The International Journal Of Global Mental Health, Innovation, Policy, Action, Culture & Transformation
e-ISSN: 3107-8311

# A Systematic Review on the Psychological Implications of AI-Generated Visual Content for Users' Self-Esteem and Self-Perception

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***Abstract:*** Over the past decade, the use of AI-generated visual images has grown exponentially, posing novel psychological challenges. This is particularly evident in constructs such as self-esteem and self-perception, which together influence basic psychological processes underlying identity formation, social comparison, and self-worth. In contrast to traditional media, AI-generated content provides algorithmically optimized, hyper-realistic depictions that could skew standards of self-image. This systematic review examines the relation between exposure to AI- AI-generated visual information and psychological effects spanning across diverse demographics and contexts. To identify empirical and theoretical evidence on these psychological effects of AI-generated images, a comprehensive literature search was conducted across several databases, including Scopus, PsycINFO, PubMed, Springer, ACM, and ResearchGate. Research findings show that self-esteem is affected by different AI-generated images, leading to increased social comparison driven by algorithmically refined visuals and reduced authenticity boundaries that create skewed benchmarks. Studies also show that adolescents and populations within impoverished countries are more vulnerable to this phenomenon. Gender based inequalities are especially evident when it comes to non-consensual intimate imagery and body image issues. Existing research suggests that AI-generated content may be linked to risk factors for different eating disorders and body dysmorphia. The findings underscore the need for digital literacy initiatives, ethical frameworks, and culturally aware mental health services to address the specific challenges posed by generative AI. Future research should place greater emphasis on longitudinal

approaches, the development of protective mechanisms, and strategies that minimise harm while thoughtfully utilizing the positive applications of generative AI.

**Keywords:** *AI-generated imagery, self-esteem, body image, social comparison, self-perception, mental health, generative AI*

## 1. Introduction

Imagine scrolling through a social media feed, and you pause on a flawless face, symmetrical features, luminous skin, perfectly flowing hair, only to discover, moments later, that the person behind it was never real at all. This, in the present, is no longer a hypothetical situation; it exists as our new normal. In 2025, the fashion brand "Guess" published what is said to be the first fully AI-generated model to appear in print in Vogue magazine. This digitally perfect figure never existed in the physical world and will never exist yet was presented alongside authentic clothing on one of the most influential fashion platforms on earth (The Social Institute, 2025). This single incident encapsulated a broader, pervasive shift: the migration of artificial intelligence into the very core of how we see and perceive ourselves.

The inclusion of AI into visual media did not happen overnight. The rise of technology accelerated rapidly after 2010, with smartphones enabling developers to build apps that let users interact, share photos, and edit and enhance their own images with ease (BetterHelp Editorial Team, 2026). It was not until 2015 that AI was integrated into social media platforms, allowing users to alter their faces and bodies in photos and videos in real time (BetterHelp Editorial Team, 2026). What began as rudimentary augmented reality (AR) filters on Snapchat and Instagram that overlay adjusted facial features, such as a sharper jawline or a thinner nose, quickly gave way to far more sophisticated AI-driven tools (BetterHelp Editorial Team, 2026).

Modern filters operate through the form of machine learning known as generative adversarial networks (GANs), which focus not solely on overlaying an effect on top of an existing image but instead completely regenerate imagery at the pixel level, producing an entirely new face or body that conforms realistically to the user's features (BetterHelp Editorial Team, 2026). The result is a visual output that can be difficult or impossible to distinguish from an unedited photograph. Beyond filters applied to existing photos, a parallel trend has emerged in which individuals use generative text-to-image AI tools to create new visual representations of themselves, reimagining their appearance or collaborating with others across different artistic

styles, historical periods, or idealized forms (Sharma, n.d.). Exploratory research has begun to confirm this observation, with one study finding that participants who engaged in AI-assisted self-image generation reported the experience as deeply engaging and described a heightened sense of self-efficacy as a result. (BetterHelp Editorial Team, 2026).

