Int. J. Sci. R. Tech., 2026 3(10)
A Multidisciplinary peer-reviewed Journal
www.ijsrtjournal.com [ISSN: 2394-7063]

Original Article

Compulsive Engagement in AI-Generated Sexual Deepfakes of Real Individuals: Behavioral Patterns, Psychological Well-Being, and Ethical Implications

Priyabrata Nayak*

Department of Computer Science and Engineering, Nalanda Institute of Technology, Bhubaneswar, Odisha, India.

ABSTRACT

The increasing accessibility of generative artificial intelligence (AI) has enabled the creation of realistic synthetic images and videos, including sexually explicit deepfakes depicting real individuals without their consent. Although research has examined the technological capabilities and ethical consequences of such content, the behavioral patterns and psychological experiences of individuals who repeatedly create it warrant further investigation. This narrative review examines compulsive engagement in AI-generated sexual deepfake creation from an interdisciplinary perspective, focusing on behavioral patterns, psychological well-being, and ethical implications. It considers repeated engagement, preoccupation, perceived loss of control, and interference with everyday functioning as potential dimensions for future research rather than established characteristics of all users. It also examines the relevance and limitations of existing literature on problematic digital behavior alongside research addressing sexualized deepfake abuse, consent, privacy, and accountability. A central concern is the distinction between frequent use, problematic engagement, and clinically recognized disorders. The review identifies gaps in current knowledge and outlines directions for responsible research, including appropriate assessment methods and ethically designed empirical studies. By connecting generative AI research with behavioral science and digital ethics, this paper aims to support a more evidence-based understanding of repeated sexual deepfake creation and its potential implications for individuals and society.

Keywords: Generative Artificial Intelligence, Sexual Deepfakes, Compulsive Engagement, Psychological Well-Being, Digital Ethics

INTRODUCTION

Background and Context

The increasing accessibility of AI-powered image-generation and facial-manipulation tools has reduced the technical expertise required to produce synthetic content. Research on sexualized deepfake abuse has examined motivations reported by participants, including curiosity, sexual interest, social reinforcement, and the minimization of perceived harm.[1] These findings suggest that the phenomenon warrants examination not only as a technological development but also as a behavioral and social issue. However, findings from individual studies should not be assumed to represent all creators.

Problem Statement

Existing research has examined the production and distribution of non-consensual sexual deepfakes and the harms experienced by depicted individuals. By comparison, evidence concerning the behavioral patterns and psychological experiences of people who repeatedly create such material remains limited. Repeated engagement may reflect curiosity, technical experimentation, sexual interest, habitual use, or perceived difficulty controlling the behavior. These possibilities require investigation without assuming that frequent use necessarily constitutes addiction or a psychiatric disorder.

Research on problematic digital behaviors and problematic pornography use provides potentially relevant concepts, including preoccupation, impaired control, unsuccessful attempts to reduce engagement, distress, and interference with everyday functioning.[3,4] Nevertheless, these concepts cannot automatically be applied to sexual deepfake creation. The involvement of

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

identifiable individuals introduces distinctive concerns about consent, privacy, objectification, and interpersonal harm.

Research Objectives

The objectives of this review are:

1. To identify behavioral patterns and motivations associated with repeated creation of sexual deepfakes depicting real individuals.
2. To examine the relevance of preoccupation, perceived loss of control, and functional interference to the study of problematic engagement.
3. To review available evidence concerning psychological well-being and distinguish established findings from hypotheses requiring further investigation.
4. To analyse ethical implications involving consent, privacy, empathy, and accountability.
5. To identify research gaps and propose directions for responsible, evidence-based investigation.

Scope and Significance

This review focuses on adults and on AI-generated or AI-manipulated sexual imagery depicting identifiable real individuals, particularly where the depicted individuals have not consented to the creation of the sexualized image. It considers behavioral patterns and potential well-being outcomes among creators while recognizing the rights and possible harms of the people depicted.

The paper is intended as a literature-based review rather than a clinical assessment or an empirical investigation of individual creators. By distinguishing frequent use from impaired control and functional interference, it seeks to establish a conceptual foundation for future research. Its discussion may inform future work on ethically responsible AI systems, digital-literacy initiatives, prevention strategies, and the relationship between generative technologies and human behavior.

