think the souvenir is a piece of artwork? 	Gupta et al. (2024)
Perceived uniqueness (Main study 2)	Please select the option that best represents your opinions (1 = strongly disagree, 7 = strongly agree). <ul style="list-style-type: none"> • The souvenir is unique. • The souvenir is rare. • The souvenir is uncommon. • The souvenir is special. 	Fan et al. (2024)
Perceived functional value (Main study 2)	Please select the option that best represents your opinions (1 = strongly disagree, 7 = strongly agree). <ul style="list-style-type: none"> • The souvenir would perform consistently. • The souvenir has consistent quality. • The souvenir is durable. 	Kolbl et al. (2020)

Appendix D. Study 2 Stimuli

[AI-designed souvenir condition]

Imagine visiting New York City, a world-famous travel destination known for its cultural landmarks, historic sites, and dynamic fusion of tradition and modernity. While exploring, you come across a souvenir shop filled with various items, including keyrings, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in keyrings and ask to see their options. The owner then shows various types of keyrings designed by AI-powered robots.

The owner explains that the keyring was sophisticatedly designed by AI-powered robots to serve as art-infused representations of the culture, with each detail designed to showcase artistic expression.



[Human-designed souvenir condition]

Imagine visiting New York City, a world-famous travel destination known for its cultural landmarks, historic sites, and dynamic fusion of tradition and modernity. While exploring, you come across a souvenir shop filled with various items, including keyrings, mugs, postcards, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in keyrings and ask to see their options. The owner then shows various types of keyrings designed by humans.

The owner explains that the keyring was sophisticatedly designed by humans to serve as art-infused representations of the culture, with each detail designed to showcase artistic expression.



Appendix E. Study 3 Stimuli

[AI-designed souvenir + Presence of verification cue condition]

Imagine visiting a tourism destination, to which you have never been. This place is known for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including mugs, magnets, postcards, and paintings. The store has been recognized by the Local Chambers of Commerce, which is dedicated to verifying the authenticity and practices of regional souvenir stores.



As you browse, the shop owner greets you and asks what you are looking for. You express an interest in mugs and ask to see their options. The owner then shows various types of mugs designed by AI-powered robots.

The owner explains that AI-powered robots sophisticatedly designed the mug to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



[Human-designed souvenir + Absence of verification cue condition]

Imagine visiting a tourism destination, to which you have never been. This place is known for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including mugs, magnets, postcards, and paintings.

As you browse, the shop owner greets you and asks what you are looking for. You express an interest in mugs and ask to see their options. The owner then shows various types of mugs designed by humans.

The owner explains that humans sophisticatedly designed the mug to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.



Appendix F. Study 4 Stimuli

[AI-designed souvenir + Presence of time scarcity cue condition]

Imagine visiting a tourism destination you have never been to in December during a snowy winter. This place is known for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, postcards, mugs, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in magnets and ask to see their options. The owner then shows various types of magnets designed by AI-powered robots.

The owner explains that AI-powered robots sophisticatedly designed the magnet to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.

The owner also adds that this magnet is available only during winter, specifically in December.



Available for Sale **ONLY** in December!

[Human-designed souvenir + Absence of time scarcity cue condition]

Imagine visiting a tourism destination you have never been to in December during a snowy winter. This place is known for its cultural and historical sites. While exploring, you come across a local souvenir shop filled with various local items, including magnets, postcards, mugs, and paintings. As you browse, the shop owner greets you and asks what you are looking for. You express an interest in magnets and ask to see their options. The owner then shows various types of magnets designed by humans.

The owner explains that AI-powered robots sophisticatedly designed the magnet to serve as art-infused representations of the local culture, with each detail designed to showcase artistic expression.

