Do We Find AI-Generated Less Emotional?

The Impact Of Reality Beliefs On Affective Responses

SCAN ME FOR MORE DETAILS ! !

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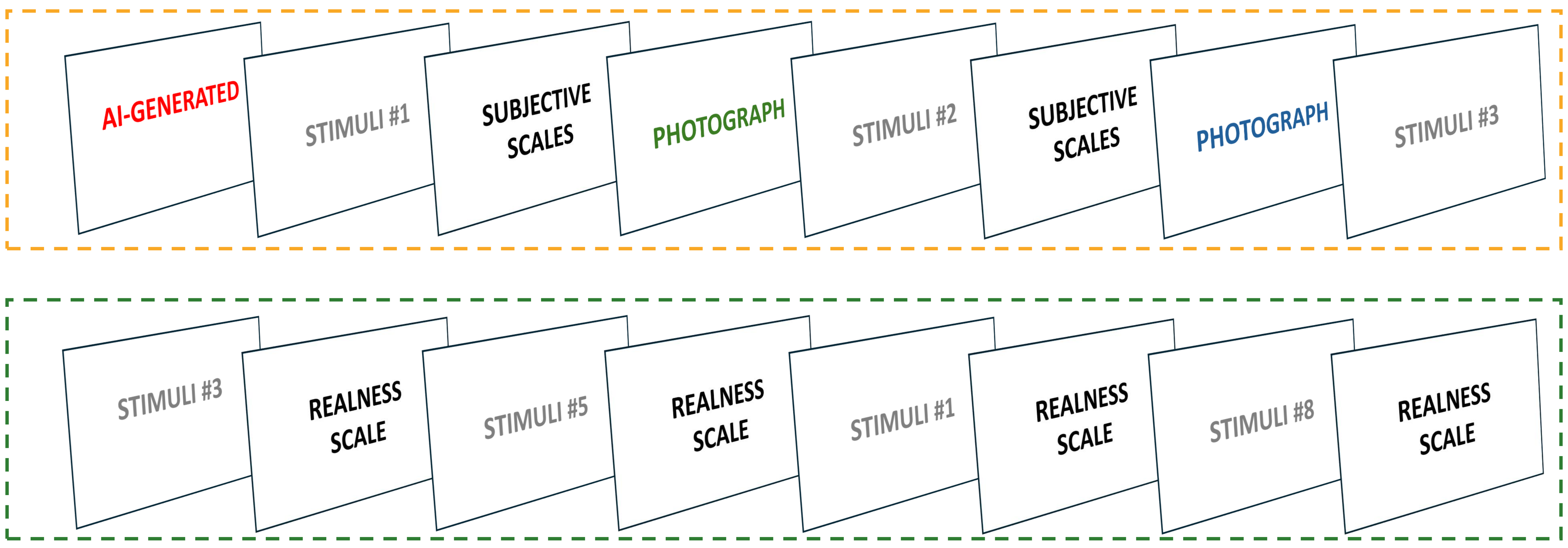
INTRODUCTION

- **Advances in AI** and **immersive technology (e.g., VR)** are making it **increasingly difficult to distinguish between real** and **artificial content -** a challenge with **serious consequences,** such as **misinformation[1].**
- For instance, **deepfake technologies** can **generate realistic fake videos** of politicians, spreading false narratives[2].
- In a "**post-truth**" era[3], where **emotions often outweigh facts**, it is **vital** to **understand** how **ambiguous** or **synthetic stimuli drive affect**.
- **Emotions shape** how we **interpret** and **respond** to our **environment[4]** and play a **key role** in how we **process ambiguous** or **fictional** content. Studies show that **framing stimuli as fictional reduces emotional impact**:
  - ↓ **Valence** & **intensity** for **neutral/negative videos[5]**
  - ↓ **Intensity** for **negative** pictures[6]
  - ↓ **Physiological arousal, subjective arousal, intensity** & **valence** for negative and neutral images[7]