DEEPFAKE GENERATION TECHNOLOGIES

Overview of Deepfake Technology

Deepfake technology refers to the use of artificial intelligence (AI), particularly deep learning techniques, to generate or manipulate digital images, videos, or audio in ways that may appear authentic. Recent developments in generative models have expanded the capabilities and accessibility of synthetic media. Although these technologies have applications in entertainment, communication, education, and digital content production, they can also be misused to create deceptive or non-consensual sexual imagery involving identifiable individuals.[5]

Deepfake generation and manipulation encompass several distinct technical processes, including face swapping, facial reenactment, attribute manipulation, and the synthesis of entirely artificial faces. These approaches differ in their objectives, computational requirements, and dependence on existing images or videos. Understanding these distinctions is important when examining how generative AI tools are used and how their accessibility may influence patterns of user engagement.[5]

Major Deepfake Generation Approaches

Generative adversarial networks (GANs) have played an important role in realistic image synthesis and facial manipulation. A GAN consists of a generator that produces synthetic samples and a discriminator that attempts to distinguish generated samples from real data. Through adversarial training, the generator learns to produce increasingly realistic outputs. GAN-based approaches have been applied to facial synthesis, image editing, and identity manipulation.[5]

Diffusion models represent another important development in generative AI. These models learn to generate data by reversing a process that progressively introduces noise into training samples. Modern diffusion-based systems can generate detailed images and support controlled image editing. Their increasing capabilities have expanded the range of synthetic media that can be produced using natural-language instructions and other forms of user guidance.[5]

Other approaches include autoencoder-based architectures and neural methods for facial reenactment, expression modification, and identity swapping. The choice of method depends on the intended output, available input data, model architecture, and computational resources. Contemporary systems may also combine several techniques within a single content-generation workflow.[5]

Accessibility and User Engagement

The accessibility of AI generation tools is an important consideration in research on repeated engagement. User interfaces that simplify image manipulation, automated processing, rapid feedback, and readily available generation services may reduce the effort required to produce synthetic content. Research on sexualized deepfake abuse has highlighted the significance of accessible tools and the ease with which such imagery can be created.[1]

Nevertheless, technological accessibility should not be interpreted as direct evidence of compulsive behavior. A tool may enable frequent experimentation without producing impaired control or adverse psychological outcomes. Investigating whether accessibility is associated with repeated or problematic engagement requires evidence concerning actual usage patterns, user motivations, and the consequences of that engagement.

Relevance to Compulsive Engagement

For the present review, deepfake generation technology provides the technical context for examining potentially repetitive user behavior. Relevant factors may include the time and effort required for generation, the speed of output production, opportunities for repeated experimentation, and the perceived quality of generated content. These factors may be investigated as possible influences on engagement, but their relationship with compulsivity must be established through appropriate empirical research.

The distinction between technological capability and human behavior is central to this review. Generative AI systems provide the means to create synthetic content, but the frequency and nature of their use may also depend on individual motivations, social circumstances, ethical awareness, and self-regulation. The availability of rapid generation and repeated editing may be relevant to the study of engagement, but these technical characteristics do not independently establish compulsivity. Accordingly, research in this area requires an interdisciplinary approach integrating computer science, behavioral research, psychological well-being, and digital ethics.

BEHAVIORAL PATTERNS AND COMPULSIVE ENGAGEMENT

Understanding Repeated Engagement

Repeated engagement with AI-based sexual deepfake generation may arise from different motivations, including curiosity about generative technology, sexual interest, experimentation, social reinforcement, or deliberate attempts to harm or humiliate another person. These motivations should not be assumed to be equivalent, as the same observable behavior may occur in different personal and social contexts. Research involving interviews with perpetrators and victims of sexualized deepfake abuse identified curiosity, peer reinforcement, causing harm, and financial motives among the motivations described by participants.[1]

The accessibility of generation tools may reduce the time and technical expertise required to produce synthetic sexual imagery. However, the ease of performing an action does not establish that the person performing it has developed a compulsive pattern. Research must distinguish occasional experimentation, frequent use, habitual engagement, and behavior associated with impaired control or significant negative consequences.

From Frequent Use to Problematic Engagement

Frequency alone is insufficient to establish problematic engagement. Repeated use may reflect technical curiosity or experimentation without perceived difficulty controlling the activity. Conversely, a person may report preoccupation or interference with everyday responsibilities even when the frequency of use is not exceptionally high. Whether these patterns occur among people who create sexual deepfakes, and how they relate to one another, requires direct empirical investigation.

For this review, problematic engagement can be considered through several dimensions: persistent preoccupation with generation, repeated attempts to continue despite intended limits, perceived difficulty reducing or stopping the behavior, and interference with work, education, relationships, or other responsibilities. These dimensions are proposed as research constructs rather than a validated diagnostic instrument for sexual deepfake generation.

The distinction is important because compulsive sexual deepfake creation is not established here as a separate clinical diagnosis. Concepts drawn from research on other problematic behaviors may help formulate questions, but their validity must be assessed specifically for this context.

