

NFT y Terapia en Salud Mental: Fichas Simbólicas para la Identidad NFTs and Mental Health Therapy: Symbolic Tokens for Identity

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Resumen

Este ensayo argumentativo explora las implicaciones psicológicas y clínicas del uso de los tokens no fungibles (NFT, por sus siglas en inglés) como herramientas simbólicas en contextos reales de terapia psicológica. Desde una perspectiva propositiva, se plantea que los NFT, al ser activos digitales únicos registrados en blockchain, ofrecen nuevas posibilidades para representar logros terapéuticos, procesos de identidad y experiencias personales significativas. El texto analiza cómo estos activos pueden fortalecer la motivación del paciente, aumentar su sentido de pertenencia, promover la autorreflexión y mejorar el compromiso con la intervención clínica. Integrando conceptos de economía de fichas, gamificación y psicología narrativa, se argumenta que los NFT pueden actuar como reforzadores simbólicos que validan el progreso personal, fomentan la autoeficacia y permiten al paciente asumir un rol más activo y autónomo en su proceso terapéutico. Además, se consideran aspectos técnicos y éticos, como la necesidad de interfaces accesibles, la protección de datos personales y la supervisión clínica en su implementación. A partir de la evidencia científica reciente, se concluye que los NFT tienen un potencial innovador en salud mental, especialmente cuando se utilizan como parte de programas terapéuticos digitales o inmersivos. Se recomienda avanzar hacia investigaciones empíricas que evalúen su efectividad en distintos contextos clínicos. En definitiva, los NFT podrían constituir una herramienta emergente que conecte tecnología y psicología, permitiendo simbolizar y reforzar la experiencia del cambio personal en terapia.

Palabras clave: NFT, terapia psicológica, motivación, identidad digital, gamificación.

Abstract

This argumentative essay explores the psychological and clinical implications of using non-fungible tokens (NFTs) as symbolic tools in real-world psychological therapy. Adopting a constructive and pro-NFT perspective, the text argues that NFTs—unique digital assets recorded on a blockchain—offer novel opportunities to represent therapeutic milestones, identity processes, and meaningful personal experiences. The essay examines how NFTs can enhance patient motivation, promote self-reflection, support engagement, and reinforce a sense of autonomy throughout the therapeutic process. Drawing from concepts such as token economies, gamification, and narrative psychology, NFTs are proposed as symbolic reinforcers that validate personal growth, improve adherence to treatment, and help patients actively shape their therapeutic journey. The discussion highlights potential use cases, such as NFT-based achievements, digital identity representations, and collectible artifacts created during therapy. Technical and ethical considerations—such as accessibility, privacy, and



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informed consent—are addressed to ensure responsible implementation. Grounded in recent peer-reviewed research, the essay concludes that NFTs have the potential to enrich mental health interventions, especially in digital and immersive therapy environments. It recommends future empirical studies to assess the effectiveness of NFT-based systems in clinical practice. Ultimately, NFTs could serve as a bridge between emerging technologies and psychology, providing patients with symbolic tools to represent, commemorate, and take ownership of their therapeutic progress.

Keywords: NFT, psychological therapy, motivation, digital identity, gamification. Introduction.

In recent years, non-fungible tokens (NFTs) have emerged as a novel form of digital asset on blockchain networks. Unlike cryptocurrencies (e.g. Bitcoin) that are interchangeable, each NFT is *unique* and indivisible. NFTs can represent ownership of digital or physical items, from artworks and collectibles to game items. Technically, an NFT is a blockchain-based token whose smart contract ensures its uniqueness and verifiable provenance. Because blockchain ledgers are public and immutable, NFTs carry a permanent, tamper-evident record of their origin and transactions. (Sibanda et al., 2024), While this technology is often associated with art, finance, and gaming, recent scholarly work has begun exploring its relevance for healthcare and therapy.