This practice has spread exponentially across platforms such as Instagram, TikTok, and LinkedIn, driven by the accessibility and affordability of these tools compared to traditional photography or commissioned artwork (Sharma, n.d.). Researchers have noticed that this trend reveals something more profound than novelty; it represents a fundamental shift in how individuals make sense of self-perception in digital spaces, with AI functioning not merely as a passive mirror but as an active tool that interprets, reimagines, and reconstructs identity (Sharma, n.d.).

### 1.1 *Defining Key Terms*

To situate this review within a clear conceptual framework, it is necessary to define the key terms central to the research question. Artificial intelligence (AI) refers to technological systems programmed by humans to perform intellectual tasks that simulate or exceed human cognitive capabilities, enabling processes such as facial recognition, real-time image manipulation, and predictive analysis (BetterHelp Editorial Team, 2026). AI-generated visual content encompasses any imagery that has been substantially created or reconstructed through AI processes, including, but not limited to, text-to-image outputs, AI beauty filter results, digitally generated avatars, and algorithmically produced portraits, as distinct from traditional photography or human-created artwork (Sharma, n.d.).

Self-esteem refers to an individual's overall subjective evaluation of their own worth and the emotional responses associated with that evaluation; in the context of this review, it is understood as the degree to which a person feels positively or negatively about their own appearance and identity. Self-perception refers to the way an individual understands, interprets, and constructs a mental image of themselves, encompassing both cognitive assessments of one's physical appearance and the broader sense of personal identity that surrounds it. Both self-esteem and self-perception are psychological constructs that are significantly influenced by the visual information individuals are exposed to, particularly through social media (The Social Institute, 2025; BetterHelp Editorial Team, 2026).

It is also essential to distinguish AI-generated content from AI-enhanced content (in which an existing image is subtly refined or adjusted) and traditional media (in which no algorithmic

manipulation has occurred), as the degree of algorithmic involvement may bear directly on its psychological effects (BetterHelp Editorial Team, 2026).

### 1.2 *Scope and Significance of the Research Study*

As AI-generated visual content increasingly embeds itself in the digital environments that individuals, particularly young people, inhabit daily, questions about its psychological consequences have become urgent. Research has already linked frequent exposure to AI and AR filters with a condition now referred to as "Snapchat dysmorphia," in which individuals develop a distorted perception of their own appearance after prolonged engagement with algorithmically altered imagery, and in some cases, this has been associated with the onset of body dysmorphic disorder (BetterHelp Editorial Team, 2026). Mental health organizations have warned that the presentation of digitally perfected images, particularly those featuring AI-generated models that are free from what some consider human imperfections, may foster unhealthy social comparisons and erode self-esteem, especially among adolescents (The Social Institute, 2025). At the same time, early evidence suggests that AI-generated self-imagery is not exclusively harmful; some research indicates that creating AI-generated self-representations can facilitate meaningful psychological reflection and a sense of personal empowerment. This tension between potential psychological harm and benefit underscores the need for a careful, structured examination of the existing literature.

This paper conducts a systematic review of the literature to examine the psychological implications of AI-generated visual content for users' self-esteem and self-perception. By drawing on evidence from multiple areas of inquiry, this review aims to provide a comprehensive, evidence-based understanding of how algorithmically generated visual content shapes how individuals evaluate and experience themselves, and to identify the critical gaps in the current body of knowledge that future research must address.

## 2. Methodology

### 2.1 *Search Strategy and Databases*

A systematic literature review was conducted to identify theoretical and empirical literature on the psychological effects of AI-generated images, with particular emphasis on their impact on individuals’ self-esteem and self-perception. Various research journals and academic databases

have been reviewed to provide extensive coverage of the literature pertinent to the fields of psychology, artificial intelligence, and interdisciplinary research.

The review covered keywords such as AI-generated visuals, artificial intelligence, visual content, psychological effects, mental health, self-perception, social comparison, and human behavior. The research has been narrowed using Boolean operators to maximize the study's relevance.

