



Marketing Science Institute Working Paper Series 2026

Report No. 26-118

## Synthetic Diversity: Racial Depictions Influence Consumer Responses to AI-Generated Models in Advertising

Rhonda Hadi, Esther Uduehi, Felipe Thomaz and Andrew Stephen

“Synthetic Diversity: Racial Depictions Influence Consumer Responses to AI-Generated Models in Advertising” © 2026

Rhonda Hadi, Esther Uduehi, Felipe Thomaz and Andrew Stephen

MSI Working Papers are Distributed for the benefit of MSI corporate and academic members and the general public. Reports are not to be reproduced or published in any form or by any means, electronic or mechanical, without written permission.

## Synthetic Diversity:

### Racial Depictions Influence Consumer Responses to AI-Generated Models in Advertising

#### **ABSTRACT**

As brands seek to increase racial representation in their advertising, many are turning to AI-generated images of humans (i.e., synthetic models) as a scalable solution. This research demonstrates that consumer reactions to synthetic models are asymmetric, depending on the racial identity being depicted. Across five experiments, we demonstrate that disclosing the synthetic nature of models lowers firm evaluations when the featured models are Black (but not when they are White). This effect is driven by reduced perceptions of cultural essence, decreased perceptions of the firm's commitment to diversity, equity, and inclusion (DEI), and increased perceptions of “woke washing.” Importantly, these negative effects can be mitigated when firms collaborate with Black-owned advertising agencies. Our findings extend research on racialized depictions in advertising by identifying synthetic depiction as a critical boundary condition for the benefits of diverse representation. More broadly, our results highlight that technological innovations in advertising cannot be divorced from the social and historical contexts that shape their meaning.

*Keywords:* Race; Diversity, Equity, & Inclusion (DEI), Artificial Intelligence; Advertising

*“Who’s going to tell this multibillion-dollar company that it can develop a diversity and inclusion strategy by just... hiring and paying actual models of different races and body types?”*

(blogger reaction to Levi’s announcement that it would use AI-generated imagery to increase diverse representation)

Brands are under increasing pressure to showcase racial diversity in their advertising (Hartmann et al., 2024; Jeong et al., 2024). Black representation, in particular, has become a visible marker of cultural relevance and social commitment, with contemporary research documenting benefits such as generating cultural capital, signaling progressiveness, and strengthening engagement (Eisend et al., 2023; Khan & Kalra, 2022; Lenk et al., 2024). Traditionally, brands increased such racial representation by casting real models. More recently, however, companies have been turning to artificial intelligence (AI) tools to create hyper-realistic human depictions for advertising (Campbell et al., 2022; see Appendix A). Many reputable brands now utilize these hyper-realistic depictions— which we hereby refer to as *synthetic models*—for their scalability and creative flexibility. Legislative mandates and platform policies increasingly require transparent disclosure of such AI usage (Satariano, 2023), yet little research has examined how consumers respond when firms disclose the use of synthetic models in advertising.

Early marketplace reactions hint at potential concerns. When Levi’s announced using synthetic models to increase racial diversity, many consumers criticized the move as being “lazy” and “problematic” (Holt, 2023). J.Crew similarly faced backlash when it featured Black synthetic models in Instagram advertisements, with critics accusing the brand of “digital blackface” and arguing that the company was “commodifying Black representation, but not pay[ing] a real Black person for their likeness,” (Edwards, 2025). Notably, this

backlash targeted synthetic representations of underrepresented races specifically, not AI imagery generally, raising a key question: do consumer responses to synthetic models depend on the racial identity being depicted?

Across five experiments, we demonstrate that disclosure of synthetic models leads to asymmetric consumer reactions: when models are Black (a historically underrepresented racial group), disclosure reduces firm evaluations, but no such penalty emerges when models are White.<sup>1</sup> Thus, while featuring Black models typically improves consumer evaluations (Lenk et al., 2024), this benefit disappears when those models are synthetic. We further show that this negative effect is driven by diminished cultural resonance, increased doubt about the firm's DEI commitment, and increased suspicion about the motives behind the imagery. Importantly, we also find that collaboration with a Black-owned advertising agency can attenuate these negative effects.

Our work extends the literature on racial representation in advertising by identifying synthetic diversity as a boundary condition for the established benefits of Black representation (Hartmann et al., 2024; Lenk et al., 2024). Thus, we contribute to ongoing calls to examine consumer research through a racial lens (Grier et al., 2024) and to critically evaluate how diversity is represented in the marketplace (Arsel et al., 2022). Further, we add to emerging work on consumer responses to generative AI by showing that the racial characteristics of AI depictions fundamentally shape evaluations (Puntoni et al., 2021; Hermann & Puntoni, 2024). More broadly, our findings reveal that technological innovations in advertising cannot be divorced from their social and historical context: design choices carry different symbolic weight depending on the identity represented. By introducing the

---

<sup>1</sup> We focus on Black representation because of its central role in cultural production, historical underrepresentation in advertising, and symbolic resonance in DEI debates (Crockett 2008; Lenk et al., 2024). White depictions serve as a theoretically important contrast because Whiteness often operates as the “default” or invisible category in advertising, making it a critical point of comparison rather than a claim of neutrality (Irving 2014; Aaker, Brumbaugh, and Grier 2000).

concept of *synthetic diversity*, we show that AI-based approaches to inclusion can undermine the very benefits that authentic racial representation provides, raising new questions for both scholars and practitioners.

## **THEORETICAL DEVELOPMENT**

### **Consumer Responses to Racial Depictions in Advertising**

Consumers from racial minorities have historically preferred advertisements featuring models of their own race (Aaker et al., 2000). However, contemporary research demonstrates that brands now more broadly benefit from featuring Black models (Hartmann et al., 2024; Lenk et al., 2024; Uduehi et al., 2024b). This shift reflects evolving consumer preferences: meta-analytic evidence shows that White Americans, who historically favored White models in advertising, now demonstrate preferences toward Black models (Lenk et al., 2024). This trend stems from multiple factors. First, Black models allow brands to leverage cultural essence and “reflexive coolness” associated with Black popular culture (Crockett, 2008; Stevens, 2021). Second, the Black community's centrality in contemporary social movements against systemic racism (e.g., BLM) has heightened consumer expectations for Black representation in media (Hartmann et al., 2023). Consequently, featuring Black models often signals a brand's commitment to social justice and improves consumer outcomes (Eisend et al., 2023; Khan & Kalra, 2022).

Critically, however, these benefits diminish when Black representation appears disingenuous. Namely, when representation efforts appear merely superficial, they undermine the cultural connections that genuine representation and lived experience provide (Lin et al., 2024). Similarly, shortcuts to representation that appear inconsistent with genuine DEI commitments can trigger accusations of “woke washing” (the disingenuous promotion of

social issues for commercial gain; Vredenburg et al., 2020). Such perceptions risk eroding brand credibility and suggest performative activism rather than genuine inclusion. We argue that brands' deployment of synthetic Black models heightens these risks, undermining the cultural and social value that genuine racial representation provides. To support this prediction, we first review literature on consumers' general responses to AI-generated content and disclosure, then develop theorizing for why synthetic depictions of underrepresented racial groups introduce unique risks.

### Consumer Responses to AI-Generated Human Depictions

The rise of generative AI has enabled brands to create hyper-realistic synthetic human depictions for advertising. Studies show that consumers often struggle to distinguish synthetic from real faces (Nightingale & Farid, 2022), and in some cases even place greater trust in synthetic faces (Miller et al., 2024). However, regulatory and platform-level disclosure requirements now mandate that firms explicitly label AI-generated imagery (Satariano, 2023). Accordingly, consumers are increasingly aware when content is synthetic, regardless of whether they can detect it unaidedly.

Emerging research documents varied consumer responses to AI disclosure. Much of this work has focused on AI-authored text (Kirk & Givi, 2025; Chen et al., 2024; Lim & Schmälzle, 2024). Negative effects of AI disclosure have also been observed in charitable communications (Arango et al., 2023; Baek et al., 2024), luxury advertising (To et al., 2025), and among consumers high in AI aversion (Wortel et al., 2024). Sands et al. (2024) further show that AI-based representation can threaten social identities among LGBTQIA+ consumers and people with disabilities.