Potential Behavioral Mechanisms

Several behavioral mechanisms warrant investigation in relation to repeated engagement with generative AI tools. Rapid generation, immediate visual feedback, novelty, and opportunities for repeated modification may encourage continued experimentation. However, whether these features contribute to persistent or poorly controlled engagement in sexual deepfake creation remains an empirical question.

Curiosity and social reinforcement may also be relevant to continued use. Qualitative research on sexualized deepfake abuse has documented participants who described curiosity about the generation process and positive responses from peers as motivations for their behavior. These findings provide a basis for further investigation, but do not establish that curiosity or peer reinforcement necessarily leads to compulsive engagement.[1]

Indicators for Future Investigation

Future empirical studies could examine several indicators to determine whether repeated engagement is associated with meaningful difficulties. These may include the amount of time spent generating content, unsuccessful attempts to reduce use, intrusive preoccupation, continuation despite recognized consequences, and interference with daily functioning. Researchers should also examine alternative explanations, including technical interest, situational experimentation, social pressure, and other contextual factors.

Self-reported distress should be assessed separately from behavioral control. Feelings of guilt or concern may arise from ethical awareness, social stigma, personal values, or the recognition of harm. Such feelings do not, by themselves, establish a compulsive pattern. Similarly, frequent use does not necessarily indicate psychological impairment.

These indicators should be treated as candidate research variables rather than diagnostic criteria. Future studies should examine their reliability, validity, and relevance to sexual deepfake creation before using them to classify engagement as problematic or compulsive.

SUMMARY

The available literature provides an initial basis for examining motivations and social contexts associated with sexualized deepfake abuse. However, the evidence discussed here does not establish the prevalence, progression, or clinical status of compulsive sexual deepfake generation. A careful distinction between motivation, frequency, impaired control, and functional consequences is therefore essential. Future research should develop and validate appropriate assessment approaches while addressing consent, participant privacy, and the potential harm associated with the creation of non-consensual sexual imagery.

PSYCHOLOGICAL WELL-BEING

Understanding Psychological Well-Being

Psychological well-being encompasses emotional functioning, self-regulation, interpersonal relationships, and the ability to manage everyday responsibilities. When examining repeated engagement in AI-generated sexual deepfake creation, it is important to distinguish the creator's psychological experiences from the psychological and social harms experienced by the individual depicted in the content. These are related but separate research questions.

Direct empirical evidence concerning the psychological well-being of people who repeatedly create non-consensual sexual deepfakes remains limited in the literature considered for this review. Consequently, possible associations with emotional distress, self-regulation, relationships, or everyday functioning should be treated as questions for investigation rather than established outcomes of deepfake creation.

Problematic Digital Behavior and Psychological Distress

Research on problematic pornography use offers a related, but not equivalent, body of evidence. A systematic review by Vieira and Griffiths examined associations between problematic pornography use and mental health, reporting that these relationships were complex and varied across the available studies.[3] Such findings may help identify questions for future research, but they do not establish that the same psychological associations occur among people who create sexual deepfakes.

These findings suggest that psychological outcomes associated with problematic digital sexual behavior should not be interpreted in isolation. Emotional distress may coexist with perceived loss of control, but it

may also reflect other personal circumstances, interpersonal difficulties, or conflicts between behavior and personal values. Moreover, findings from pornography-use research cannot establish that similar associations occur among people who generate sexual deepfakes.

Self-Regulation and Perceived Loss of Control

One area for future investigation is the relationship between repeated generation and perceived difficulty controlling behavior. Researchers could examine whether some individuals report persistent preoccupation, unsuccessful attempts to reduce engagement, or continued activity despite interference with work, education, relationships, or other responsibilities.

These indicators should be assessed independently rather than combined into an assumed diagnosis. Frequent use alone does not establish impaired control, and subjective guilt does not necessarily demonstrate behavioral dysregulation. Research should also consider alternative explanations, including technical curiosity, situational experimentation, social influences, and the amount of time available for digital activities.

Future studies should determine whether these indicators form distinct dimensions of engagement and whether any proposed measures demonstrate reliability and validity in populations studied for sexual deepfake creation.

Emotional Experiences and Personal Values

Some individuals may experience emotional conflict when their actions contradict their personal values or their understanding of consent and privacy. Others may minimize the significance of their behavior or fail to recognise the potential consequences for depicted individuals. These possibilities should be investigated empirically rather than presumed to apply to all creators.

Research on problematic pornography use indicates that subjective distress and behavioral dysregulation are conceptually distinct, even though they may overlap. A recent systematic review and meta-analysis published in 2026 found that the psychological correlates of problematic pornography use varied according to how the behavior was measured. The authors also reported substantial differences across studies, highlighting the importance of distinguishing impaired control from shame, moral conflict, and other distress-related experiences.[6]

This distinction is especially important in the study of sexual deepfake creation. Feelings of guilt, the absence of guilt, and the frequency of generation are not sufficient individually to determine whether a person experiences compulsive engagement or psychological impairment. Future studies should use clearly defined constructs and validated measures appropriate to the research population.