### 2.2 *Inclusion and Exclusion Criteria*

The inclusion and exclusion criteria were predefined to ensure a transparent selection of studies. Studies were included if they focused on the examination of AI-generated images or other forms of synthetic visual media and analyzed their impact on psychological outcomes. Both empirical and theoretical studies were considered to maintain psychological relevance and ensure subjectivity.

Studies that focus exclusively on technical aspects of artificial intelligence without analyzing the psychological implications have been excluded as they lack empirical evidence.

## 3. Psychological mechanisms underlying AI-generated imagery effects

### 3.1 *AI as a Social Comparison Algorithm*

Festinger (1957) theorized that social comparison is a normal psychological process by which people can analyze their self-worth and capabilities in comparative relation to others. Based on this model, recent authors have studied AI-generated imagery as an algorithmic social referent that implicitly shapes the process of self-evaluation. Research indicates that AI-based images tend to be highly idealistic and stylish, which makes the upward social comparison very likely, which can have a negative impact on self-esteem, self-perception, and overall mental health. (Festinger, 1957).

These processes are supported by empirical data. Indicatively, by Tufil et al. (2024) whose quantitative research with students determined that both self-esteem and body image satisfaction had a significant negative relationship with exposure to AI-generated content among students, and social comparison was a major intervening variable in such relationships. These results are not isolated to other sources in the literature of digital media which suggest that recurrent exposure to unrealistic visual ideals may change self-perception and enhance self-criticism. (Tufail et al., 2024)

Conversely, Reich and Teeny (2025) indicate that AI may be used as a distinct social referent in complex, domain-specific ways. In situations where people perceive a creative piece as generated by a generative AI, they tend to have greater creative self-confidence than when a human created it, as they view AI as a less credible referent in the creative field. This effect shows a form of downward social comparison, as it is perceived that AI is not as competent in some aspects, which strengthens users' perceptions of their own competencies. (Reich & Teeny, 2025)

On the whole, these processes suggest that AI-generated imagery is not a neutral stimulus; rather, it becomes incorporated into social comparison processes that determine self-esteem, body image, and self-perception, depending on how people frame the relative referential status of AI compared to themselves.

### 3.2 *Authenticity Erosion, Hyperrealism, and Identity Distortion*

Scorzin (2023) critically explored the emergence of AI-generated visual representations and what they imply for the phenomenon of authenticity in modern self-presentation, suggesting that AI-generated faces and bodies are hyperreal in that they are more symmetrical, refined, and aesthetically optimized, and lack a basis in lived, embodied experience. This concept of blurring the boundaries between AI-generated and human imagery interacts with traditional beliefs about visual realism, making it hard to determine where a person is represented with true features and where the image is generated by algorithms. Empirical data show that prolonged exposure to AI-generated and AI-edited bodies can lead to the acceptance of artificial aesthetics. A study of young adults has shown that although most can recognize and, in some cases, desire AI-enhanced bodies, these desires are accompanied by increased autonomy and fears of authenticity. The results indicate that AI-generated images do not simply affect aesthetic judgment; they actively transform normative views of appearance. (Scorzin, 2023)

Additional theory building by Wijesundara and Rathnayake (2024) implicated identity-linked distress as a consequence of sustained contact with distorted images of self (AI), including loss of clarity in self-concept and role confusion. They proposed, in their work, that emotional or cognitive attachment to AI-generated representations might arise as a temporary effect of perceived identity emptiness, under which algorithmically perfected images can produce a moment of coherence or control. Such attachments can enhance the identity distortion when placed in a larger context of a hyperreal visual world, as outlined by Scorzin (2023) when they support the

norms that are generated by algorithms with more cultural power. (Wijesundara & Rathnayake, 2024) (Scorzin).