As the Levi's controversy illustrates (Holt, 2023), one of the most prominent motivations for using synthetic models is to inexpensively scale racial diversity in advertising. Yet substituting real underrepresented models with synthetic depictions introduces unique risks: while AI-generated imagery generally raises issues of disclosure and trust, synthetic diversity directly intersects with historically fraught dynamics of racial representation.

### Synthetic Models as Disingenuous Racial Representation

We define *synthetic diversity* as the use of AI-generated visual depictions of underrepresented racial groups as substitutes for real individuals in corporate marketing contexts. This differs from related digital phenomena such as virtual influencers (personas with ongoing social media presence; Leung et al., 2022), AI chatbots designed for conversation (Crollic et al., 2022; Davis et al., 2023), or metaverse avatars (Hadi et al., 2024; Henry & Bradford, 2025), all of which involve personality construction and animacy as opposed to constituting mere visual snapshots. Our investigation uniquely examines how consumers respond when firms transparently disclose this surface-level substitution in traditional advertising contexts, rather than analyzing engagement with designed digital personas or interactive agents.

Unlike traditional forms of representation, synthetic diversity relies on algorithmically produced likenesses that lack lived experience and cultural grounding participation (Cohen, 2001; Beverland, 2006). We argue this distinction is crucial. While authentic diversity can generate cultural capital and consumer trust, synthetic diversity risks reducing representation to mere imagery, severed from the social and historical contexts that make it meaningful (Omi & Winant, 2014).

For various reasons, we argue that utilizing Black synthetic models may specifically be perceived as problematic. First, synthetic depictions lack the lived experience and cultural authenticity that imbue Black models with cultural essence (Crockett, 2008). Second, by replacing real individuals with synthetic alternatives, brands may appear to foreclose economic opportunities for marginalized communities, signaling misalignment between implied DEI goals and actual practices. Finally, the replication of marginalized identities via AI can be interpreted as woke washing, whereby surface-level signifiers of inclusion are co-opted without the accompanying substance or respect (Vredenburg et al., 2020).

These dynamics align with theories of social identity threat (Steele et al., 2002; Major & O'Brien, 2005), which argue that marginalized identities are especially vulnerable to cues of inauthentic representation. Whereas prior research demonstrates that Black representation in advertising can strengthen consumer engagement (Hartmann, Netzer, & Zalta, 2023), our findings reveal that technological mediation via AI can undermine this effect. By disclosing that models are synthetic rather than real, firms shift consumer interpretations of representation from authentic inclusion to symbolic substitution.

We advance consumer psychology by theorizing synthetic diversity as a critical boundary condition. Importantly, these dynamics are asymmetrical across racial groups. For White models—who have historically dominated advertising—substitution with synthetic versions does not carry the same symbolic burden. In contrast, for Black models—historically underrepresented in commercial imagery—synthetic substitution risks being seen as yet another exclusionary practice, hollowing out the authenticity and cultural value of representation. Formally, we hypothesize:



H1: When an advertisement features Black models, disclosing that those models are AI-generated will harm firm evaluations. This will not be the case when the advertisement features White models.

H2: For Black models, the negative effect of AI disclosure will be driven by:

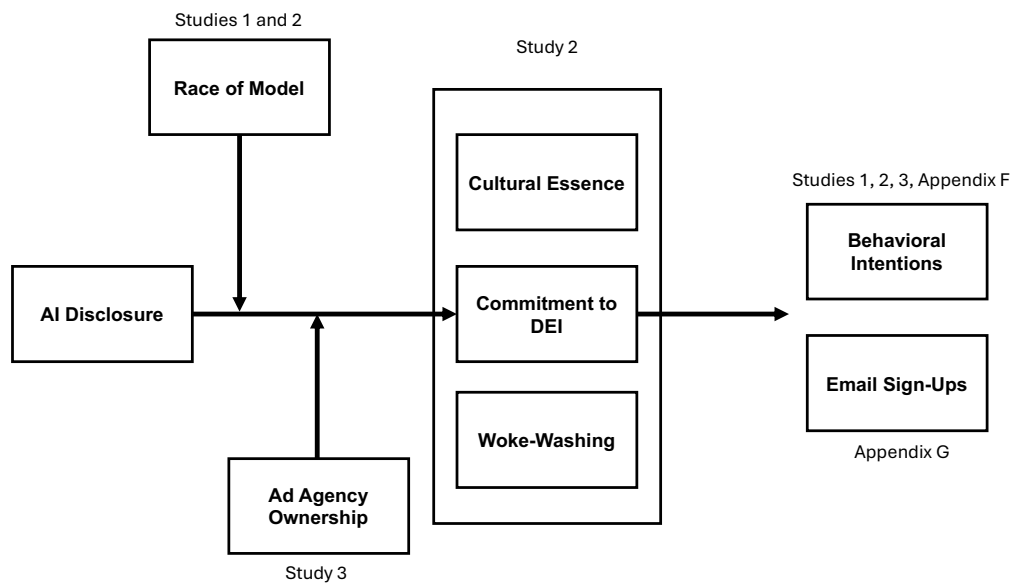
- a) reduced perceptions of cultural essence,
- b) reduced perceptions of the firm's DEI commitment, and
- c) increased perceptions of woke washing.

## Overview of Studies

We test our theorizing across five experiments (three reported in the main text and two in the Appendix; see Figure 1). Study 1 demonstrates that a firm's decision to use synthetic (vs. traditional) models harms evaluations when the models are described as Black, but not when described as White. Study 2 replicates this interactive effect using naturalistic ads and shows that it is explained by three interrelated mechanisms: diminished perceptions of cultural essence, weaker beliefs in the firm's DEI commitment, and heightened perceptions of woke washing. Study 3 establishes a boundary condition, showing that explicit collaboration with a Black-owned advertising agency mitigates these negative effects. Two additional studies extend our findings: Appendix F examines the moderating role of participants' own race and Appendix G documents a real behavioral outcome.

## FIGURE 1

### CONCEPTUAL FRAMEWORK



## STUDY 1: INTERACTIVE EFFECT OF AI DISCLOSURE AND MODEL RACE ON FIRM EVALUATION

Our first main study ([https://aspredicted.org/V76\\_75P](https://aspredicted.org/V76_75P)) provided evidence for the interactive effect of AI disclosure and model race on firm evaluations. Employing text-based descriptions allowed us to probe the interactive effect in a generalizable manner independent of specific advertising materials (which we employ in all subsequent studies).

### Method

This study employed a 2(AI disclosure: absent vs. present)  $\times$  2(model race: Black vs. White) between-subjects design. While four hundred and six recruits from CloudResearch participated in our study, we excluded 25 participants who failed the preregistered attention

check resulting in a final sample of 381 participants (50.9% female, 1.3% non-binary, 68% White<sup>2</sup>;  $M_{\text{age}} = 36.53$ ,  $SD_{\text{age}} = 11.90$ ).

Participants read a description of a financial services firm's advertising campaign (Appendix B). We manipulated AI disclosure by specifying (vs. omitting) that models were synthetic and model race by describing models as Black or White. Participants then evaluated the firm on six 7-point bipolar items (Dislike/Like; Bad/Good; Uninteresting/Interesting; Awful/Nice; Unfavorable/Favorable; Negative/Positive;  $\alpha = .97$ ) and completed the attention check and demographics.