STIMULUS

STUDY 1

DATABASE: American Multiracial Face Database[8]

VARIABLE: *Attractiveness*

STUDY 2

DATABASES: Nencki Affective Picture System[9] ***AND*** NAPS Erotic subset (NAPS ERO[10])

VARIABLE: *Arousal*

STUDY 3

DATABASE: NAPS Erotic subset (NAPS ERO[10])

VARIABLE: *Arousal*

"AI-Generated" beliefs leads to a *decrease* in *emotional responses*

RESULTS

STUDY 1 - *FACES*

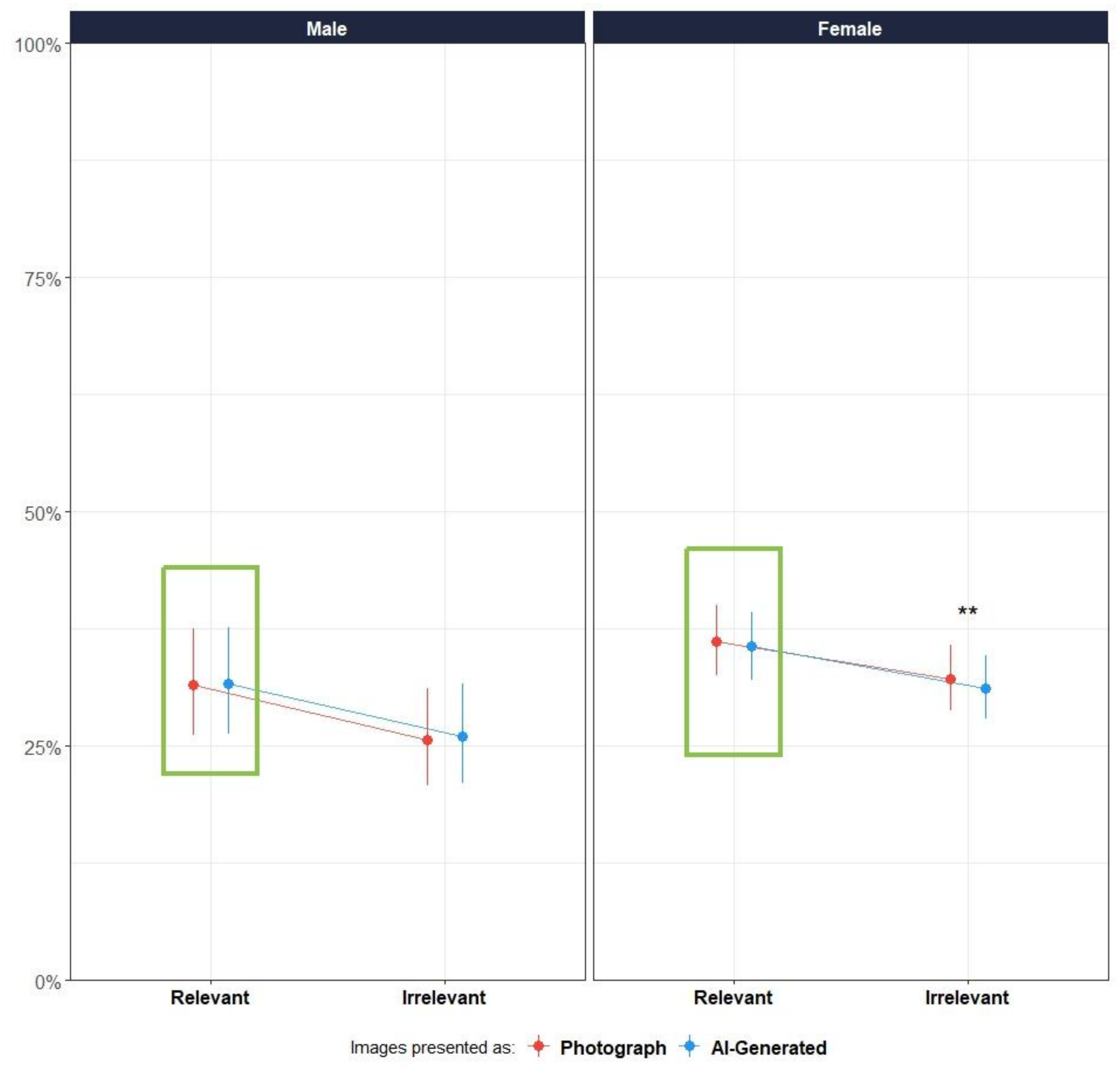


Figure 1. Estimated marginal means of attractiveness ratings across image relevance (relevant vs. irrelevant) and condition (photograph vs. AI-generated). Error bars represent 95% confidence intervals. Estimates are based on a generalized linear mixed model with participant- and stimulus-level random effects. ** $p < .01$.

- **N**: 206 participants (Mean age = 27.8, SD = 13.6, range: (18, 69); Gender: 76.7% women, 23.3% men)
- **Effect of condition**: Significant only for women, and only for *irrelevant* images (e.g., heterosexual women rating female faces); β = –0.05, 95% CI [–0.08, –0.001], *p* = .006.
- **Moderation by Honesty-Humility[11]**: Among women, higher Honesty-Humility predicted lower attractiveness ratings for AI-labelled *irrelevant* images vs photos (β = –0.03, *p* = .008).

