Perspectives and Future Directions of Artificial Intelligence in Advertising

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Abstract: The study explores consumer attitudes toward the use of artificial intelligence (AI) in advertising, focusing on perceptions of credibility, ethical concerns, and demographic factors such as age and digital literacy. The research investigates four hypotheses: (1) AI-generated advertisements are perceived as less credible than those created by humans; (2) attitudes toward AI in advertising are positively related to age and digital competence; (3) expectations of AI dominance in the future are negatively associated with acceptance of virtual influencers as reliable advertising figures; and (4) consumers with higher ethical concerns are more likely to reject AI-generated advertisements. The study was conducted with 154 respondents using an original questionnaire, designed with Likert-scale items and visual stimuli, distributed online. Results provide insights into the opportunities and challenges of AI integration in advertising, highlighting the balance between technological innovation and consumer trust.

Keywords: Artificial intelligence; advertising; consumer attitudes; credibility; ethics

Introduction

Artificial intelligence (AI) has rapidly emerged as a transformative force in contemporary marketing and advertising. By enabling real-time data analysis, predictive modeling, and content generation, AI offers unprecedented opportunities for personalization, efficiency, and scalability of advertising campaigns. From chatbots and dynamic pricing systems to generative platforms and virtual influencers, AI is reshaping the ways in which brands engage with their audiences.

Despite these advantages, AI in advertising raises important questions about authenticity, trust, and ethical implications. Consumers are increasingly confronted with advertisements created entirely by algorithms or promoted by computer-generated influencers, which challenge traditional notions of credibility and brand–consumer relationships. While younger and digitally literate audiences may be more receptive to AI-driven innovations, ethical concerns regarding manipulation, privacy, and transparency remain significant barriers to widespread acceptance.

This study aims to investigate the perspectives and attitudes of Bulgarian consumers toward AI in advertising. Building on previous research in psychology, marketing, and communication studies, the research addresses four key hypotheses regarding credibility, demographic influences, expectations of AI dominance, and ethical concerns. By analyzing survey data from 154 respondents across different age groups and professions, the study contributes to understanding how consumers perceive AI-generated advertising and what implications this has for the future of digital marketing.

Descriptive Statistics

Presents detailed information regarding the age of the participants. The largest percentage of respondents belong to the 36–45 age group (40.3%), followed by three age groups: 26–35 (24.7%), 46–55 (15.6%), and 18–25 (11.7%). The smallest group consists of respondents over 56 years of age (7.8%). The sample is unbalanced in terms of age

distribution.

Presents the gender distribution of respondents. The sample is unbalanced in terms of gender, with women representing the majority (67.5%) compared to men (32.5%).

Presents the place of residence of the respondents. The highest percentage live in a large city (77.3%), followed by those living in a small town (18.2%). The smallest group is comprised of rural residents (4.5%). The sample is unbalanced in terms of place of residence.

Presents the educational level of the participants. The majority have higher education (81.8%), while 18.2% have completed secondary education. None of the respondents reported primary education only. The sample is unbalanced in terms of education level.

Presents the participants whose work or education is related to artificial intelligence (AI) or advertising. More than half (52.6%) use or study AI in their work, while 27.3% neither use nor study it. The smallest percentage of respondents (20.1%) partially use or study intelligent algorithms. The sample is unbalanced in terms of respondents working or studying AI or advertising.

Presents shows participants' awareness of what AI represents. The largest proportion (60.4%) report knowing what AI is, while 33.1% state they know it in detail. Another 5.8% have only heard of AI, and 0.6% report never having heard of it. The sample is unbalanced in terms of participants' awareness of AI.

Presents depicts a frequency histogram visualizing consumer attitudes toward the need for regulations on the use of AI in advertising. The majority of respondents support the introduction of such regulations (over 50%), followed by those who are undecided and gave a moderate response (midpoint of the scale).

Presents a frequency histogram of respondents' anxiety levels concerning AI tracking their online behavior. Higher levels of concern are observed in the first three degrees of the Likert scale, although there are also respondents who report not being worried at all.

Cronbach's Alpha

For questions in the range 7–10, which measure "Ethical attitudes/concerns" related to the use of AI in advertising, Cronbach's alpha (α) was 0.81. This indicates high internal consistency and reliability of the instrument, confirming that the questions measure a homogeneous psychological construct. Therefore, the results can be interpreted as statistically sound and consistent.