## Results and Discussion

*Firm evaluation.* ANOVA results revealed significant main effects of AI disclosure ( $F(1, 377) = 5.72, p = .017, \eta_p^2 = .02$ ) and model race ( $F(1, 377) = 24.35, p < .001, \eta_p^2 = .03$ ) on firm evaluation as well as a significant interaction ( $F(1, 377) = 4.80, p = .029, \eta_p^2 = .01$ ). Consistent with our theorizing, planned contrasts revealed that that for Black models, AI disclosure reduced firm evaluations ( $M_{\text{Control}} = 5.18$  vs.  $M_{\text{AI}} = 4.52$ ;  $F(1, 377) = 10.30, p = .001, \eta_p^2 = .03$ ), while White models showed no such effect ( $M_{\text{Control}} = 4.36$  vs.  $M_{\text{AI}} = 4.33$ ;  $F(1, 377) = .02, p = .89, \eta_p^2 = .00$ ; see Figure 2). Further, without AI disclosure, the description of Black models received higher evaluations than the description of White models ( $F(1, 377) = 15.86, p < .001, \eta_p^2 = .04$ ). However, this effect disappeared with AI disclosure ( $F(1, 377) = .84, p = .36, \eta_p^2 = .00$ ).

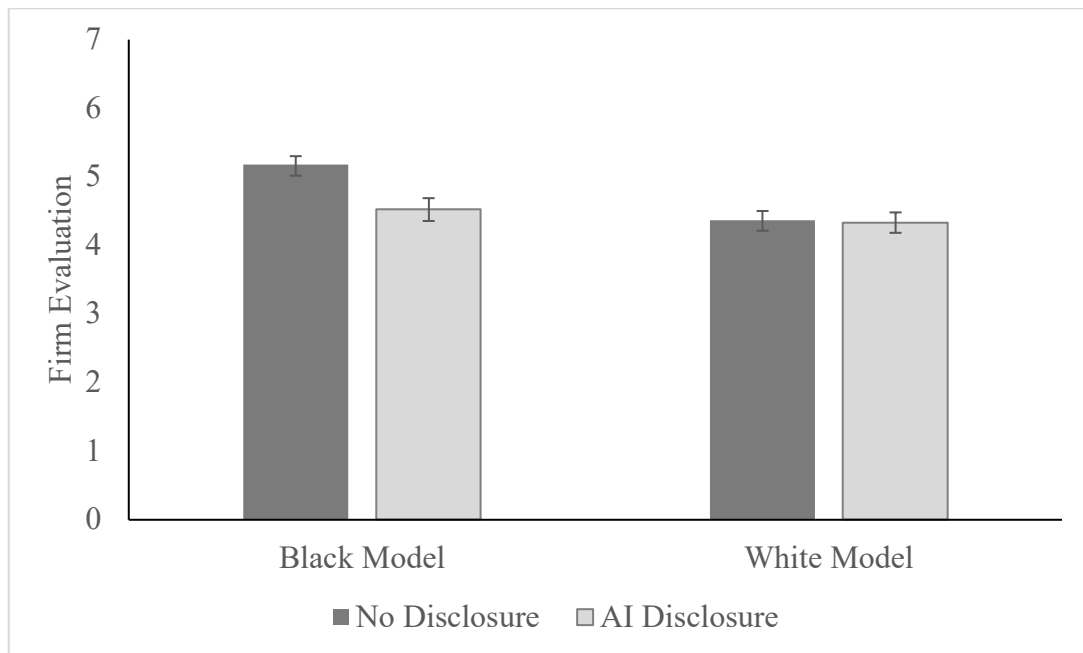
## FIGURE 2

---

<sup>2</sup> Across all studies, we report the racial characteristics of our samples using a “non-descriptive, majority-focused” approach as recommended in Web Appendix G of Uduchi, Clair and Crabbe (2024).

## THE EFFECT OF AI DISCLOSURE AND MODEL RACE ON FIRM EVALUATION

### (STUDY 1)



These findings provide initial support for H1: disclosing synthetic model use negatively impacts firm evaluations for Black (but not White) models. Importantly, while featuring Black models typically improves firm evaluations, this advantage disappears when consumers know the models are synthetic.

### STUDY 2: NATURALISTIC ADS AND PROCESS EXAMINATION

Study 2 ([https://aspredicted.org/PMH\\_SQ9](https://aspredicted.org/PMH_SQ9)) had two goals: to boost external validity by using naturalistic ads and to test our hypothesized process explanations—cultural essence (H2a), DEI commitment (H2b), and woke washing (H2c).

#### Method

This study employed a 2 (AI disclosure: absent vs. present)  $\times$  2 (model race: Black vs. White) between-subjects design. While five hundred and ninety-nine recruits from CloudResearch participated in our study, we excluded 13 participants who failed the attention check (2.2% of respondents), resulting in a final sample of 586 participants (50.9% female, 2.2% non-binary, 72% White;  $M_{\text{age}} = 40.19$ ,  $SD_{\text{age}} = 12.83$ ).

Participants indicated their gender and viewed one of four advertisements (Appendix C). AI disclosure was manipulated by including (vs. omitting) a statement that the model was synthetic (“Please note that this image was generated by an AI algorithm and is not a photograph of a real person.”). Model race was manipulated by featuring a Black or White synthetic model that matched participants’ gender (non-binary participants were randomly assigned to a male or female model). Participants then evaluated the firm as in study 1 ( $\alpha = .96$ ) and assessed cultural essence ( $\alpha = .96$ ), DEI commitment ( $\alpha = .95$ ), woke washing ( $\alpha = .94$ ), and cultural appropriation ( $\alpha = .93$ ; see all process measure items in Appendix D), before completing the attention check and demographics.

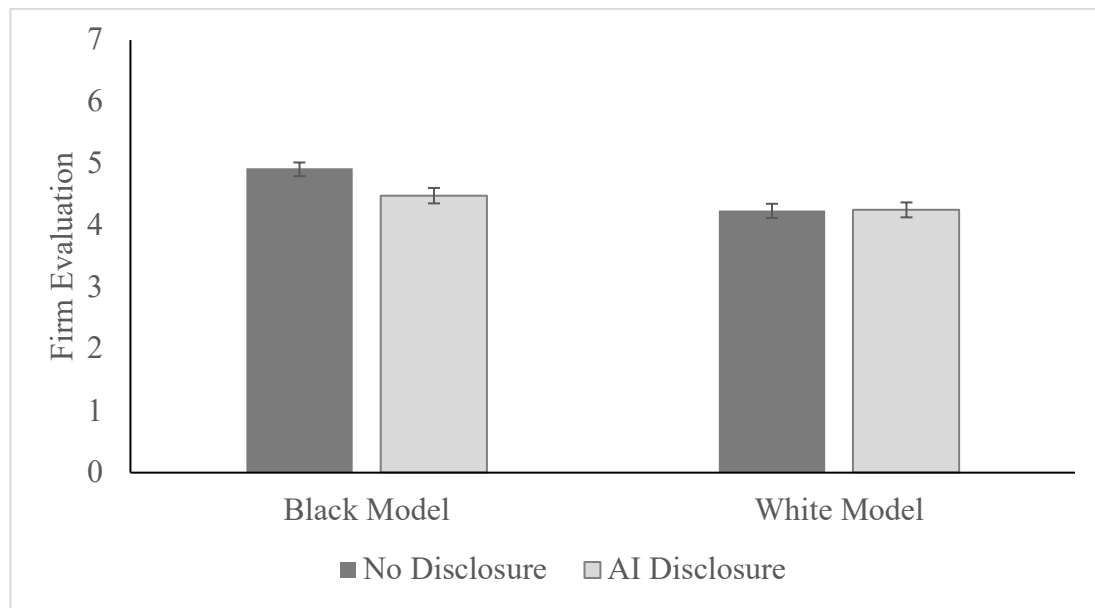
## Results and Discussion

*Firm evaluation.* ANOVA results revealed a marginally significant main effect AI disclosure ( $F(1, 582) = 3.70$ ,  $p = .055$ ,  $\eta_p^2 = .01$ ) and significant main effect of model race ( $F(1, 582) = 16.23$ ,  $p < .001$ ,  $\eta_p^2 = .03$ ) on firm evaluation. As in study 1, the interaction was also significant ( $F(1, 582) = 4.156$ ,  $p = .042$ ,  $\eta_p^2 = .01$ ). Planned contrasts revealed that showed that for Black models, AI disclosure reduced firm evaluations ( $M_{\text{Control}} = 4.92$  vs.  $M_{\text{AI}} = 4.47$ ;  $F(1, 582) = 7.88$ ,  $p = .005$ ,  $\eta_p^2 = .01$ ) while White models showed no effect ( $M_{\text{Control}} = 4.24$  vs.  $M_{\text{AI}} = 4.25$ ;  $F(1, 582) = .01$ ,  $p = .935$ ,  $\eta_p^2 = .00$ ; Figure 3). Further, without AI disclosure, Black models received higher evaluations than White models ( $F(1, 582) = 18.60$ ,

$p < .001$ ,  $\eta_p^2 = .03$ ), but this advantage disappeared with AI disclosure ( $F(1, 582) = 1.96$ ,  $p = .16$ ,  $\eta_p^2 = .00$ ).