STUDY 2 - *EROTIC + NON-EROTIC*

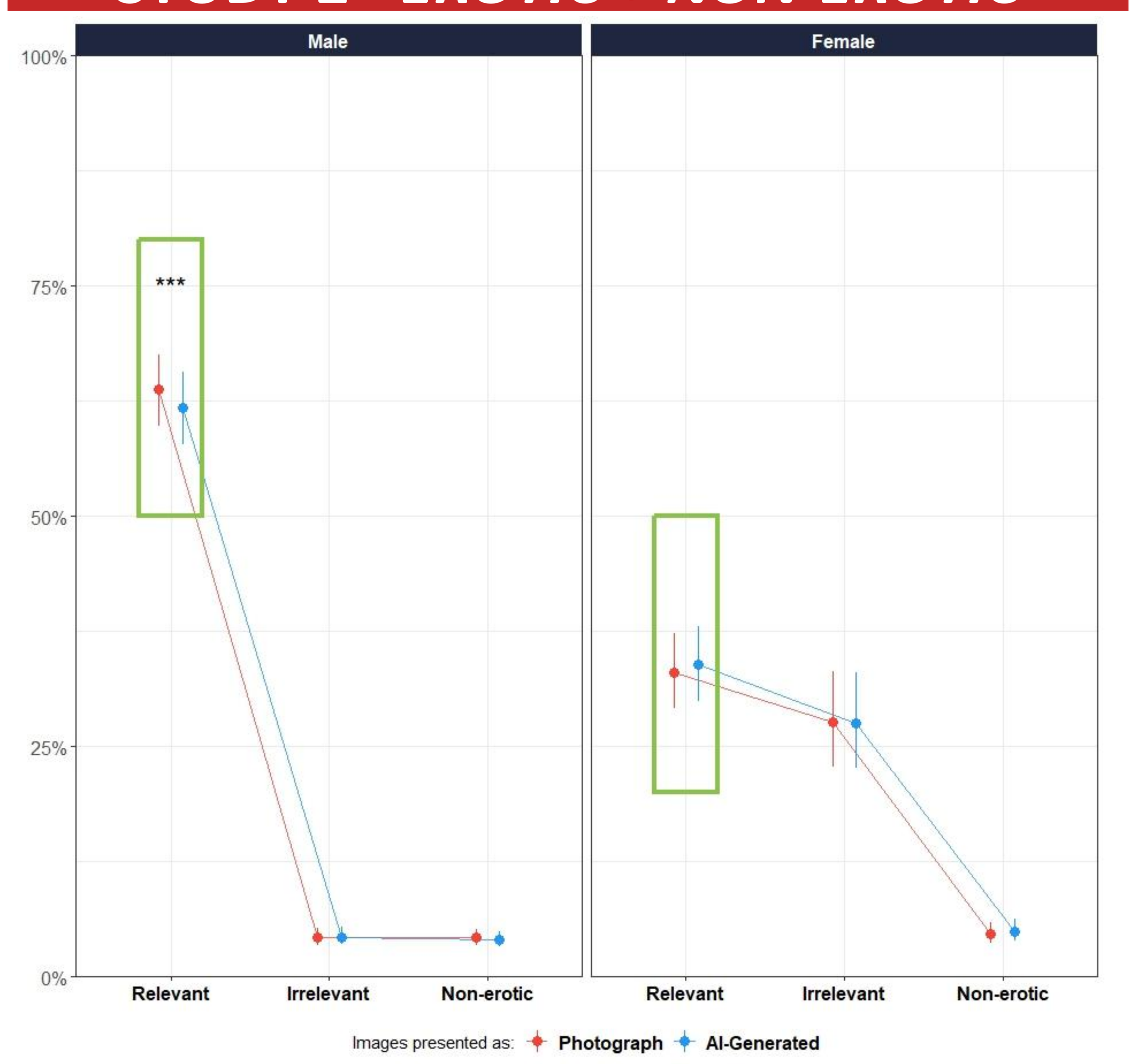


Figure 2. Estimated marginal means of arousal ratings across image relevance (relevant vs. irrelevant vs non-erotic) and condition (photograph vs. AI-generated). Error bars represent 95% confidence intervals. Estimates are based on a generalized linear mixed model with participant- and stimulus-level random effects. *** $p < .001$.

- **N**: 705 participants (M age = 30.2, SD = 11.8, range = 18–80); 35.7% women, 64.3% men.
- **Effect of condition**: Significant only for men, and only for *relevant* images (e.g., heterosexual men rating erotic images of women); β = –0.07, 95% CI [–0.13, –0.006], *p* < .001.
- **Moderation by AI-arousal feedback**: Men who believed AI images were less arousing rated them lower in arousal than photo-labelled images (β = –0.16, *p* = .009).