In healthcare contexts, NFTs have been proposed for patient-centric data ownership, supply chain tracking of medicines, and digital certifications. Building on these ideas, some researchers envision NFTs as *symbolic rewards* and *identity tokens* within mental health treatment. This essay examines how NFTs might enrich real-world therapy by serving as tokens of identity, milestones, or personal narratives. We argue from a positive perspective, drawing on psychological theory and emerging studies to highlight potential benefits: enhancing motivation and engagement, reinforcing personal achievements, and bolstering patient autonomy. We ground our discussion in current peer-reviewed literature on blockchain, gamification, and mental health interventions.

NFTs as Motivators and Rewards.

A well-established principle in behavior therapy is that providing rewards for desired actions increases motivation and adherence. Token economies and contingency management are classic examples: patients earn tokens, vouchers, or prizes for meeting goals, and these can be exchanged for privileges or goods. Research shows these systems can dramatically improve outcomes (e.g. adherence to medication, abstinence in addiction treatment). NFTs can be thought of as a digital evolution of this idea. For instance, a therapist might assign a special NFT badge when a patient achieves a milestone, such as attending every session for a month. (Regnier et al., 2022)

This NFT, visible in the patient's digital wallet, acts as a reward token. Crucially, blockchain-backed tokens have additional features: they are secure, unforgeable, and can be collected or traded in patient-safe marketplaces. Allowing NFTs to be *exchanged or shared* adds an extra





incentive layer (patients could gift tokens to peers for encouragement or use them to unlock new therapy content). In this way, NFTs embody gamification, the use of game elements in non-game contexts, which has been shown to boost motivation. Studies in health psychology demonstrate that gamified programs with rewards and achievements can significantly engage users (Castellano-Tejedor & Cencerrado, 2024).

These programs satisfy core psychological needs (competence, autonomy, relatedness) by giving clear feedback and acknowledgment. Analogously, in a therapy NFT system each token marks a concrete accomplishment, signaling to the patient ("I did this, and it was recognized"). This taps into positive reinforcement: seeing that token can trigger pride and encourage continuation of healthy behaviors. In fact, digital badges and reward points in educational and health apps have been found to "enhance motivation by signaling achievement, supporting competence and autonomy, and fostering a sense of progress. Thus, NFTs hold promise as *electronic badges of achievement* in therapy, reinforcing each therapeutic gain.

Furthermore, NFTs can make routine therapy tasks more engaging by transforming them into quests. For example, completing a daily mindfulness exercise or a CBT homework sheet could "level up" a patient's profile by awarding a unique NFT medal. The anticipation of earning collectible tokens introduces a playful, rewarding structure to treatment. Because NFTs are scarce and only earned through effort, they may carry more perceived value than generic badges. Importantly, this does not rely on monetary value or material prize; satisfaction comes from recognition and self-efficacy. Early applications in related fields suggest this could work: one commentary notes that in a metaverse setting, "NFTs will be used as reward tokens that will be awarded on completion of certain goals in therapy" (Nudes et al., 2024). Patients could then trade these tokens in a controlled virtual marketplace, further incentivizing goal achievement. In that scenario, the therapist might say, "you've earned this token for doing good work today," and the patient sees it in their digital collection – a persistent reminder of success. These mechanisms could ultimately *increase treatment adherence*, as patients find therapy tasks more gratifying.

Enhancing Engagement and Participation.

Closely related to motivation is the issue of engagement: the extent to which patients actively participate in therapy. Many digital health interventions struggle with dropout or low compliance. Gamification research shows that embedding interactive game elements in health programs can dramatically boost engagement. NFTs, as part of a digital gamified ecosystem (e.g. a therapy app or virtual reality platform), could similarly draw patients in. The novelty and social buzz around NFTs may especially appeal to younger or tech-savvy patients. For instance, integrating NFTs with virtual reality exposure therapy could make the experience more immersive: as patients overcome a feared scenario, they unlock a virtual souvenir NFT tied to that success. Because the NFT can be shared with their therapist or posted in a secure group (if clinically appropriate), it also introduces a social element of support. Research on VR in mental health suggests that engaging, game-like environments





enable patients to practice skills repeatedly and enjoyably. NFT rewards can enhance this effect by giving each session a tangible outcome. (Lawson-McLean, 2023)