**FIGURE 3**

THE EFFECT OF AI DISCLOSURE AND MODEL RACE ON FIRM EVALUATION  
(STUDY 2)



*Process measures.* We ran a series of ANOVAs with AI disclosure and model race as predictors and each potential process measure as the dependent variable (full results in Table 1). Results revealed significant AI disclosure x Model race interactions on cultural essence ( $F(1, 582) = 5.19$ ;  $p = .023$ ;  $\eta_p^2 = .01$ ) and DEI commitment ( $F(1, 582) = 6.41$ ;  $p = .012$ ;  $\eta_p^2 = .01$ ) and a marginally significant interaction on woke washing ( $F(1, 582) = 3.52$ ;  $p = .061$ ;  $\eta_p^2 = .01$ ). The interactive effect on cultural appropriation did not reach significance ( $F(1, 582) = 2.04$ ;  $p = .154$ ;  $\eta_p^2 = .00$ ) and is not discussed further. Contrasts showed that for Black models, AI disclosure reduced cultural essence ( $M_{\text{Control}} = 4.38$  vs.  $M_{\text{AI}} = 3.73$ ;  $F(1, 582) = 14.03$ ,  $p < .001$ ,  $\eta_p^2 = .02$ ) and perceived DEI commitment ( $M_{\text{Control}} = 4.60$  vs.  $M_{\text{AI}} = 4.09$ ;  $F(1, 582) = 10.09$ ,  $p = .002$ ,  $\eta_p^2 = .02$ ) while increasing woke washing perceptions ( $M_{\text{Control}} =$

3.50 vs.  $M_{AI} = 4.02$ ;  $F(1, 582) = 8.34$ ,  $p = .004$ ,  $\eta_p^2 = .01$ ). In the White model condition, AI disclosure had no significant effect on any of these variables.

**TABLE 1**  
EFFECTS OF AI DISCLOSURE AND MODEL RACE ON POTENTIAL PROCESS  
MEASURES (STUDY 2)

| DV                     | Means       |      |             |      | Interaction                         | Contrast Within Black Model         | Contrast Within White Model       |
|------------------------|-------------|------|-------------|------|-------------------------------------|-------------------------------------|-----------------------------------|
|                        | Black Model |      | White Model |      |                                     |                                     |                                   |
|                        | Control     | AI   | Control     | AI   |                                     |                                     |                                   |
|                        |             |      |             |      |                                     |                                     |                                   |
| Cultural Essence       | 4.38        | 3.73 | 3.22        | 3.13 | F(1,582) = 5.19;<br><i>p</i> = .023 | F(1,582) = 14.03<br><i>p</i> < .001 | F(1,582) = .27<br><i>p</i> = .606 |
| DEI Commitment         | 4.60        | 4.09 | 2.86        | 2.93 | F(1,582) = 6.41<br><i>p</i> = .012  | F(1,582) = 10.09<br><i>p</i> = .002 | F(1,582) = .17<br><i>p</i> = .682 |
| Woke Washing           | 3.50        | 4.02 | 2.54        | 2.59 | F(1,582) = 3.52<br><i>p</i> = .061  | F(1,582) = 8.34<br><i>p</i> = .004  | F(1,582) = .05<br><i>p</i> = .819 |
| Cultural Appropriation | 2.73        | 2.98 | 2.28        | 2.18 | F(1,582) = 2.04<br><i>p</i> = .154  | F(1,582) = 2.14<br><i>p</i> = .144  | F(1,582) = .31<br><i>p</i> = .576 |

Moderated mediation analysis (Hayes 2013, model 8) confirmed that all three mechanisms mediated the negative effect of AI disclosure on firm evaluations for Black models (95% CIs excluded zero), but not for White models (95% CIs included zero; see Table 2).

**TABLE 2**  
MODERATED MEDIATION RESULTS (STUDY 2)

| Mediator         | Index of Moderated Mediation |                  | Conditional Indirect Effect for Black Model |                  | Conditional Indirect Effect for White Model |                 |
|------------------|------------------------------|------------------|---------------------------------------------|------------------|---------------------------------------------|-----------------|
|                  | Index                        | 95% CI           | Indirect Effect                             | 95% CI           | Indirect Effect                             | 95% CI          |
| Cultural Essence | -.2061                       | [-.4033, -.0291] | -.2391                                      | [-.3918, -.1051] | -.0330                                      | [-.1588, .0931] |
| DEI Commitment   | -.1335                       | [-.2685, -.0281] | -.1182                                      | [-.2210, -.0376] | .0153                                       | [-.0575, .0920] |
| Woke Washing     | -.0760                       | [-.1669, .0017]  | -.0826                                      | [-.1563, -.0212] | -.0066                                      | [-.0616, .0457] |

In sum, study 2 replicated the interactive effect of AI disclosure and model race on firm evaluations using naturalistic stimuli and provided evidence for three mediating mechanisms: cultural essence, DEI commitment, and woke washing perceptions. A supplementary study and post-hoc analyses (Appendix F) suggest that this interactive effect does not appear to significantly vary based on the race of participants. Further, an additional study (Appendix G) extends our results by demonstrating that the detrimental effects of AI disclosure for Black models go beyond mere evaluations and translate into real behavioral consequences (willingness to sign-up for promotional emails).

### **STUDY 3: MITIGATION VIA BLACK-OWNED AGENCY COLLABORATION**

Our findings thus far raise an important question: How can firms mitigate negative consequences of AI disclosure when featuring underrepresented groups? One solution is collaborating with Black-owned agencies when featuring synthetic Black models. Such collaboration may enhance perceptions of cultural essence by implying authentic lived experience behind the imagery. In addition, it may bolster perceptions of DEI commitment and reduce perceptions of woke washing by demonstrating support for Black-owned businesses. Thus, we hypothesized that while AI disclosure negatively impacts firm evaluations when the agency is not non-descript (consistent with our previous findings), this effect will be mitigated when the advertisement is attributed to a Black-owned agency.

#### **Method**

Study 3 ([https://aspredicted.org/6FR\\_4G6](https://aspredicted.org/6FR_4G6)) employed a 2 (AI disclosure: absent vs. present)  $\times$  2 (Ad agency: Control vs. Black-Owned) between-subjects design. Six hundred



recruits from CloudResearch participated in our study. As preregistered, we excluded 9 participants who failed the attention check (1.5% of respondents), resulting in a final sample of 591 participants (54.0% female, 2.0% non-binary, 73% White;  $M_{\text{age}} = 38.29$ ,  $SD_{\text{age}} = 12.61$ ).