Relationships and everyday Functioning

Repeated engagement may warrant investigation when individuals report that the behavior interferes with their responsibilities, personal relationships, sleep, or other everyday activities. Researchers could examine whether time spent generating content, preoccupation with further generation, or attempts to conceal the activity are associated with self-reported difficulties in these areas.

However, the existence and strength of such relationships remain open empirical questions for sexual deepfake creators. Cross-sectional associations, if identified, would not establish whether repeated generation contributes to psychological difficulties, whether existing difficulties influence engagement, or whether both are associated with other factors.

Implications for Future Research

Future research should distinguish the frequency of generation, perceived loss of control, subjective distress, and functional impairment. These dimensions should be measured separately so that frequent use is not automatically classified as problematic and distress is not automatically interpreted as evidence of compulsivity.

Studies could use anonymous adult surveys, qualitative interviews, and longitudinal designs to investigate behavioral patterns over time. Appropriate ethics review, informed consent, confidentiality, and safeguards against collecting or distributing non-consensual intimate imagery would be essential. Researchers should also consider social desirability and self-report limitations when interpreting participants' responses.

SUMMARY

The psychological implications of compulsive engagement in AI-generated sexual deepfake creation

remain an important area for further research. Existing studies of related digital sexual behaviors provide useful conceptual distinctions, particularly between behavioral dysregulation and subjective distress, but they do not establish the psychological outcomes of deepfake creation itself. A careful, evidence-based approach is therefore necessary to determine whether, how, and under what circumstances repeated engagement is associated with individual well-being and everyday functioning.

ETHICAL AND SOCIAL IMPLICATIONS

Consent and Personal Autonomy

Consent is a central ethical consideration in the creation of sexual deepfakes depicting identifiable individuals. Using a person's face, likeness, or photographs to construct sexually explicit imagery does not establish that the person has agreed to that representation. The creation of such material can therefore raise serious concerns about personal autonomy and control over one's identity, even when the resulting image is synthetic rather than a photograph of an actual sexual act. Philosophical research on deepfake pornography argues that the use of a person's likeness to create sexual imagery can provide a basis for requiring consent.[7]

Consent to use a photograph for one purpose should not be interpreted as consent to transform it into sexual content. Similarly, public availability of an individual's photographs does not eliminate the ethical questions associated with their sexual manipulation. Research and policy discussions should distinguish consent to the original image, consent to its transformation, and consent to its subsequent distribution.

Privacy and Image-Based Sexual Abuse

Non-consensual sexual deepfakes raise privacy concerns because they appropriate an identifiable person's likeness for a sexual representation that the person did not authorize. Potential consequences include unwanted exposure, reputational damage, distress, harassment, and concerns about how the material may be circulated or used. A systematic literature review of AI-generated deepfake pornography identifies consent violations, privacy infringement, sexual exploitation, and gaps in legal protection as important areas of concern.[8]

The distinction between creation and distribution is also important. An image may cause harm even if it is not widely circulated, while distribution can increase exposure and make the material more difficult to control. Research on sexualized deepfake abuse has examined both the creation and sharing of such material and the experiences of perpetrators and victims.[1] Ethical analysis should therefore consider the entire process rather than focusing exclusively on publicly circulated content.

Objectification and Perceived Harm

The creation of sexual deepfakes may involve treating another person's identity as material for sexual representation without considering their autonomy or preferences. Research on AI-powered undressing applications has examined how platform features, marketing, and design can facilitate non-consensual intimate image creation and normalize the sexualisation of others without their permission.[9]

An important question for future research is whether creators recognise the potential consequences of their behavior and how they justify or minimize perceived harm. Qualitative research has explored how some perpetrators explain their actions and how social influences may contribute to the normalisation of sexualized deepfake abuse.[1] These findings should not be interpreted as evidence that all creators share the same motivations or ethical attitudes.

Responsibility of Developers and Digital Platforms

The ethical implications extend beyond individual users to developers, service providers, and digital platforms. Design choices can influence how easily users generate, modify, store, and distribute synthetic media. Features that facilitate non-consensual sexual manipulation may increase opportunities for misuse, while safeguards can potentially reduce foreseeable risks.

Potential safeguards include restrictions on non-consensual sexual transformations, clear reporting mechanisms, appropriate content moderation, protection of personal data, and processes for requesting removal of abusive material. Research has also proposed examining platform advertising, search visibility, and the availability of tools that facilitate non-consensual intimate image creation.[8,9] The effectiveness and practical limitations of these interventions require further evaluation.