## 4. Effects on self-esteem and self-perception

The relationship between AI-generated visual content and users' psychological well-being is one of the most consequential areas of inquiry in this review. While exposure to AI-generated visual content has been linked to measurable reductions in self-worth and increases in social comparison, other studies suggest that specific interactions with AI-generated content. This section examines the key self-esteem outcomes documented in the literature, explores the role of social comparison as a mediating mechanism, and considers how AI-generated imagery intersects with deeper processes of identity and self-representation.

### 4.1 *Reduced Self-Worth*

The most consistently documented psychological effect of AI-generated visual content is a reduction in self-esteem. In a survey of 600 students in Punjab, significant negative correlations were found between exposure to AI-generated imagery and both self-esteem and body image satisfaction, as measured with validated scales such as the Rosenberg Self-Esteem Scale. Social comparison emerged as a key mediating mechanism, with participants actively comparing themselves to idealized AI-generated figures, contributing to diminished self-worth (Tufail et al. 2024).

### 4.2 *Conditional or Artificial Confidence*

While reduced self-worth represents the more intuitive risk, the literature also reveals a less expected outcome: in specific contexts, exposure to AI-generated content can increase an individual's sense of confidence, though this confidence may be unwarranted. Reich and Teeny (2025) investigated this phenomenon in a series of experiments anchored in the domain of creativity. They found that when individuals were exposed to creative content, including visual art, that they believed had been produced by generative AI rather than a human peer, they reported significantly higher confidence in their own creative abilities. This effect held across multiple creative domains and increased participants' willingness to engage in creative activities, even when the elevated confidence did not correspond to any objective improvement in skill (Reich & Teeny, 2025).

### 4.3 *Validation Dependency and the Distortion of Self-Perception*

Beyond immediate self-esteem effects, the literature highlights a longer-term risk: dependency on AI-generated imagery for psychological validation. Lee (2023), through a reflective exploration of tools such as Stable Diffusion, found that generating alternative versions of oneself prompted deeper questions about identity and self-representation. The study also revealed that AI systems reproduce societal biases; prompts like “important” or “scientist” produced shifts in gender, skin tone, and facial expression, reflecting assumptions embedded in training data.

### 4.4 *Synthesis: The Dual Nature of AI's Effect on Self-Esteem*

Taken together, the studies reviewed in this section illustrate that the psychological impact of AI-generated visual content on self-esteem is not unidirectional. Tufail et al. (2024) provided content is associated with reduced self-worth and body image dissatisfaction, mediated by social comparison. Reich and Teeny (2025) complicated this picture by demonstrating that the same kind of exposure can, under certain conditions, inflate confidence, though in ways that may be equally disconnected from reality. Moreover, Lee's (2023) qualitative exploration highlighted the more profound, more structural concern: that AI-generated self-imagery does not merely affect how individuals feel about themselves in the moment but may fundamentally reshape the terms on which self-evaluation takes place, embedding algorithmic and culturally biased standards into the very process of identity formation.

## 5. Differential vulnerabilities and demographic variations

### 5.1 *Adolescents and Children*

A cross-sectional study by Jimenez Arriaga, K., & Miranda García, D. A. (2025) indicates that children and adolescents are among the most sensitive and vulnerable groups in this context. At these ages, self-concept, body image, and social identity are still not fixed and are highly influenced by external feedback. In this regard, exposure to AI-generated or AI-enhanced self-images at this stage can have an overabundant impact on self-perception, since young people tend to rely more on visual and social cues in identity formation. This weakness is further enhanced by the fact that identity is unstable during this stage, and adolescence is characterized by people in a process of negotiating the discrepancies between their actual self, ideal self, and representations valued by society. Studies indicate that AI-generated self-images, which are also commonly

optimized, idealized, or future-oriented, may also exacerbate these differences by introducing self-images that seem achievable but remain algorithmically produced.