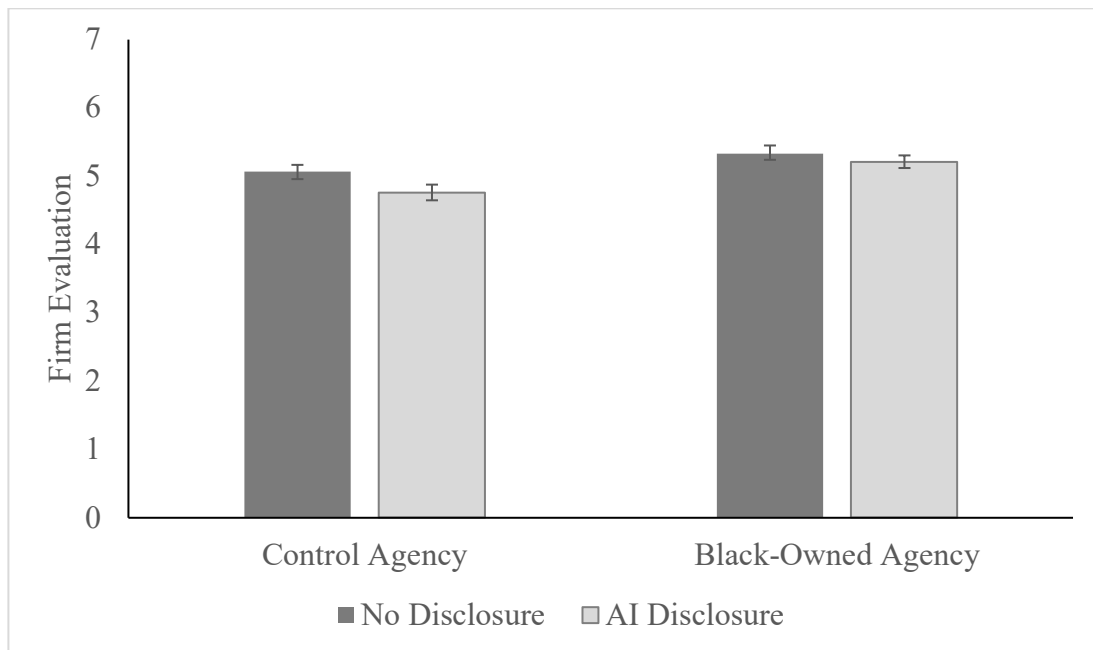
Participants indicated their gender, read a brief description of a healthcare firm ("Health+ Lab"), and viewed an advertisement featuring a Black model (gender-matched as in Study 2). AI disclosure was manipulated by including (vs. excluding) text stating the image was AI-generated. Ad agency was manipulated by specifying collaboration with either "an advertising agency" (Control) or "a Black-Owned advertising agency" (Black-owned; Appendix E). Participants then evaluated the firm as in studies 1 and 2 ( $\alpha = .95$ ) and completed demographics.

## Results and Discussion

*Firm evaluation.* ANOVA results revealed significant main effect of AI Disclosure ( $F(1, 587) = 4.16, p = .042, \eta_p^2 = .01$ ) and Ad agency ( $F(1, 587) = 11.76, p < .001, \eta_p^2 = .02$ ) on firm evaluation. While the interactive effect did not reach significance ( $F(1, 587) = .77, p = .38, \eta_p^2 = .00$ ), we examined the effect of AI Disclosure under each Ad Agency condition based on our a priori predictions (Aiken & West, 1991). When there was no specification about agency ownership, AI disclosure again reduced firm evaluations ( $M_{\text{Control}} = 5.07$  vs.  $M_{\text{AI}} = 4.76$ ;  $F(1, 587) = 4.31, p = .038, \eta_p^2 = .01$ ). However, when the Ad agency was explicitly described as Black-Owned, this effect was not significant ( $M_{\text{Control}} = 5.33$  vs.  $M_{\text{AI}} = 5.21$ ;  $F(1, 587) = .67, p = .415, \eta_p^2 = .00$ ; see Figure 4).

## FIGURE 4

## THE EFFECT OF AI DISCLOSURE AND AD AGENCY OWNERSHIP ON FIRM EVALUATION (STUDY 3)



### GENERAL DISCUSSION

Across five studies, we found consistent evidence that disclosing the use of AI-generated models in advertising harms consumer evaluations when the depicted models are Black (vs. White). These effects hold across various product categories, persist for text descriptions and naturalistic ads, and extend to a behavioral outcome. We identify three interrelated authenticity mechanisms—reduced cultural essence, weakened beliefs in the firm’s DEI commitment, and heightened perceptions of woke washing, and show preliminary evidence that collaboration with a Black-owned agency can attenuate the negative effects.

Our work extends research on racialized depictions and DEI in marketing by identifying a novel factor, the use of synthetic models, that shapes responses to depictions of underrepresented groups. Although featuring Black models generally benefits brands (Hartmann et al., 2024; Lenk et al., 2024), those benefits dissipate when consumers learn the

models are synthetic, establishing a boundary condition for theories of racial representation. We also add to the AI-in-marketing literature by showing that the racial characteristics of AI imagery fundamentally alter reactions; most prior work on AI disclosure centers on text or ignores race. Our findings reveal that AI disclosure cannot be understood without racial context, because technological choices carry different symbolic weight given historical patterns of representation.

The differential effects between synthetic Black and White models highlight that technological innovations in advertising cannot be evaluated apart from social and historical context (Grier et al., 2024). While AI-generated White models are often perceived through the lens of default representation, their use still carries symbolic meaning, shaped by Whiteness's historical invisibility in advertising. The contrasting effects underscore that ostensibly similar technological choices can bear very different symbolic consequences, as all uses of synthetic representation are embedded in broader histories of race and advertising.

An alternative explanation is that consumers react to labor displacement rather than race-specific considerations (Mariani, 2022; Puntoni et al., 2021). However, if displacement alone drove responses, negative effects should appear for both Black and White depictions. Instead, the asymmetric pattern suggests displacement concerns are amplified when substitution targets historically marginalized groups. Future work should directly test labor displacement as a parallel mechanism.

Although we focus on Black and White depictions, future research should examine other racial identities. We emphasize Black models because of their central role in cultural production, historical underrepresentation in advertising, and symbolic resonance in DEI debates (Crockett, 2008; Lenk et al., 2024). Synthetic depictions of Asian or Latinx models may elicit distinct reactions (e.g., perceptions of invisibility or tokenism), which warrant further theorizing (Mastro & Behm-Morawitz, 2005; Mistry & Kiyama, 2021).

Our studies center on traditional advertising, but future work should test generalization to domains with different authenticity and transparency expectations; for instance, political advertising may invite stronger scrutiny than commercial messaging (e.g., Luebke & Engelmann, 2023). Beyond context, moderators such as political ideology and cultural orientations (e.g., individualism vs. collectivism) likely shape interpretations of synthetic racial representation (Fernandes et al., 2022; Shavitt & Cho, 2016). Additional psychological consequences merit attention: repeated substitution of real minority models with synthetic ones may produce dehumanization (Haslam, 2006), symbolically denying full humanity and lived cultural presence.

Synthetic representation is proliferating across marketing and media. Virtual influencers raise questions about the racial dynamics of synthetic personas: the Shudu Gram controversy, a dark-skinned virtual influencer created by a White man, illustrates how appropriation and lack of authentic representation can spark backlash (Jackson, 2018). Relatedly, Henry and Bradford (2025) describe “phygital Blackfishing,” wherein non-Black individuals adopt Black features via avatars and metaverse platforms to monetize Black aesthetics. These cases underscore the need to interrogate how race and technology intersect in shaping representation, and how synthetic identities may perpetuate appropriation, exclusion, and misrepresentation.

As AI reshapes marketing, our results show that the social meaning of representation is inseparable from its mode of production. Synthetic diversity may appear to deliver inclusion, but in contexts like Black representation it risks re-inscribing symbolic exclusion. By situating these effects in perceptions of authenticity, we show that seemingly neutral technological choices carry profound social and cultural weight—making the stakes of *how* as important as *who* in the future of diverse representation.

## REFERENCES

- Aaker, J. L., Brumbaugh, A. M., & Grier, S. A. (2000). Nontarget markets and viewer distinctiveness: The impact of target marketing on advertising attitudes. *Journal of Consumer Psychology*, 9(3), 127–140.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Arango, L., Singaraju, S. P., & Niininen, O. (2023). Consumer responses to AI-generated charitable giving ads. *Journal of Advertising*, 52(4), 486–503.
- Arsel, Z., Crockett, D., & Scott, M. L. (2022). Diversity, equity, and inclusion (DEI) in the Journal of Consumer Research: A curation and research agenda. *Journal of Consumer Research*, 48(5), 920–933.
- Baek, T. H., Kim, J., & Kim, J. H. (2024). Effect of disclosing AI-generated content on prosocial advertising evaluation. *International Journal of Advertising*, 1–22.
- Beverland, M. B. (2006). The ‘real thing’: Branding authenticity in the luxury wine trade. *Journal of Business Research*, 59(2), 251–258.
- Brustein, J. (2023, November 6). Biden’s AI order is step 1 of a very long project. *Bloomberg*.
- Caldwell, M., Andrews, J. T. A., Tanay, T., & Griffin, L. D. (2020). AI-enabled future crime. *Crime Science*, 9(1), 1–13.
- Campbell, C., Plangger, K., Sands, S., & Kietzmann, J. (2022). Preparing for an era of deepfakes and AI-generated ads: A framework for understanding responses to manipulated advertising. *Journal of Advertising*, 51(1), 22–38.