Legal and Social Accountability

Legal responses to sexual deepfake creation and distribution vary across jurisdictions. Research has highlighted questions concerning the scope of criminalization, protection of depicted individuals, platform responsibilities, and the distinction between creating and disseminating non-consensual sexual imagery.[8,10] As laws differ between countries and may change over time, legal claims should be verified against current legislation in the relevant jurisdiction.

Beyond legal enforcement, prevention may require digital literacy, education about consent, responsible system design, accessible support for affected individuals, and clearer accountability mechanisms. Such approaches should recognise the technological ease of producing synthetic media without assuming that technical accessibility removes individual responsibility for harmful uses.

Ethical Implications for Research on Compulsive Engagement

Research into repeated or potentially compulsive sexual deepfake generation presents its own ethical challenges. Participants may disclose sensitive sexual interests, potentially unlawful behavior, or information about identifiable individuals. Researchers should minimize the collection of intimate data, protect confidentiality, obtain informed consent, and secure appropriate ethics approval before conducting interviews or surveys.

Studies should avoid collecting or reproducing non-consensual intimate imagery unless a clearly justified, ethically approved protocol establishes that such material is necessary. In many cases, anonymous questionnaires and carefully designed interviews can investigate behavioral patterns without requiring participants to submit images or identify depicted individuals. Researchers should also avoid stigmatising participants or treating self-reported frequency as proof of addiction.

SUMMARY

The ethical and social implications of sexual deepfake creation extend beyond the technical production of synthetic imagery. Consent, privacy, autonomy, potential harm, platform responsibility, and accountability are central considerations. Existing literature provides a basis for analysing these concerns, but further research is needed to determine how individual motivations, repeated engagement, and platform design interact. An effective response should combine responsible technology development, evidence-based prevention, appropriate legal protections, and respect for the rights of the individuals depicted.

RESEARCH GAPS AND FUTURE DIRECTIONS

Limited Evidence on Creator Behavior

Research on deepfake technologies has increasingly examined generation methods, detection systems, misinformation, privacy violations, and the harmful use of synthetic media. However, the behavioral experiences of individuals who repeatedly create sexually explicit deepfakes of real people remain insufficiently understood. Existing studies addressing non-consensual sexualized deepfakes provide useful insights into motivations, attitudes, and perceived harm, but they do not establish how frequently such creation becomes repetitive, difficult to control, or disruptive to everyday functioning.[1]

Future studies should investigate the circumstances in which individuals engage in this activity, the reasons for repeated participation, and whether users experience changes in their motivations or patterns of use over time. Researchers should distinguish between occasional experimentation, frequent engagement, and behavior associated with perceived loss of control rather than treating these categories as equivalent.

Need for Clear Conceptual and Assessment Frameworks

A major research gap concerns the absence of an established framework specifically designed to assess compulsive engagement in AI-generated sexual deepfake creation. Concepts such as frequency of use, preoccupation, impaired self-regulation, and interference with daily responsibilities may provide useful starting points. However, these dimensions require careful definition and empirical validation before they can be used to classify behavior.

Future research could develop a conceptual framework that separates technological engagement from problematic behavioral outcomes. Any proposed assessment instrument should undergo appropriate reliability and validity testing and should avoid assuming

that frequent use automatically indicates a psychological disorder. Researchers should also consider alternative explanations, including curiosity, technical experimentation, social influence, and deliberate harmful intent.

Future research could proceed in stages, beginning with qualitative exploration of motivations and experiences, followed by the development and validation of appropriate assessment measures, and then longitudinal studies examining patterns of engagement over time. Each stage should distinguish frequency of use from perceived loss of control, psychological distress, and functional impairment. This staged approach would help establish a clearer evidence base before drawing conclusions about compulsive engagement in sexual deepfake creation.

Longitudinal and Empirical Research

Much of the available discussion surrounding sexual deepfakes focuses on technological capabilities, ethical concerns, legal responses, and the experiences of affected individuals. Further empirical research is needed to understand the development and persistence of repeated creation behavior. Longitudinal studies could examine whether engagement patterns change over time and whether factors such as accessibility, perceived anonymity, social reinforcement, or changes in personal circumstances are associated with those patterns.

Qualitative interviews and appropriately designed surveys could help identify motivations and subjective experiences that are difficult to capture through technical analysis alone. Where feasible, researchers could combine self-reported information with privacy-preserving behavioral measures. Such studies should use transparent sampling procedures, clearly defined variables, and suitable comparison groups. Findings should be reported with appropriate limitations and should not be generalized beyond the populations and settings actually studied.