Shukla and Srivastava (2023) studied how individuals who have social media characteristics facilitated by artificial intelligence affect their self-esteem and body image of teenage girls. Their results reveal that repeated exposure to AI-enhanced and appearance-oriented materials is associated with heightened body dissatisfaction and negative self-assessment, especially when the digitally altered images are presented as realistic and aspirational rather than artificial. The research points out that in digitally mediated spaces, adolescents internalize appearance-related ideals more, in which appearance-focused social comparisons are exacerbated by AI-based image enhancement and recommendation systems. This was a process that was linked to decreased self-esteem and increased body image issues. In addition, perceived authenticity and the algorithmic power of AI-generated content were found to overlap with the boundaries between real self-representation and digitally altered images, thereby increasing their psychological effects on teenage users (Shukla and Srivastava, 2023).

Additionally, emerging research on AI-generated representations of future selves suggests that such technologies may influence adolescents' identity development by shaping expectations about who they should become. Collectively, these findings indicate that children and adolescents are especially vulnerable to the psychological impacts of AI-generated self-representations (Pataranutaporn et al., 2023).

### 5.2 *Developing and Impoverished Contexts*

Anwar et al. examined the psychological implications of AI-created media narratives in developing and economically disadvantaged settings and how vulnerable structural factors exacerbate them. The research finds that the digital divide, cultural irrelevance, and low media literacy are among the factors that shape the psychological impact of AI-generated content. People living in low-resource areas can also have less access to digital infrastructure and educational resources, limiting their ability to critically assess AI-generated media and placing more people at risk of uncritically accepting algorithmically filtered stories. Moreover, the authors emphasize that AI systems trained on Western datasets may also clash with local cultural values, leading to misrepresentation, identity dissonance, and cultural alienation. The research evidence indicates that poor media literacy in such circumstances leads to greater exposure to misinformation, anxiety, and increased mistrust of media sources. The results demonstrate the importance of

culturally responsive AI and population-specific media literacy intervention, especially in resource-limited settings.

### 5.3 *Feminized Experiences and Online Violence*

The research by Brigham et al. (2024) focuses on how people will perceive AI-generated non-consensual intimate imagery (NCII) using a qualitative approach. The paper will examine the interpretation of deepfake abuse as a form of violation of bodily autonomy, identity, and dignity on the part of the victims, as well as the psychological and reputational effects of it. The results reveal that even the sexual imagery that is digitally fabricated causes harm that is similar to the offline gender-based violence. The methodological virtues are a victim-centered qualitative approach that anticipates lived experiences. Limitations include, however, dependence on data based on perceptions and poor demographic representation, which limit generalizability. (Brigham et al., 2024)

Likewise, Toor et al (2025) explore the unfair targeting of women in terms of artificial sexualization, coercion, and image manipulation using AI. The research places the deepfake abuse and its strategies in a wider framework of systematic misogyny and the asymmetries of power systems through the application of qualitative gender analysis. It highlights how online cultures tend to trivialize or normalize such harms. It has strength in its critical feminist perspective and depth in context, but its weaknesses are a notoriously lacking longitudinal evaluation of the long-term psychological consequences and a dearth of cross-cultural representation (Toor, 2025b).

## 6. Bias, Representation, and Ethical Concerns

### 6.1 *Racial and Algorithmic Bias*

Recent research has also found a high degree of racial and algorithmic bias in AI-generated images, especially when it comes to Eurocentric beauty ideals, stereotyping, and dataset bias. As Yang et al. (2025) discuss in detail, generative AI systems reproduce racial biases present in the training data. The research in question shows that empirical analysis of images prompts the production of results biased towards light skin, Western-type features, and aesthetic aspects dominant in the cultures considered. The study identifies bias in datasets as a structural factor in the development of discriminatory products.

In a similar manner, Yazmina Vargas-Veleda et al. examine the persistence of racialized and gendered stereotypes through AI-generated visuals. The qualitative and computational analysis results help the study conclude that there are strong patterns of association between specific professions, roles in society, and particular races, perpetuating social bias. The strong aspect is its interdisciplinary framework for integrating technical and social critique, but the research article is poor because it focuses too narrowly on AI models and lacks longitudinal bias testing. (Yazmina Vargas-Veleda et al., n.d.).