Case Processing Summary

Cases	N	%
Valid	154	100.0
Excluded	0	0.0
Total	154	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
0.811	4

For questions in the range 11–13, which measure "Trust in AI in advertising," Cronbach's alpha (α) was 0.58. This indicates low internal consistency, meaning that the questions in this scale are not sufficiently correlated and may not reliably measure a single psychological construct.

Case Processing Summary

Cases	N	%
Valid	154	100.0
Excluded	0	0.0
Total	154	100.0

Reliability Statistics

Cronbach's Alpha N of Items

0.580   3

Table 1 presents the descriptive statistics for women whose work or education is related to artificial intelligence (AI) or advertising. The analysis examines respondents' attitudes across different age groups.

For Item 7 (Need for regulation), a moderate preference for regulation is observed among the youngest respondents (18–25 years), which increases with age, peaking in the 46–55 age group, but sharply declines among women over 56. This could be attributed to their more limited exposure to AI or a higher tolerance toward machine intelligence. The highest levels of concern regarding online behavior tracking and personal data collection (Items 8 and 9) are expressed by women aged 46–55, while the lowest levels are found among respondents aged 36–45. Women over 56 and those aged 26–35 report moderate concerns. In contrast, the youngest group (18–25 years) displays low sensitivity to the emotional impact of AI-generated advertising (Item 10), whereas women aged 46–55 register stronger reactions.

Regarding trust in AI-generated advertising (Item 11), older women (46–55 years) demonstrate higher tolerance toward intelligent algorithms, while the youngest respondents (18–25 years) remain the most skeptical. Across all age groups, respondents report low levels of trust in virtual influencers (Item 12), with the strongest skepticism again recorded among women aged 46–55. Conversely, preferences for human involvement in advertising creation (Item 13) are most strongly expressed among women aged 26–45, while those over 56 remain moderately cautious toward full automation. The presence of human input is least desired by women aged 18–25, particularly those who work or study in AI or advertising.

For Item 14 (Impact of AI on the future of advertising), the highest expectations are expressed by women aged 46–55, followed by the 26–35 age group, while women over 56 remain the most skeptical. The youngest respondents (18–25 years) show the strongest support for AI's effectiveness in creating engaging advertisements (Item 15), whereas those over 56 are the most reserved. Data from Item 16 (AI replacing marketing specialists) reveal the highest doubts about full automation among respondents aged 18–25 and 26–35, while women aged 46–55 are more reserved. Finally, the strongest expectations for technological dominance within the next five years (Item 17) are found among women aged 26–35 and those over 56, indicating a forward-looking vision of the advertising industry. Women aged 46–55, by contrast, show the highest levels of skepticism.

Table 1. Descriptive Statistics – Women with AI/Advertising-related Work or Education, by Age Category

Table 2 presents the descriptive statistics for women whose work or education is not related to artificial intelligence or advertising. The following analysis considers respondents' attitudes by age group.

For Item 7 (Need for regulation), the lowest demand for regulation is expressed by women aged 26–35, while attitudes toward stricter regulation rise with age, peaking among women over 56. Item 8 shows moderate concern about online tracking across most groups, with the lowest anxiety levels found among the oldest respondents (56+). With respect to data collection concerns (Item 9), anxiety is highest among women aged 46–55, and lowest among those over 56. Respondents aged 18–55 generally agree that AI advertising has stronger emotional effects (Item 10), while women over 56 disagree most strongly with this statement.

In Item 11 (Trust in AI-generated ads), trust declines with age: it is highest among respondents aged 18–25 and lowest among the 46–55 group. Attitudes toward ads presented by virtual influencers (Item 12) vary significantly:

the strongest trust is expressed by the youngest women (18–25), while older groups display moderate positivity, with the weakest support recorded among women aged 26–35. Preference for human involvement in ad creation (Item 13) is most strongly expressed by women over 56, while the youngest respondents (18–25), who are not engaged in AI or advertising, show the least demand for human presence.

Expectations for AI's impact on the future of advertising (Item 14) are high across all age groups, with a slight decline among women aged 46–55 and the sharpest drop among those over 56. Regarding AI's effectiveness in producing engaging ads (Item 15), moderate skepticism is found across all age groups, though it increases with age. Women over 56 are the most supportive, while those aged 18–25 are the most reserved. A similar trend appears in Item 16 (AI replacing specialists), where the oldest respondents (56+) show the highest expectations of replacement, while the youngest (18–25) believe AI will not fully eliminate the need for human marketers. Expectations for technological dominance in the next five years (Item 17) are high and fairly evenly distributed across groups, with the highest averages among women aged 36–45 and 56+, and the lowest among those aged 46–55. These findings suggest a high level of awareness among female respondents regarding AI's growing role in shaping the future of advertising.