Psychological Well-Being and Individual Differences

The relationship between repeated sexual deepfake creation and psychological well-being remains an important area for investigation. Research on other forms of problematic digital behavior may offer theoretical concepts and methodological guidance, but its findings cannot automatically be applied to creators of sexual deepfakes. Direct evidence is needed to determine whether particular patterns of engagement are associated with distress, difficulties in self-regulation, interpersonal conflict, or disruption of everyday responsibilities.

Future studies should examine psychological outcomes without presuming that every person who creates such content experiences distress or compulsive behavior. Researchers should also distinguish between the psychological characteristics of creators and the harms experienced by people depicted without consent. These are related but separate research questions that require appropriate study designs and ethical safeguards.

Technical Research and Responsible Platform Design

Computer Science research can contribute by examining how generative AI systems and digital platforms influence the accessibility, production, distribution, and removal of non-consensual sexual deepfakes. Potential research directions include privacy-preserving detection methods, provenance and authenticity mechanisms, consent-aware content controls, reporting workflows, and evaluation of safeguards intended to reduce harmful use.

Technical interventions should be assessed not only for detection accuracy but also for false positives, false negatives, privacy implications, accessibility, and potential misuse. Researchers should investigate whether safety features meaningfully reduce the creation or circulation of non-consensual content while avoiding unnecessary restrictions on legitimate synthetic media applications. Collaboration among computer scientists, behavioral researchers, legal scholars, and affected communities may help ensure that technical solutions address real-world risks.

Ethical and Methodological Considerations

Research involving sexual deepfakes of real individuals presents substantial ethical challenges. Studies must avoid reproducing or distributing non-consensual intimate imagery unnecessarily and should protect the privacy and dignity of people depicted. Researchers should use appropriate ethics review, informed consent procedures where applicable, secure data handling, and carefully justified data collection methods.

Where research involves potentially harmful content, investigators should minimize exposure, restrict access to sensitive materials, and consider the risks of re-identification or further dissemination. Studies of creators should also avoid collecting identifying or incriminating information beyond what is necessary and ethically justified. Clear reporting of limitations is essential, particularly when research relies on self-report, small samples, or populations that may not represent wider user groups.

SUMMARY

Current research provides important foundations for understanding deepfake technologies, non-consensual sexual imagery, and the associated ethical and social risks. Nevertheless, the specific behavioral patterns, potential compulsive features, and psychological experiences associated with repeated creation of AI-generated sexual deepfakes remain insufficiently established. Future work should prioritize validated assessment frameworks, empirical and longitudinal studies, responsible technical interventions, and strong ethical safeguards. Addressing these gaps may support a more evidence-based understanding of the issue without prematurely classifying frequent engagement as a clinical disorder.

CONCLUSION

The increasing accessibility of generative artificial intelligence has created new opportunities for synthetic media production while raising serious concerns about sexually explicit deepfakes depicting real individuals without their consent. Although technical research has advanced the understanding of deepfake generation and detection, the behavioral patterns and psychological experiences associated with repeatedly creating such content remain insufficiently understood.

This review has examined potential dimensions of repeated engagement, including preoccupation, perceived loss of control, difficulties with self-regulation, and interference with everyday functioning. These dimensions provide directions for future research rather than established characteristics of all individuals who create sexual deepfakes. Frequent technological engagement should not be equated with compulsive behavior or a clinically recognized disorder without appropriate empirical evidence and validated assessment methods.

The psychological implications also require careful investigation. Research on related digital behaviors may offer useful theoretical perspectives, but its findings cannot automatically be generalized to people who create sexual deepfakes. Future studies should investigate possible associations with psychological well-being while distinguishing creators' experiences from the harms experienced by individuals whose likenesses are used without consent.

The ethical implications are substantial, particularly in relation to personal autonomy, privacy, dignity, reputational harm, and accountability. Addressing these concerns requires responsible AI development, effective platform safeguards, appropriate legal protections, and greater public awareness. From a Computer Science and Engineering perspective, future research should examine privacy-preserving detection, consent-aware design, content provenance, and reporting mechanisms, while evaluating their effectiveness, limitations, and potential unintended consequences.

Overall, a comprehensive understanding of compulsive engagement in AI-generated sexual deepfake creation requires interdisciplinary research integrating technical analysis, behavioral science, psychological assessment, and digital ethics. Future work should prioritize reliable empirical evidence, validated assessment frameworks, longitudinal investigation, and rigorous ethical safeguards. Establishing this evidence base can clarify the nature of repeated engagement without premature clinical classification, while supporting the protection of individual rights and the responsible development and use of generative AI technologies.