- Campbell, C., Sands, S., McFerran, B., & Mavrommatis, A. (2023). Diversity representation in advertising. *Journal of the Academy of Marketing Science*, 1–29.
- Castelo, N., Bos, M. W., & Lehmann, D. R. (2019). Task-dependent algorithm aversion. *Journal of Marketing Research*, 56(5), 809–825.
- Castro, A. (2024, March 26). Adobe’s new GenStudio platform is an AI factory for advertisers. *The Verge*.
- Clark, M. (2023, March 29). Levi’s addresses backlash after using AI models to ‘increase diversity’ in online shopping. *Independent*.
- Cohen, E. (2001). Ethnic tourism: A theoretical perspective. *Tourism Recreation Research*, 26(2), 1–17.
- Costello, J. P., & Malkoc, S. A. (2022). Why are donors more generous with time than money? The role of perceived control over donations on charitable giving. *Journal of Consumer Research*, 49(4), 678–696.
- Crockett, D. (2008). Marketing blackness: How advertisers use race to sell products. *Journal of Consumer Culture*, 8(2), 245–268.
- Crolic, C., Thomaz, F., Hadi, R., & Stephen, A. T. (2022). Blame the bot: Anthropomorphism and anger in customer–chatbot interactions. *Journal of Marketing*, 86(1), 132–148.
- Davis, N., Olsen, N., Perry, V. G., Stewart, M. M., & White, T. B. (2023). I’m only human? The role of racial stereotypes, humanness, and satisfaction in transactions with anthropomorphic sales bots. *Journal of the Association for Consumer Research*, 8(1), 47–58.

- Dietvorst, B. J., Simmons, J. P., & Massey, C. (2014). Algorithm aversion: People erroneously avoid algorithms after seeing them err. *Journal of Experimental Psychology: General*, 144(1), 114–126.
- Dunivin, Z. O., Yan, H. Y., Ince, J., & Rojas, F. (2022). Black Lives Matter protests shift public discourse. *Proceedings of the National Academy of Sciences*, 119(10), e2117320119.
- Edwards, A. (2025, August 28). Digital Blackface? J.Crew's Faces Heat Over "AI Slop" Sneaker Ad. *B&T*.
- Eisend, M., Muldrow, A. F., & Rosengren, S. (2023). Diversity and inclusion in advertising research. *International Journal of Advertising*, 42(1), 52–59.
- Fernandes, D., Ordabayeva, N., Han, K., Jung, J., & Mittal, V. (2022). How political identity shapes customer satisfaction. *Journal of Marketing*, 86(6), 116–134.
- Furman, D. (2024, March 9). AI is affecting small business marketing. How can you use it right now? *Inc*.
- Graham, M. M. (2024, June 26). Deepfakes: Federal and state regulation aims to curb a growing threat. *Thomson Reuters*.
- Grier, S. A., Crockett, D., Johnson, G. D., Thomas, K. D., & Bradford, T. W. (2024). Race in consumer research: Past, present, and future. *Journal of Consumer Research*, 51(1), 56–65.
- Hadi, R., Melumad, S., & Park, E. S. (2024). The metaverse: A new digital frontier for consumer behavior. *Journal of Consumer Psychology*, 34(1), 142–166.
- Hartmann, J., Netzer, O., & Zalta, R. (2023). Diversity in advertising in times of racial unrest. *SSRN*.

- Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, 10(3), 252–264.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hermann, E., & Puntoni, S. (2024). Artificial intelligence and consumer behavior: From predictive to generative AI. *Journal of Business Research*, 180, 114720.
- Henry, J., & Bradford, T. W. (2025). Phygital blackfishing: New tools, new opportunities. *Journal of Strategic Marketing*, 1–15.
- Holt, B. (2023, April 4). Levi's announced they'd use AI-generated models to 'increase diversity.' Black models say it's a step backward and they should book real people instead. *Business Insider*.
- Hulzebosch, N., Ibrahimi, S., & Worring, M. (2020). Detecting CNN-generated facial images in real-world scenarios. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops* (pp. 642–643).
- Jackson, L. M. (2018, May 4). Shudu Gram is a white man's digital projection of real-life Black womanhood. *The New Yorker*.
- Jeong, Y., Shaw, J., Ritchart, E., & Dunnam, C. C. (2024). The impact of the 2020 BLM resurgence on the racial representations of ads and ad evaluations: Analysis of Super Bowl ads. *Journalism & Mass Communication Quarterly*.
- Johnson, G. D., & Grier, S. A. (2011). Targeting without alienating: Multicultural advertising and the subtleties of targeted advertising. *International Journal of Advertising*, 30(2), 233–258.



- Kareklas, I. (2010). A quantitative review and extension of racial similarity effects in advertising (Doctoral dissertation, University of Connecticut). ProQuest Dissertations Publishing. (UMI 3415548)
- Kim, D., Jiang, Z., & Thomadsen, R. (2023). TV advertising effectiveness with racial minority representation: Evidence from the mortgage market. *SSRN*.
- Kirk, C. P., & Givi, J. (2025). The AI-authorship effect: Understanding authenticity, moral disgust, and consumer responses to AI-generated marketing communications. *Journal of Business Research*, 186, 114984.
- Khan, U., Kim, S., Choi, S., & Labroo, A. (2024). Diversity representations in advertising: Enhancing variety perceptions and brand outcomes. *Journal of Consumer Research*, 52(1), 179–204.
- Khan, U., & Kalra, A. (2022). It's good to be different: How diversity impacts judgments of moral behavior. *Journal of Consumer Research*, 49(2), 177–201.
- Kietzmann, J., & Park, A. (2024). Written by ChatGPT: AI, large language models, conversational chatbots, and their place in society and business. *Business Horizons*, 67(5), 453–459.
- Kietzmann, J., Lee, L. W., McCarthy, I. P., & Kietzmann, T. C. (2020). Deepfakes: Trick or treat? *Business Horizons*, 63(2), 135–146.
- Lago, F., Pasquini, C., Böhme, R., Dumont, H., Goffaux, V., & Boato, G. (2021). More real than real: A study on human visual perception of synthetic faces. In *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision* (pp. 3249–3258).

- Lenk, J. D., Hartmann, J., & Sattler, H. (2024). White Americans' preference for Black people in advertising has increased in the past 66 y: A meta-analysis. *Proceedings of the National Academy of Sciences*, 121(9), e2307505121.
- Lin, J. D., Kim, N. Y. J., Uduehi, E., & Keinan, A. (2024). Culture for sale: Unpacking consumer perceptions of cultural appropriation. *Journal of Consumer Research*, 51(3), 571–594.
- Lim, S., & Schmälzle, R. (2024). Exploring the mechanisms of AI message generation: A chatbot development activity for students. *Communication Teacher*, 38(1), 21–27.
- Logg, J. M., Minson, J. A., & Moore, D. A. (2019). Algorithm appreciation: People prefer algorithmic to human judgment. *Organizational Behavior and Human Decision Processes*, 151, 90–103.
- Longoni, C., & Cian, L. (2022). Artificial intelligence in utilitarian vs. hedonic contexts: The “word-of-machine” effect. *Journal of Marketing*, 86(1), 91–108.
- Luebke, S. M., & Engelmann, I. (2023). Perceiving politicians as true to themselves: Development and validation of the perceived political authenticity scale. *PLoS One*, 18(5), e0285344.
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393–421.
- Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI in marketing, consumer research and psychology: A systematic literature review and research agenda. *Psychology & Marketing*, 39(4), 755–776.
- Marr, B. (2023, June 7). Pixel perfect: The rise of AI fashion models. *Forbes*.