On the whole, the literature indicates that racial or algorithmic biases in AI-generated images are long-established in the makeup of datasets and social cultures of domination, supporting Eurocentric standards and systemic stereotyping in the digital visual culture.

### 6.2 *Consent, Autonomy, and Image Ownership*

In the article by Brigham et al. (2024b), the authors analyzed how people perceive AI-generated non-consensual intimate imagery (NCII) using a survey. In the study, there is a great concern regarding the creation and sharing of synthetic sexual images without consent and this form of infringement of autonomy, privacy, and identity. It also finds gendered variations in attitudes of acceptability. The strengths are the empirical evaluation of consent standards in developing AI environments, and the weaknesses are the use of speculative conditions and a narrower sample.

The study by M & Ramenzoni (2025) examines the effects of AI-enhanced body imagery on authenticity and self-image. The research, conducted using survey and experimental approaches, concludes that even minor manipulations of AI are hard to notice and can have adverse effects on psychological well-being and body image. One of its strengths is that it allows for the identification of identity and authenticity in online self-presentation, but the sample and analysis are restricted to young adults and do not include a longitudinal study. Comprehensively, literature highlights essential issues of consent, misuse of identity, psychological harm, and image ownership in the digital world through AI-generated and AI-enhanced images. (Brigham et al., 2024b)

## 7. Emotional, Cognitive, and Neuropsychological Responses

While previous sections of this review have examined the broader psychological implications of AI-generated visual content, including its effects on self-esteem and self-

perception, the question of how individuals experience that content at a deeper, more immediate level remains underexplored. Emotional responses to visual stimuli are not purely conscious or reflective; they are shaped by automatic neurological processes, attentional patterns, and physiological reactions that operate beneath conscious awareness. Understanding these lower-level responses is critical because they form the foundation for higher-order psychological effects, such as shifts in self-worth or identity. This section examines what the current empirical literature reveals about the emotional, cognitive, and neuropsychological responses elicited by AI-generated visual content, drawing on two key studies that employ objective physiological and behavioral measurement tools to move beyond reliance on self-report alone.

### 7.1 *Emotional and Physiological Reactions*

Emotional responses to AI-generated imagery remain understudied, but emerging evidence is revealing. In a pilot neurophysiological study with 33 participants, Bilucaglia et al. (2025) compared reactions to real and AI-generated images using EEG, skin conductance, and the Self-Assessment Manikin (SAM). While self-reports showed no significant differences in perceived emotion, physiological measures told a different story. Awareness that an image was AI-generated significantly altered EEG and arousal responses, and AI-generated images overall elicited greater physiological arousal than real photographs. The authors attributed this to the hyper-realism and novelty of AI imagery. These findings suggest a disconnect between conscious perception and automatic physiological response, indicating that AI-generated content may influence users at a level beyond their awareness.

### 7.2 *Threat Perception and Attentional Bias*

Pfeifer et al. (2025) examined whether AI-generated imagery activates threat-related attentional processes. Using Midjourney-generated images to ensure precise stimulus control, 241 young adults completed an eye-tracking task measuring attentional bias toward socially threatening and positive images. Contrary to expectations, loneliness was not associated with greater attention to social threat in this non-clinical sample. However, gender and anxiety-related differences emerged: females showed greater engagement with socially positive images, and baseline pupil diameter was linked to social anxiety. These findings indicate that individual differences, particularly anxiety and gender, shape attentional responses to AI-generated social imagery.

### 7.3 *Synthesis: The Unconscious Dimension of Engagement with AI-Generated Content*

Pfeifer et al. (2025) examined whether AI-generated images activate threat-related attentional processes. Using Midjourney-generated stimuli, the researchers ensured tight control over visual variables such as lighting and composition. In an eye-tracking study with 241 young adults, participants viewed image matrices depicting social threat or positivity, and attentional bias was measured through fixation patterns and pupil dilation. Contrary to expectations, loneliness was not associated with greater attention to socially threatening images in this non-clinical sample. However, females showed greater engagement with socially positive stimuli, and baseline pupil diameter was linked to social anxiety. These findings suggest that individual differences, including anxiety and gender, shape attentional responses to AI-generated social imagery.