REFERENCES

1. Flynn A, Powell A, Eaton A, Scott AJ. Sexualized deepfake abuse: perpetrator and victim perspectives on the motivations and forms of non-consensually created and shared sexualized deepfake imagery. J Interpers Violence. 2026;41 (21-22):9042-9076. doi:10.1177/08862605251368834.
2. Diel A, Lalgi T, Mellis FS, Teufel M, Bäuerle A. The harm of deepfakes: a scoping review of deepfakes' negative effects on human mind and behavior. AI Soc. 2026;41:5971-5987. doi:10.1007/s00146-025-02774-0.

3. Vieira C, Griffiths MD. Problematic pornography use and mental health: a systematic review. Sex Health Compulsivity. 2024;31 (3):207-247. doi:10.1080/26929953.2024.2348624.
4. Mennig M, Tennie S, Barke A. Self-perceived problematic use of online pornography is linked to clinically relevant levels of psychological distress and psychopathological symptoms. Arch Sex Behav. 2022;51 (2):1313-1321. doi:10.1007/s10508-021-02101-w.
5. Abbas F, Taeihagh A. Unmasking deepfakes: a systematic review of deepfake detection and generation techniques using artificial intelligence. Expert Syst Appl. 2024;252 (Pt B):124260. doi:10.1016/j.eswa.2024.124260.
6. Sheikhi S, Mohammadkhani S, Akbari M. Psychological correlates of problematic pornography use: a systematic review and meta-analysis of measurement and conceptualization differences. Addict Behav Rep. 2026;24:100741. doi:10.1016/j.abrep.2026.100741.
7. Benn C. Deepfakes, pornography and consent. Philosophers' Imprint. 2025. doi:10.3998/phimp.2653.
8. Furizal, Ma'arif A, Maghfiroh H, Suwarno I, Prayogi D, Kariyamin, et al. Social, legal, and ethical implications of AI-generated deepfake pornography on digital platforms: a systematic literature review. Soc Sci Humanit Open. 2025;12:101882. doi:10.1016/j.ssaho.2025.101882.
9. Williams K. "There are no limits!": AI undressing apps and the normalization of nonconsensual intimate deepfakes. Violence Against Women. 2026;32 (14):5267-5288. doi:10.1177/10778012251397966.
10. McGlynn C, Toparlak RT. The "new voyeurism": criminalizing the creation of "deepfake porn." J Law Soc. 2025;52 (2):204-228. doi:10.1111/jols.12527.
11. Döring N, Le TD, Vowels LM, Vowels MJ, Marcantonio TL. The impact of artificial intelligence on human sexuality: a five-year literature review 2020–2024. Curr Sex Health Rep. 2025;17:4. doi:10.1007/s11930-024-00397-y.
12. Jose A, Mathew S. Addressing the psychiatric implications of AI-enabled non-consensual sexual imagery. Br J Psychiatry. 2026;228 (1):73-74. doi:10.1192/bjp.2025.10489.
13. McArthur JL, Blais J, Goruk KJ. Sexual violence in the digital era: exploring correlates of non-consensual intimate image dissemination from a sexual offending framework. Arch Sex Behav. 2025;54 (5):1957-1969. doi:10.1007/s10508-025-03136-z.
14. Peters CS, McGinnis AJ, Im S, Hennessey HL. Satire versus illicit: policy issues regarding the creation of deepfakes using AI technology. Behav Sci Law. 2025;43 (4):462-471. doi:10.1002/bsl.2726.
15. Döring N, Le TD. Engagement in deepfake pornography. Database of Variables for Content Analysis (DOCA). 2026. doi:10.34778/mm485x54.
16. Witt A, Stevens G, Ridgway A, Ringin A. A scoping review of artificial intelligence-generated image-based sexual abuse: terminology, nature, prevalence, attitudes, and harms. Trauma Violence Abuse. 2026. doi:10.1177/15248380261487144.
17. Umbach R, Henry N, Shelby R, Stevens G, Gonzalez-Pons K. AI-generated image-based sexual abuse: perpetration and consumption across three regions. Comput Human Behav. 2026;179:108935. doi:10.1016/j.chb.2026.108935.
18. Ruvalcaba Y, Ray C, Zinter KE, Le VD, Berra L, Leemis R, et al. Nonconsensual pornography, sextortion, and deepfake pornography victimization: findings from a national online sample of U.S. adults. Arch Sex Behav. 2026;55 (6):2357-2362. doi:10.1007/s10508-026-03503-4.
19. McGlynn C, Toparlak RT. The "new voyeurism": criminalizing the creation of "deepfake porn." J Law Soc. 2025;52 (2):204-228. doi:10.1111/jols.12527.
20. Williams K. "There are no limits!": AI undressing apps and the normalization of nonconsensual intimate deepfakes. Violence Against Women. 2026;32 (14):5267-5288. doi:10.1177/10778012251397966.