STUDY 3 - *EROTIC*

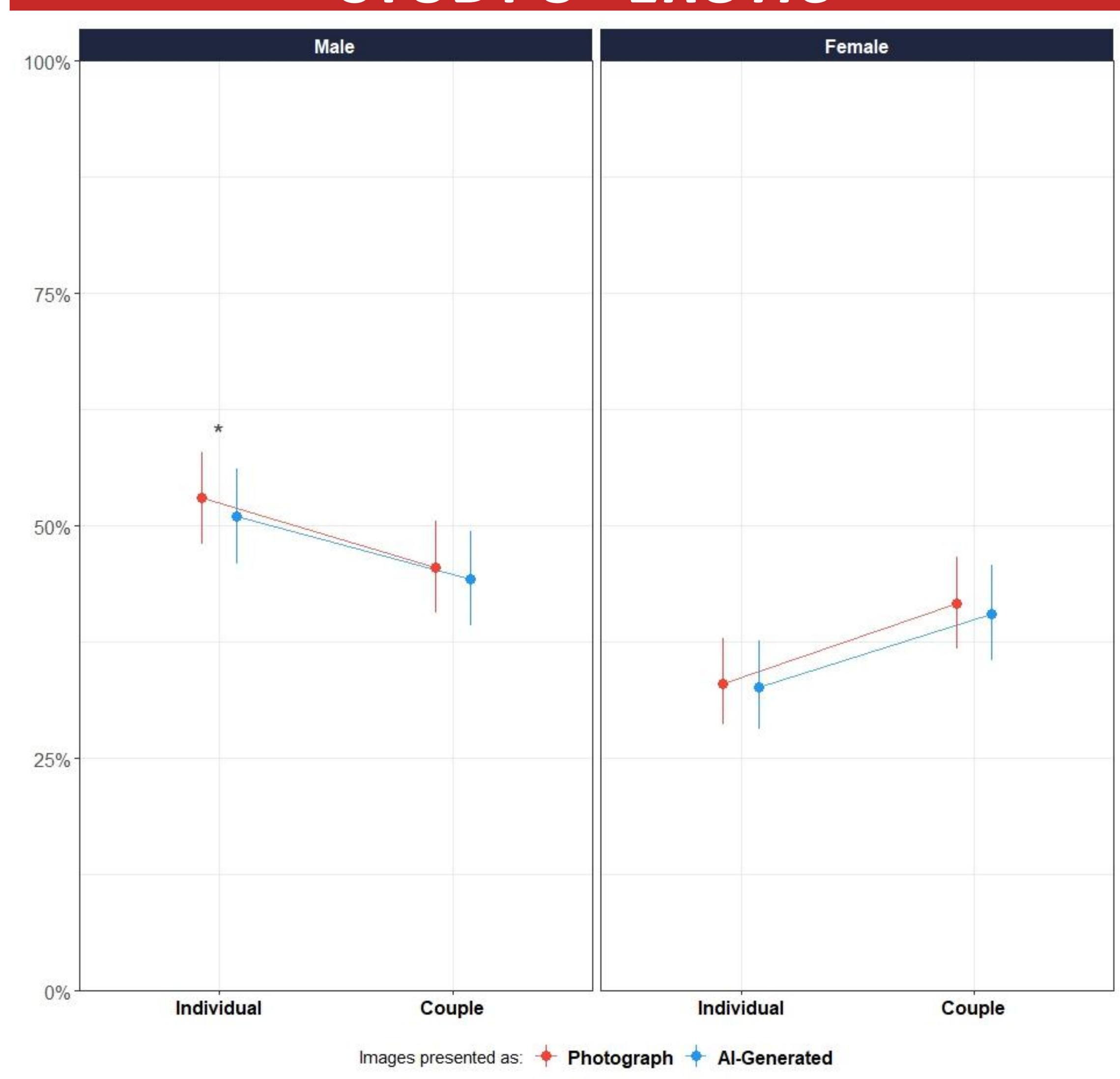


Figure 3. Estimated marginal means of arousal ratings across stimuli type - image of an individual or a couple - and condition (photograph vs. AI-generated). Error bars represent 95% confidence intervals. Estimates are based on a generalized linear mixed model with participant- and stimulus-level random effects. * $p < .05$. All pictures were relevant.

- **N**: 197 participants (M age = 36.5, SD = 13.1, range = 18–80); 48.2% women, 51.8% men.
- **Effect of condition**: Significant only for men, and only for *erotic images of individuals*; β = –0.08, 95% CI [–0.15, –0.01], *p* = .019.
- **Moderation by AI-attractiveness feedback** : Among men, those who believed AI images were more attractive also rated them as more arousing (β = 0.14, *p* = .034).

DISCUSSION

- **Perceived artificiality reduces emotional responses**, but only in **specific gender and relevance contexts** - women for irrelevant images (e.g., same-gender faces), and men for relevant erotic images.
- Among women, the effect was stronger for those **high in Honesty-Humility**, suggesting that **individual moral traits** influence reactions to artificial or fictional stimuli.
- **Beliefs about AI** played a key role: men who believed AI images were less arousing rated them lower, while others rated them higher when they believed AI images were more attractive.
- ***Key takeaway***: **emotional responses** to **"AI-generated"** media are shaped not only by the **content itself**, but also by **beliefs** about **its origin**.
- ***Next step***: assess **physiological indices** to test whether they **align** with these **subjective patterns**.

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OPEN DATA

OPEN MATERIALS