## 8. Beneficial and therapeutic applications

Although much of the discussion around AI-generated visual content emphasizes its potential harms, such as diminished self-worth and distorted self-perception, emerging research highlights its therapeutic promise. When used intentionally and ethically, AI-generated imagery can support identity exploration, reduce anxiety, and serve as a valuable tool in research and clinical contexts. This section reviews evidence from three studies demonstrating how AI-generated visuals can be applied to promote psychological well-being.

### 8.1 *Identity Exploration and the Construction of the Future Self*

A compelling example of AI-generated imagery's therapeutic potential comes from research on future self-continuity, the extent to which individuals feel connected to their future selves. Pataranutaporn et al. (2025) developed "Future You," an interactive intervention that allows users to converse with an AI-generated version of their future self, complete with a personalized narrative and an age-progressed portrait. In a preregistered study of 344 participants, even a single-session interaction significantly reduced anxiety and increased future self-continuity compared to control conditions. These findings suggest that AI-generated visual content can serve as a grounding tool, making abstract future identity more tangible and personally meaningful, and promoting psychological well-being rather than social comparison.

### 8.2 *AI-Generated Imagery as a Research and Therapeutic Tool*

AI-generated imagery is also being explored as a methodological and therapeutic tool. Figoli et al. (2025) introduced an AI-augmented value exploration method inspired by photo

elicitation, where participants used Midjourney-generated images to reflect on abstract concepts such as well-being. By translating personal keywords into visual prompts, the method facilitated deeper reflection and revealed implicit meanings that traditional verbal questioning alone did not elicit. The value appeared to lie not only in the final interpretations but in the iterative engagement with the images.

From a broader perspective, Milasan (2024) reviewed the role of AI-generated imagery in mental health research, arguing that it should be viewed as human–AI co-creation rather than a replacement for human creativity. AI-generated visuals may enhance self-expression and lower barriers to artistic participation, particularly in therapeutic contexts. However, the field remains nascent, requiring stronger empirical validation and careful ethical consideration.

### 8.3 *Synthesis: The Conditions Under Which AI-Generated Imagery Becomes Beneficial*

The studies reviewed here indicate that AI-generated visual content is neither inherently harmful nor inherently beneficial; its psychological impact depends largely on context and purpose. Pataranutaporn et al. (2025) showed that structured interventions using AI-generated imagery can reduce anxiety and strengthen future self-continuity. Figoli et al. (2025) demonstrated that AI-generated images can deepen guided self-reflection and reveal unarticulated personal meanings. Milasan (2024) further argued that, when framed as human–AI co-creation and supported by ethical safeguards, such tools hold promises for mental health research and therapy. Together, these findings counter the predominantly risk-focused narrative, suggesting that intentionally designed and guided use of AI imagery can support psychological exploration and well-being.

## 9. Implications and Future Directions

### 9.1 *Implications on Ethics and Policy*

The accelerated development of AI-generated imagery raises urgent ethical and regulatory issues that require a unified policy reaction. Strict, binding rules must be implemented to regulate the production, distribution, and use of AI-generated visual images, particularly regarding consent, privacy, transparency, and algorithmic fairness. The responsibility for digital platforms hosting or sharing AI-generated images lies with a greater degree of responsibility to check for abuse and put in place measures to prevent the spread of non-consensual, misleading, or harmful information. This entails taking preventive actions to shield the minors against accessing sexually explicit,

misleading, and psychologically upsetting images. Caused by the absence of effective accountability structures, AI-mediated visual landscapes threaten to increase identity distortion, strengthen the detrimental social norm, and solely affect vulnerable groups. Ethical governance should hence strike a balance between technological innovation, human rights, psychosocial well-being, and social equity.