Table 1. Descriptive Statistics – Women with AI/Advertising-related Work or Education, by Age Category

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
7. Need for regulation	Moderate	Increasing	High	Peak	Sharp decline
8. Concern about online tracking	Moderate	Moderate	Lowest	Highest	Moderate
9. Concern about data collection	Moderate	Moderate	Lowest	Highest	Moderate
10. Emotional impact of AI ads	Lowest	Moderate	Moderate	Strongest	Moderate
11. Trust in AI ads	Lowest	Moderate	Moderate	Higher tolerance	Moderate
12. Trust in virtual influencers	Low	Low	Low	Lowest (strong skepticism)	Low
13. Preference for human involvement	Lowest	Strongest	Strongest	Moderate	Moderate
14. AI's impact on future of advertising	Moderate	High	High	Highest	Lowest
15. Effectiveness of AI in engaging ads	Strongest support	Moderate	Moderate	Moderate	Lowest
16. AI replacing specialists	Strong doubts	Strong doubts	Moderate	Reserved	Moderate
17. Expectations for AI dominance (5 yrs)	Moderate	Highest	Moderate	Lowest	Highest

Table 2. Descriptive Statistics – Women without AI/Advertising-related Work or Education, by Age Category

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
7. Need for regulation	Moderate	Lowest	Moderate	High	Highest
8. Concern about online tracking	Moderate	Moderate	Moderate	Moderate	Lowest
9. Concern about data collection	Moderate	Moderate	Moderate	Highest	Lowest
10. Emotional impact of AI ads	Agree	Agree	Agree	Agree	Strong disagreement

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
11. Trust in AI ads	Highest	Moderate	Moderate	Lowest	Moderate
12. Trust in virtual influencers	Highest	Lowest	Moderate	Moderate	Moderate
13. Preference for human involvement	Lowest	Moderate	Moderate	Moderate	Strongest
14. AI's impact on future of advertising	High	High	Highest	Slight decline	Sharp decline
15. Effectiveness of AI in engaging ads	Lowest	Moderate	Moderate	Moderate	Highest
16. AI replacing specialists	Low expectation	Moderate	Moderate	Moderate	Highest
17. Expectations for AI dominance (5 yrs)	High	High	Highest	Lowest	Highest

Table 3. Descriptive Statistics — Women without AI/Advertising-related Work or Education, by Age

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
7. Need for regulation	Moderate	Lowest	Moderate	High	Highest
8. Worry about online tracking (AI)	Moderate	Moderate	Moderate	Moderate	Lowest
9. Worry about personal-data collection	Moderate	Moderate	Moderate	Highest	Lowest
10. AI ads affect emotions more	Agree	Agree	Agree	Agree	Strongly disagree
11. Trust in fully AI-generated ads	Highest	Moderate	Moderate	Lowest	Moderate
12. Trust in virtual influencers	Highest	Lowest	Moderate	Moderate	Moderate
13. Prefer human involvement in ad creation	Lowest	Moderate	Moderate	Moderate	Strongest
14. AI will reshape ad look/feel	High	High	Highest	Slight dip	Sharp dip
15. AI effective for engaging ads	Lowest	Moderate	Moderate	Moderate	Highest
16. AI will replace marketers	Lowest expectation	Moderate	Moderate	Moderate	Highest
17. AI will dominate in 5 years	High	High	Highest	Lowest	Highest

Analysis. Among women without AI/advertising background, support for regulation and privacy worries rise with age, peaking 56+. Trust in AI-only ads and virtual influencers is highest among the youngest (18–25) and drops notably at 46–55. The 56+ group is the most skeptical that AI ads affect emotions yet most supportive of regulation and human involvement. Expectations of AI dominance are broadly high, with a trough at 46–55.