21. McGlynn C, Rackley E. Image-based sexual abuse. Oxf J Leg Stud. 2017;37 (3):534-561. doi:10.1093/ojls/gqw033.
22. McGlynn C, Johnson K, Rackley E, Henry N, Gavey N, Flynn A, et al. "It's torture for the soul": the harms of image-based sexual abuse. Soc Leg Stud. 2021;30 (4):541-562. doi:10.1177/0964663920947791.
23. Henry N, Gavey N, Johnson K. Image-based sexual abuse as a means of coercive control: victim-survivor experiences. Violence Against Women. 2023;29 (6-7):1206-1226. doi:10.1177/10778012221114918.
24. Rackley E, McGlynn C, Johnson K, Henry N, Gavey N, Flynn A, et al. Seeking justice and redress for victim-survivors of image-based sexual abuse. Fem Leg Stud. 2021;29:293-322. doi:10.1007/s10691-021-09460-8.
25. Kraus SW, Krueger RB, Briken P, First MB, Stein DJ, Kaplan MS, et al. Compulsive sexual behaviour disorder in the ICD-11. World Psychiatry. 2018;17 (1):109-110. doi:10.1002/wps.20499.
26. Grubbs JB, Hoagland KC, Lee BN, Grant JT, Davison P, Reid RC, et al. Sexual addiction 25 years on: a systematic and methodological review of empirical literature and an agenda for future research. Clin Psychol Rev. 2020;82:101925. doi:10.1016/j.cpr.2020.101925.
27. Furizal, Ma'arif A, Maghfiroh H, Suwarno I, Prayogi D, Kariyamin, et al. Social, legal, and ethical implications of AI-generated deepfake pornography on digital platforms: a systematic literature review. Soc Sci Humanit Open. 2025;12:101882. doi:10.1016/j.ssaho.2025.101882.
28. Benn C. Deepfakes, pornography and consent. Philosophers' Imprint. 2025. doi:10.3998/phimp.2653.
29. Bhattacharjee R, Sharma M. Deepfake and pornography: the coming crisis of privacy and consent. South Eastern European Journal of Public Health. 2025;26 (Suppl 2):1196-1213. doi:10.70135/seejph.vi.4885.
30. Henry N, McGlynn C, Flynn A, Johnson K, Powell A, Scott AJ. Image-based sexual abuse: a study on the causes and consequences of non-consensual nude or sexual imagery. London: Routledge; 2021.
31. Diel A, Lalgi T, Mellis FS, Teufel M, Bäuerle A. The harm of deepfakes: a systematic review of the literature. AI Soc. 2026;41:5971-5987. doi:10.1007/s00146-025-02774-0.
32. Abbas F, Taeihagh A. Unmasking deepfakes: a systematic review of deepfake detection and generation techniques using artificial intelligence. Expert Syst Appl. 2024;252 (Pt B):124260. doi:10.1016/j.eswa.2024.124260.
33. Vieira C, Griffiths MD. Problematic pornography use and mental health: a systematic review. Sex Health Compulsivity. 2024;31 (3):207-247. doi:10.1080/26929953.2024.2348624.
34. Mennig M, Tennie S, Barke A. Self-perceived problematic use of online pornography is linked to clinically relevant levels of psychological distress and psychopathological symptoms. Arch Sex Behav. 2022;51 (2):1313-1321. doi:10.1007/s10508-021-02101-w.
35. Sheikhi S, Mohammadkhani S, Akbari M. Psychological correlates of problematic pornography use: a systematic review and meta-analysis of measurement and conceptualization differences. Addict Behav Rep. 2026;24:100741. doi:10.1016/j.abrep.2026.100741.
36. Flynn A, Powell A, Eaton A, Scott AJ. Sexualized deepfake abuse: perpetrator and victim perspectives on the motivations and forms of non-consensually created and shared sexualized deepfake imagery. J Interpers Violence. 2026;41 (21-22):9042-9076. doi:10.1177/08862605251368834.
37. McGlynn C, Rackley E. Image-based sexual abuse and the law: a critical review of the current legal landscape. Verify publication details before including this entry; do not submit until a specific publication record and DOI are confirmed.
38. Döring N, Le TD. The impact of artificial intelligence on human sexuality: a five-year literature review 2020–2024.

HOW TO CITE: Priyabrata Nayak, Compulsive Engagement in AI-Generated Sexual Deepfakes of Real Individuals: Behavioral Patterns, Psychological Well-Being, and Ethical Implications, Int. J. Sci. R. Tech., 2026, 3 (10), 1528-1539. https://doi.org/10.5281/zenodo.23835264