### 9.2 *Electronic Literacy and Mental Health Interventions*

The psychological implications of AI-generated images should be addressed through a dual focus on digital literacy and mental health-oriented interventions. The promotion of critical visual literacy will allow users to be more aware of the artificial and algorithmically edited character of AI-generated content and help diminish the internalization of unrealistic or hyper-idealistic standards. The educational programs must be culturally sensitive and context-based, given the diverse socio-cultural settings in which AI imagery is created and consumed. Awareness of ethical digital behavior, identity management, and thoughtful media practices should be incorporated into preventive programs.

### 9.3 *Research Gaps and Future Directions*

Although the field of AI-generated imagery is being studied more actively, significant research gaps persist. There is a general lack of longitudinal studies exploring the net psychological, social, and identity-related impact of persistent exposure to AI-generated images, which limits knowledge of the long-term consequences. The current empirical evidence is also skewed in Western populations, creating cultural bias and restricting the applicability of results to non-Western, developing, or marginalized settings. Moreover, intersectional analysis is underdeveloped, and little attention has been given to the interactions among variables such as gender, race, socioeconomic status, age, and access to digital technology in defining vulnerability, interpretation, and resilience. It is important that these gaps be addressed to promote culturally inclusive, ethically sound, and empirically robust research. The interdisciplinary and context-sensitive approaches to policy formulation, mental health interventions, and educational models should be employed in future studies to reflect the complexity and dynamic nature of AI-mediated visual culture.

## 10. Conclusion

The way individuals see themselves has always been shaped by the visual world around them, from the mirrors of ancient civilization to the curated feeds of modern social media. AI-generated visual content represents the latest, and perhaps most powerful, evolution of that relationship. As this review has demonstrated, the implications are neither simply destructive nor straightforwardly beneficial; they are, above all, complex.

The evidence assembled across this review makes clear that AI-generated imagery has become a significant force in reshaping how individuals evaluate, compare, and ultimately understand themselves. Exposure to algorithmically perfected visual standards has been linked to reduced self-worth and heightened body dissatisfaction, mediated through deeply ingrained processes of social comparison (Tufail et al., 2024). At the neuropsychological level, AI-generated content provokes measurable physiological arousal and alters attentional patterns in ways that individuals may not consciously register (Bilucaglia et al., 2025; Pfeifer et al., 2025). These effects do not unfold in isolation; they are amplified by algorithmic bias, compounded by the vulnerability of adolescents and marginalized populations, and intensified by the absence of clear regulatory frameworks governing the creation, labelling, and distribution of such content.

And yet, the same technology that carries these risks also carries genuine promise. AI-generated imagery, when deployed with intention and ethical care, has shown the capacity to reduce anxiety, strengthen individuals' sense of connection to their future selves, and serve as a meaningful tool for psychological reflection and therapeutic exploration (Pataranutaporn et al., 2025; Figoli et al., 2025; Milasan, 2024). The technology itself is neither the problem nor the solution. What will determine its ultimate effect on human psychological well-being is the wisdom, the regulation, and the critical awareness with which society chooses to engage with it.

We are, in many ways, only at the beginning of understanding what it means to see ourselves through the eyes of an algorithm. The research reviewed here has begun to map that terrain, but substantial gaps remain, particularly the absence of longitudinal evidence, the overrepresentation of Western samples, and the limited exploration of how these effects intersect with race, gender, culture, and individual psychological vulnerability. Closing these gaps is not merely an academic imperative; it is an ethical one. As AI-generated visual content becomes an inescapable feature of the digital environments in which individuals, especially young people,

construct their sense of self, the responsibility to understand, regulate, and thoughtfully integrate this technology has never been greater.

The mirror has learned to speak. The question now is whether we will listen, and whether we will ensure that what it reflects is not a distortion but a foundation upon which a healthier understanding of self can be built.

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