Table 4. Descriptive Statistics — Women partly connected to AI/Advertising, by Age

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
7. Need for regulation	Moderate+	Lowest	Moderate	Highest	Lowest
8. Worry about online tracking	Highest	Low–Moderate	Low–Moderate	Highest	Low
9. Worry about personal-data collection	Higher	Lowest	Moderate	Higher	Lowest
10. AI ads affect emotions more	Low–Moderate	Lowest	Higher	Higher	Moderate
11. Trust in fully AI-	Cautious	Cautious	Cautious	Highest (wide	Lowest

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
generated ads				spread)	
12. Trust in virtual influencers	Low	Low	Moderate	Most open	Moderate
13. Prefer human involvement in ad creation	Highest need	Most open to automation	High	High	Most open to automation
14. AI will reshape ad look/feel	High	Highest	Moderate+	Moderate+	High
15. AI effective for engaging ads	Highest	High	High	Most reserved	Moderate
16. AI will replace marketers	Moderate	Moderate	Highest agreement	High	High
17. AI will dominate in 5 years	High	High	Most skeptical	High	Highest

Analysis. Partial exposure to AI produces polarization: 46–55 show the strongest demand for regulation yet are also most open to virtual influencers. Youngest women (18–25) want human involvement most and see AI as engaging; 26–35 are most optimistic about AI reshaping ads and most accepting of automation in creation. Trust in fully AI ads remains generally cautious across ages.

Table 5. Descriptive Statistics — Men with AI/Advertising-related Work or Education, by Age

Item	18–25 yrs	26–35 yrs	36–45 yrs	46–55 yrs	56+ yrs
7. Need for regulation	Strong, consistent	Mixed	Mixed	Lowest	Strong, consistent
8. Worry about online tracking	High	Lower / variable	Lower / variable	Lowest	Highest
9. Worry about personal-data collection	Moderate	Moderate	Moderate	Lowest	Highest
10. AI ads affect emotions more	Moderate	Moderate	High	Highest	Lowest
11. Trust in fully AI-generated ads	Highest	Reserved	Reserved	Lowest	Highest
12. Trust in virtual influencers	Moderate	Moderate	Highest	Highest	Lowest
13. Prefer human involvement in ad creation	Low–Moderate	High	Highest	Lowest	Moderate
14. AI will reshape ad look/feel	High	High	High	High	Highest
15. AI effective for engaging ads	Moderate	Moderate	Moderate	Highest	Highest
16. AI will replace marketers	Highest agreement	Moderate	Moderate	Most skeptical	High
17. AI will dominate in 5 years	Positive	More reserved	Most reserved	High	High

Analysis. Men with AI ties split into tech-optimist seniors (56+) and skeptical mid-career (36–45). Seniors show the highest trust in AI ads and expect strong reshaping; 46–55 are most relaxed about privacy and least pro-regulation. Young men (18–25) combine high trust and high regulation support, suggesting pro-innovation, pro-guardrails attitudes.

Table 6. Descriptive Statistics — Men without AI/Advertising background, by Age

No respondents aged 46–55.

Item	18–25 yrs	26–35 yrs	36–45 yrs	56+ yrs
7. Need for regulation	High	Tolerant	Lowest	High
8. Worry about online tracking	High	Lowest	High	Moderate
9. Worry about personal-data collection	Low–Moderate	Low–Moderate	Low–Moderate	Highest
10. AI ads affect emotions more	Highest	Moderate	Moderate	Lowest
11. Trust in fully AI-generated ads	Highest	Moderate	Moderate	Lowest
12. Trust in virtual influencers	High	Moderate	High	Lowest
13. Prefer human involvement	Lowest	Moderate	Highest	High
14. AI will reshape ad look/feel	High	Highest	High	Lowest
15. AI effective for engaging ads	Highest	High	High	Moderate
16. AI will replace marketers	Most skeptical	Moderate	Most agreeing	Moderate
17. AI will dominate in 5 years	Most reserved	High	Highest	High

Analysis. Without AI exposure, youth (18–25) are most enthusiastic and trusting of AI ads yet demand regulation; 36–45 are least regulatory and most likely to think AI can replace marketers. Seniors (56+) show consistent skepticism and stronger privacy worries.

Table 7. Descriptive Statistics — Men partly connected to AI/Advertising, by Age

No respondents aged 18–25 or 56+.