- Mastro, D. E., & Behm-Morawitz, E. (2005). Latino representation on primetime television. *Journalism & Mass Communication Quarterly*, 82(1), 110–130.
- Miller, E. J., Steward, B. A., Witkower, Z., Sutherland, C. A. M., Krumhuber, E. G., & Dawel, A. (2024). AI hyperrealism: Why AI faces are perceived as more real than human ones. *Psychological Science*, 34(12), 1390–1403.
- Mistry, J., & Kiyama, F. (2021). Navigating marginalization and invisibility as Asian Americans in the U.S. *American Psychologist*, 76(4), 582–596.
- Moss, A., & Litman, L. (2020). Demographics of people on Amazon Mechanical Turk. *Cloud Research*.
- Nightingale, S. J., & Farid, H. (2022). AI-synthesized faces are indistinguishable from real faces and more trustworthy. *Proceedings of the National Academy of Sciences*, 119(8), e2120481119.
- Nunes, J. C., Ordanini, A., & Giambastiani, G. (2021). The concept of authenticity: What it means to consumers. *Journal of Marketing*, 85(4), 1–20.
- Omi, M., & Winant, H. (2014). *Racial formation in the United States* (3rd ed.). Routledge.
- Poole, S. M., Grier, S. A., Thomas, K. D., Sobande, F., Ekpo, A. E., Torres, L. T., Addington, L. A., Weekes-Laidlow, M., & Henderson, G. R. (2021). Operationalizing critical race theory in the marketplace. *Journal of Public Policy & Marketing*, 40(2), 126–142.
- Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, 85(1), 131–151.
- Reed, A., Forehand, M. R., Puntoni, S., & Warlop, L. (2012). Identity-based consumer behavior. *Journal of Consumer Psychology*, 22(3), 310–321.

- Sabharwal, M. (2014). Is diversity management sufficient? Organizational inclusion to further performance. *Public Personnel Management*, 43(2), 197–217.
- Satariano, A. (2023, December 8). E.U. agrees on landmark artificial intelligence rules. *The New York Times*.
- Shavitt, S., & Cho, H. (2016). Culture and consumer behavior: The role of horizontal and vertical cultural factors. *Current Opinion in Psychology*, 8, 149–154.
- Shoaib, M. (2023, April 25). AI models are here. Can they actually improve fashion representation? *Vogue Business*.
- Sierra, J. J., Hyman, M. R., & Heiser, R. S. (2012). Ethnic identity in advertising: A review and meta-analysis. *Journal of Promotion Management*, 18(4), 489–513.
- Sloane, G. (2023, December 5). How AI-generated customers can help brands learn more about real consumers. *Ad Age*.
- Sobande, F. (2019). Woke-washing ‘intersectional’ femvertising and branding “woke” bravery. *European Journal of Marketing*, 54(11), 2723–2745.
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Journal of Consumer Psychology*, 12(2), 133–144.
- Stevens, W. E. (2021). Blackfishing on Instagram: Influencing and the commodification of Black urban aesthetics. *Social Media + Society*, 7(3), 1–15.
- To, R. N., Wu, Y. C., Kianian, P., & Zhang, Z. (2025). When AI doesn’t sell Prada: Why using AI-generated advertisements backfires for luxury brands. *Journal of Advertising Research*, 1–35.

- Uduehi, E., Saint Clair, J., & Crabbe, R. (2024a). Intersectionality in marketing: A paradigm for understanding understudied consumers. *Journal of Marketing*.
- Uduehi, E., Saint Clair, J., Hamilton, M., & Reed, A. (2024b). When diversity backfires: The asymmetric role of multicultural marketing on brand perception. *SSRN*.
- Vredenburg, J., Kapitan, S., Spry, A., & Kemper, J. A. (2020). Brands taking a stand: Authentic brand activism or woke washing? *Journal of Public Policy & Marketing*, 39(4), 444–460.
- Wiles, J. (2023, January 26). Beyond ChatGPT: The future of generative AI for enterprises. *Gartner*.
- Wortel, C., Vanwesenbeeck, I., & Tomas, F. (2024). Made with artificial intelligence: The effect of artificial intelligence disclosures in Instagram advertisements on consumer attitudes. *Emerging Media*, 2(3), 547–570.
- Yalcin, G., Lim, S., Puntoni, S., & van Osselaer, S. M. J. (2022). Thumbs up or down: Consumer reactions to decisions by algorithms versus humans. *Journal of Marketing Research*, 59(4), 696–717.

## APPENDIX A: EXAMPLES OF SYNTHETIC MODELS



### Hire synthetic models for your next project

Deep Agency offers virtual photo studio services with advanced AI technology for professional photos without leaving home. Hire virtual models and elevate your photo game and say goodbye to traditional photo shoots.

Currently in closed beta

Made by [@dannypostmag](#)



As seen on:

The Guardian

VCE

PC

TC TechCrunch



<https://thispersondoesnotexist.com>



GENERATED PHOTOS

## APPENDIX B: STUDY 1 STIMULI

### **All participants read the following:**

“Capital Partners is a new financial services company that will offer banking, investing, insurance, and wealth management solutions to help clients reach their financial goals. Their mission is to empower people to grow and protect their hard-earned money through secure, innovative products and dedicated service.”

### **Control Disclosure + Black model condition also read (emphasis added):**

“Capital Partners is preparing to launch an advertising campaign showcasing its products. The company has decided to use **Black models** for their campaign. The aim of the campaign is to spread brand awareness and to communicate the benefits of its offerings.”

### **Control Disclosure + White model condition also read (emphasis added):**

“Capital Partners is preparing to launch an advertising campaign showcasing its products. The company has decided to use **White models** for their campaign. The aim of the campaign is to spread brand awareness and to communicate the benefits of its offerings.”

### **AI Disclosure + Black model condition also read (emphasis added):**

“Capital Partners is preparing to launch an advertising campaign showcasing its products. The company has decided to use **Black AI-generated models** for their campaign. The aim of the campaign is to spread brand awareness and to communicate the benefits of its offerings.”

### **AI Disclosure + White model condition also read (emphasis added):**

“Capital Partners is preparing to launch an advertising campaign showcasing its products. The company has decided to use **White AI-generated models** for their campaign. The aim of the campaign is to spread brand awareness and to communicate the benefits of its offerings.”



## APPENDIX C: STUDY 2 STIMULI

### **Black Model Condition:**



### **White Model Condition:**



### **AI Disclosure Manipulation (absent vs. present):**

“Disclosure Statement: Please note that this image was generated by an AI algorithm and is not a photograph of a real person.”



## APPENDIX D: STUDY 2 PROCESS MEASURES

### Cultural Essence (three 7-point Likert items):

“This company is representing the individuality of Black [White] people,”

“This company is representing the value of Black [White] people,”

“This company is representing the true essence of Black [White] people;  $\alpha = .96$ )

### DEI Commitment (three 7-point Likert items adapted from Sabharwal 2014):

“This company is dedicated to diversity and inclusion,”

“This company is committed to representing all segments of society,”

“This company tries to create an awareness and appreciation of individual and cultural differences”

### Wokewashing Perceptions (three 7-point Likert items adapted from Uduehi et al. 2024a):

“This company is just pretending to care about diversity,”

“This company is exploiting diversity for marketing purposes,”

“This company is disingenuously signaling wokeness and inclusion”

### Cultural appropriation (three 7-point Likert items adapted from Lin et al. 2024):

“This company is unfairly benefitting from Black [White] culture,”

“This company is exploiting Black [White] culture,”

“This company is engaging in cultural appropriation”

## APPENDIX E: STUDY 3 STIMULI

### **All participants read the following firm description:**

“**Health+ Lab** is a new healthcare provider. It offers a full range of medical services, from primary care to specialty treatment, as well as flexible and budget-friendly insurance plans. The company is dedicated to helping its patients achieve their health goals through preventative care and health education. The company is preparing to launch an advertising campaign showcasing its products. On the next page, you will see the advertisement they are planning to use in their campaign.”