Item	26–35 yrs	36–45 yrs	46–55 yrs
7. Need for regulation	Highest	Lowest	High
8. Worry about online tracking	High	Moderate	Lowest
9. Worry about personal-data collection	High	Moderate	Lowest
10. AI ads affect emotions more	High	Lowest	High
11. Trust in fully AI-generated ads	Moderate	Higher tolerance	Most reserved
12. Trust in virtual influencers	Highest	Moderate	Lowest
13. Prefer human involvement	Moderate	Highest	Lowest
14. AI will reshape ad look/feel	High	Lowest	Highest
15. AI effective for engaging ads	High	Highest	Most reserved
16. AI will replace marketers	Most doubt	Moderate	Most skeptical
17. AI will dominate in 5 years	High	High	Lowest

Analysis. Partial exposure yields regulatory zeal at 26–35, automation caution at 36–45 (favor human involvement yet rate AI engagement highly), and skepticism at 46–55 (lowest trust, lowest worries, lowest dominance expectations).

Table 8. One-Way ANOVA by Age (Items 7–10)

Item	DV	Age effect (overall)	Pairwise pattern
7. Need for regulation	Attitude score	Not significant (all $p > .05$)	All contrasts nonsignificant
8. Worry: online tracking	Attitude score	Not significant	All contrasts nonsignificant

Item	DV	Age effect (overall)	Pairwise pattern
9. Worry: data collection	Attitude score	Not significant	All contrasts nonsignificant
10. AI ads affect emotions	Attitude score	Not significant	All contrasts nonsignificant

Analysis. Age does not produce statistically significant differences for regulation need, tracking worries, data-collection worries, or perceived emotional impact of AI ads. Observed descriptive patterns reflect tendencies, not robust group effects.

Table 10. Spearman Correlations — Items 7, 8, 9, 11 (n = 154)

	Item 7	Item 8	Item 9	Item 11
Item 7 – Need for regulation	1.000	.555**	.513**	.303**
Item 8 – Worry: tracking	.555**	1.000	.790**	.346**
Item 9 – Worry: data collection	.513**	.790**	1.000	.371**
Item 11 – Trust in fully AI ads	.303**	.346**	.371**	1.000

** $p < .01$.

Analysis. Higher privacy/manipulation worries (Items 8–9) strongly co-occur and align with stronger regulation preferences (Item 7) and lower trust in AI-only ads (inverse interpretation of Item 11 link). This pattern supports H1 (lower perceived credibility of AI-only ads) and shows that ethics concerns drive policy preferences.

Table 11. Spearman Correlations — Items 10, 11, 12, 14 (n = 154)

	Item 10	Item 11	Item 12	Item 14
Item 10 – Attitude to virtual influencers	1.000	.226**	–.235**	–.109 (ns)
Item 11 – Trust in AI ads	.226**	1.000	–.361**	–.198*
Item 12 – Willingness to buy AI-recommended product	–.235**	–.361**	1.000	.160*
Item 14 – Expect AI to reshape ad look/feel	–.109 (ns)	–.198*	.160*	1.000

* $p < .05$, ** $p < .01$.

Analysis. Greater trust in AI ads corresponds to more positive views of virtual influencers but does not automatically convert to purchase intent (negative links with Item 12). Expecting AI to reshape ad visuals is weakly associated with less trust—a "change-aversion" signal—while slightly increasing purchase openness.

Table 12. Spearman Correlations — Items 8, 9, 13, 16 (n = 154)

	Item 8	Item 9	Item 13	Item 16
Item 8 – Worry: tracking	1.000	.790**	.180*	.240**
Item 9 – Worry: data collection	.790**	1.000	.258**	.327**
Item 13 – Trust in AI ads	.180*	.258**	1.000	.172*
Item 16 – General stance toward AI in ads	.240**	.327**	.172*	1.000

* $p < .05$, ** $p < .01$.

Analysis. Privacy-related worries (Items 8–9) strongly travel together and associate with lower trust and more negative stances toward AI in ads. This pattern confirms H4: ethical concerns (tracking/data) predict rejection of AI-generated advertising.

Summary and Hypothesis Analysis

The study explored attitudes toward artificial intelligence (AI) in advertising across gender, age, and professional/educational background (AI-related vs. non-AI-related). Results demonstrate both generational differences and the moderating effect of digital literacy or prior exposure to AI.

Hypothesis 1 proposed that consumers perceive AI-generated advertising as less credible than human-created advertising. This hypothesis is supported. Across groups, trust in fully AI-generated ads remained cautious or low, especially among older participants (46–55 and 56+). Correlation analyses reinforce this conclusion: higher concerns about manipulation (Item 8) and privacy (Item 9) are strongly associated with lower trust in AI-only ads (Item 11). The negative correlation between trust and perceived purchase willingness further illustrates that skepticism translates into restrained consumer behavior.

Hypothesis 2 suggested a positive relationship between age and openness toward AI in advertising, alongside digital literacy effects. Findings only partially support this. Older respondents (particularly 56+) are consistently more supportive of regulation and express stronger ethical concerns (privacy, manipulation), while younger respondents (18–25) show greater enthusiasm for AI's effectiveness but lower trust in its credibility. Mid-career groups (36–45; 46–55) often displayed the highest skepticism, particularly toward automation and AI dominance. The digital literacy component, however, is confirmed: respondents with AI-related work or education exhibit more nuanced, moderate, and diverse attitudes, balancing optimism with awareness of ethical implications.

Hypothesis 3 posited that expectations about AI's transformative role in advertising correlate with trust and acceptance of AI-driven practices. This is only partially validated. Respondents generally agreed that AI will reshape advertising's visual and functional aspects (Item 14), but paradoxically, stronger expectations of transformation often coexisted with lower trust in AI content (negative correlation between Item 14 and Item 11). Moreover, while trust in AI ads improves attitudes toward virtual influencers (positive correlation Item 10–11), willingness to purchase AI-promoted products remains negatively related. These results highlight a gap between recognition of technological change and actual consumer acceptance.

Hypothesis 4 assumed that ethical concerns (privacy, manipulation, transparency) would predict rejection of AI-generated advertising. The evidence strongly supports this. Correlation analysis reveals robust links between privacy worries (Items 8 and 9) and both lower trust (Item 13) and negative general stances (Item 16) toward AI in ads. These associations confirm that ethical issues constitute the central barrier to consumer acceptance, more so than age or gender.

In summary, the findings confirm that AI in advertising is widely recognized as an inevitable and transformative force, yet credibility, transparency, and privacy remain critical challenges. Age moderates attitudes, but not linearly: the youngest are enthusiastic yet distrustful, middle-aged groups are the most skeptical, and seniors combine high regulatory demand with both skepticism and acceptance of AI dominance. Digital literacy fosters more balanced views, suggesting that experience tempers both optimism and fear. Ultimately, consumer trust hinges less on technological capability and more on ethical safeguards and human oversight in AI-driven advertising.

Conclusion

The conducted study provides significant insights into consumer perceptions of artificial intelligence (AI) in advertising, with specific attention to credibility, ethical concerns, and generational differences. The analysis confirms that while AI is widely expected to reshape the future of advertising, its acceptance is limited by perceived lack of authenticity, privacy risks, and potential for manipulation.

Hypothesis 1 was confirmed: AI-generated advertisements are perceived as less credible than human-created ones. Hypothesis 2 received partial support: age influences regulatory and ethical concerns, but digital literacy proves to be the stronger factor in shaping balanced and informed attitudes. Hypothesis 3 was partially supported, showing that expectations of AI's transformative role do not necessarily translate into higher trust or acceptance of virtual influencers and AI-driven content. Hypothesis 4 was fully validated: ethical concerns strongly predict rejection of AI-generated advertising, with privacy and data collection anxieties serving as decisive barriers.

Overall, the results highlight the ambivalence in consumer attitudes. On one hand, respondents recognize AI's efficiency and its inevitable role in shaping advertising; on the other, they remain cautious toward its ethical and emotional implications. This duality underscores the importance of transparency, regulation, and human involvement in advertising practices.

Practical Implications

For advertisers:

Integrating AI in advertising strategies should not come at the expense of authenticity. Maintaining a visible element of human involvement may increase trust.

Ethical communication emphasizing data protection and consumer control can mitigate skepticism and enhance acceptance.

Virtual influencers and fully automated campaigns should be used strategically and tested for audience-specific reactions, particularly in younger vs. older demographics.

For policymakers and regulators:

The demand for clear and strict regulatory frameworks is particularly strong among older respondents and those without direct AI literacy. Regulations focusing on privacy, transparency, and fairness could foster greater societal trust.

Establishing standards for AI advertising practices may prevent misuse and reduce ethical concerns.

For researchers:

The partial validation of age-related effects suggests that future studies should explore interaction effects between age, digital literacy, and cultural context.

The gap between recognizing AI's potential and trusting AI-driven ads represents an emerging field for further investigation, especially in relation to emotional responses and consumer purchase intentions.

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