### **Advertisements:**



### **AI Disclosure x Ad Agency Manipulations:**

#### **No AI Disclosure + Control Ad Agency:**

“Please note that Health+ Lab collaborated with an advertising agency to design and create this ad.”

#### **No AI Disclosure + Black-Owned Ad Agency:**

“Please note that Health+ Lab collaborated with a Black-Owned advertising agency to design and create this ad.”

#### **AI Disclosure + Control Ad Agency:**

“Please note that this image was generated by an AI algorithm (i.e., it is not a photograph of a real person) and that Health+ Lab collaborated with an advertising agency to design and create this ad.”

#### **AI Disclosure + Black-Owned Ad Agency:**

“Please note that this image was generated by an AI algorithm (i.e., it is not a photograph of a real person), and that Health+ Lab collaborated with a Black-Owned advertising agency to design and create this ad.”

## APPENDIX F: SUPPLEMENTARY STUDY EXAMINING PARTICIPANT RACE

We also wished to examine whether the interactive effect uncovered in studies 1 and 2 might depend on the race of participants (i.e., the viewers of the ad). While post-hoc analyses did not reveal any three-way interaction of AI disclosure, model race, and participant race in any of our studies, this did not present a sufficient test as the vast majority of participants in these studies were White (68-73% across studies; which is a known characteristic of these recruiting platforms (Moss and Litman 2020). To more definitively test whether the race of viewers might play a role, we ran a study in which we recruited 50% White participants and 50% Black participants on the Prolific Academic platform. Thus, this study employed a 2 (AI disclosure: absent vs. present)  $\times$  2 (model race: Black vs. White)  $\times$  2 (participant race: Black vs. White) between-subjects design. Seven hundred and ninety participants recruited from Prolific Academic's platform participated in our study in exchange for a small fee. As per our preregistration, we excluded 14 participants who failed the attention check (1.8% of respondents), resulting in a final sample of 776 participants (44.6% female, 2.0% non-binary/other, 48.6% White<sup>3</sup>;  $M_{\text{age}} = 40.15$ ,  $SD_{\text{age}} = 13.93$ ).

After consenting to participate in the research, all participants indicated their gender and were told they would be asked to evaluate an advertisement. Subsequently, participants were randomly assigned to view an advertisement based on the four experimental conditions. AI disclosure was manipulated by either including (vs. excluding) a disclosure statement that the featured model was AI-generated ("Please note that this image was generated by an AI algorithm and is not a photograph of a real person."). Model race was manipulated by

---

<sup>3</sup> While we set parameters on Prolific Academic to request 50% White and 50% Black participants, the self-reported measure in the survey revealed that the resulting sample (after the attention check exclusion) was 48.6% White and 48.2% Black, with 3.2 % of participants classifying themselves in an alternative racial category (e.g., mixed race, etc.). The results reported here included these participants in the Black category, but the results do not meaningfully change if we classify those individuals as White nor if we entirely remove them from the analysis.

featuring an AI-generated model that was either Black or White (see stimuli below). Within each condition, we employed a gender-matching paradigm, where female participants viewed a female model, male participants viewed a male model, and non-binary participants were randomly assigned to a male or female model. After viewing the ad, participants were asked to evaluate it ( $\alpha = .96$ ).

#### Supplementary Study Stimuli:



#### Results and Discussion

An ANOVA with AI disclosure, model race, and participant race as predictors and ad evaluation as the dependent variable did not reveal a significant three-way interaction ( $F(1,768) = .86, p = .36, \eta_p^2 = .00$ ), suggesting that participants' race did not play a role in moderating interaction of AI disclosure and model race. Notably, participants race also did not independently interact with either AI disclosure ( $F(1,768) = .02, p = .88, \eta_p^2 = .00$ ) or

model race ( $F(1,768) = 2.23, p = .14, \eta_p^2 = .00$ ). Accordingly, we ran an additional two-way ANOVA with AI disclosure and model race as predictors while holding participants race as a covariate. Results did not reveal main effects of either AI disclosure ( $F(1,771) = .62, p = .43, \eta_p^2 = .00$ ) or model race ( $F(1,771) = 1.68, p = .20, \eta_p^2 = .00$ ) on ad evaluation. However consistent with the pattern of results predicted in H1 and the findings of studies 1 and 2, there was a significant AI disclosure x model race interaction on ad evaluation ( $F(1,771) = 4.28, p = .039, \eta_p^2 = .01$ ). An analysis of contrasts revealed that participants in the Black model condition reported lower firm evaluations when the models were described as AI-generated versus when they were not ( $M_{\text{Control}} = 5.12$  vs.  $M_{\text{AI}} = 4.89$ ;  $F(1, 771) = 4.05, p = .04$ ). In the White model condition, there was no effect of AI disclosure ( $M_{\text{Control}} = 4.81$  vs.  $M_{\text{AI}} = 4.92$ ;  $F(1, 771) = .83, p = .36$ ). Further, in the absence of AI disclosure, firm evaluations were higher when the models were Black than when they were White ( $F(1, 771) = 5.76, p = .02$ ). However, this effect disappeared when the models were described as being AI-generated ( $F(1, 771) = .30, p = .59$ ).

## **APPENDIX G: SUPPLEMENTARY STUDY DOCUMENTING A CONSEQUENTIAL BEHAVIORAL OUTCOME**

The purpose of this supplementary study (preregistered at: [https://aspredicted.org/RMY\\_DHS](https://aspredicted.org/RMY_DHS)) was to replicate the negative effect of AI disclosure for ads featuring Black models in a different category using a real behavioral outcome (willingness to sign-up for promotional emails).

### **Method**

This study employed a one factor (AI disclosure: absent vs. present) between-subjects design. Five hundred and ninety-nine recruits from CloudResearch participated in our study. As per our preregistration, we excluded 3 participants who failed the attention check (.5% of respondents), resulting in a final sample of 596 participants (61.2% female, 1.7% non-binary, 68% White;  $M_{age} = 36.76$ ,  $SD_{age} = 12.52$ ).

After consenting to participate in the research, all participants indicated their gender and were told they would view an advertisement for the skincare brand, “Skin Code”. Subsequently, all participants viewed an advertisement featuring a Black model (using the same gender matching stimuli as in the previous supplementary study). AI disclosure was manipulated by either including (vs. excluding) a disclosure statement that the featured model was AI-generated (“Please note that this image was generated by AI and is not a photograph of a real person,” see stimuli below). After viewing the ad, participants were asked if they would like to sign-up to receive promotional emails from the skincare line advertised, and if so, to provide their email address in the space indicated (a real behavioral measure of interest adapted from prior literature; Costello and Malkoc 2022). Finally,

participants completed the attention check, indicated their overall interest in skincare (“How interested are you in skincare in general?”; 1= Not at all interested; 7=Very Interested), reported their demographic information and were debriefed.

## Results and Discussion

*Email sign-up.* We conducted a generalized linear model with a binomial distribution and logit link to test the effect of AI disclosure (coded as 1 = disclosure, 0 = no disclosure) on participants' decision to sign up for promotional emails (coded as 1 = yes, 0 = no). As per prior research (Costello and Malkoc 2022) and our preregistration, participants who provided an email address were coded as “yes”. Model effects showed that AI disclosure significantly predicted email signup ( $\beta = -.497$ ; Wald  $\chi^2(1) = 3.93$ ;  $p = .047$ ). Specifically, participants in the AI disclosure condition were significantly less likely to sign up for emails (10%) compared to those in control condition (16%). Including general interest in skincare as a covariate in the model slightly strengthened the effect ( $\beta = -.523$ ; Wald  $\chi^2(1) = 4.11$ ;  $p = .043$ ).

Consistent with the results of studies 1 and 2, this study provides further evidence for the negative impact of AI disclosure on consumer responses when Black models are featured in advertisements. Specifically, we find that disclosing the use of AI models significantly reduced participants' likelihood of signing up for promotional emails from the skincare brand. This finding extends our previous results by demonstrating that the detrimental effects of AI disclosure go beyond mere perceptions and can translate into real consequences for brands.