Moreover, NFT-based features can personalize the therapy journey. For example, allowing patients to customize their avatar or environment with NFT collectibles (earned through challenges) gives them creative control and a sense of ownership. This personalization satisfies the basic psychological need of autonomy, making therapy feel less like a one-size-fits-all package and more like a personal project. (When patients invest effort to earn and curate their NFT collection, they become stakeholders in the process. Preliminary evidence from general gamification research indicates that when people feel ownership and progress (through things like digital badges and tokens), they are more likely to stick with an intervention. Translating that to therapy, we expect similar patterns: patients who build their "therapy NFT portfolio" may find renewed interest in continuing. In short, NFTs can serve as *engaging stimuli* that keep patients actively involved, turning passive exercises into interactive quests. (Afrashtehfar & Abu-Fanas, 2022).

Patient Autonomy and Empowerment.

An especially attractive feature of blockchain-based NFTs is the empowerment of patient autonomy. In traditional healthcare, patients often have little control over their records or treatments. Blockchain proponents highlight that tokenization allows individuals to "fully control their own identity" and health data. In therapy, this translates into patients *owning* their therapeutic artifacts. When a patient holds NFTs tied to their progress, they literally possess their treatment history in their own wallet, not on a clinic server. They can choose when and with whom to share these tokens. This sense of ownership can reinforce self-efficacy, the belief that one is the author of one's recovery journey. (Gross et al., 2021)

Academic viewpoints note that NFTs can "optimize utility, value, and respect for patients" by maintaining the provenance of unique personal contributions. In other words, the digital token is a form of recognition and respect for what the patient has achieved or contributed (for example, an artistic creation or a personal story). This can be psychologically meaningful: it signals to the patient that their effort is valued enough to be recorded on an immutable ledger. In practice, a therapist might explicitly discuss the NFT with the patient ("This is your token of accomplishment for completing that difficult session"), thereby reinforcing agency.

The decentralized nature of NFTs also offers privacy and trust advantages. Because blockchain records are encrypted and not controlled by any single party, patients can feel more secure that their personal tokens won't be altered or misused. This can encourage candid participation, especially in sensitive therapies (e.g. trauma work) where trust is key. Additionally, tokenization can allow creative consent models: for instance, patients might issue an NFT as permission for data sharing. Such mechanisms underline that patients remain in the driver's seat. Overall, by embedding autonomy and transparency into the reward system, NFTs can contribute to a more patient-centered approach.





Practical Considerations.

To realize these benefits, integrating NFTs into therapy must be done thoughtfully. First, clinicians and developers should design NFT rewards that align with therapeutic goals. Tokens should reflect genuine milestones (e.g. skill mastery, sessions attended) rather than arbitrary achievements, to maintain clinical relevance. Rewards can be structured hierarchically (e.g. bronze, silver, gold NFTs) to mark different levels of progress, similar to earning belts or badges. Second, digital literacy and access must be addressed. Therapists should ensure patients understand how to use wallets or apps safely. Simpler interfaces (perhaps with simplified QR codes or web wallets) can make NFT participation accessible to non-technical users. Third, ethical oversight is essential: care must be taken that token rewards do not become coercive or distracting. The focus should remain on psychological growth, not on speculating NFT value. Guidelines can include having patients co-create NFT designs, which combines creativity with therapy. Clinicians might also integrate NFTs with existing therapeutic modalities (CBT, DBT, etc.), treating them as adjunct tools to motivate behaviors like coping strategies or exposure exercises. (Wang et al., 2021)

On the technical side, blockchain platforms vary in cost and speed. As researchers note, newer blockchains offer lower fees and faster transactions, which is important if therapy apps mint many small tokens. Choosing a suitable platform is part of design. Moreover, data privacy laws must be considered: while NFTs themselves may not contain identifiable data (often just pointers or hashes), the systems linking them to patient records must comply with regulations like HIPAA or GDPR. Partnerships with health informatics experts are advisable when building NFT-based health apps. (Banaeian-Far & Hosseini-Bamakan, 2023).

Conclusion and Recommendations.

In summary, NFTs represent an intriguing new modality for mental health practice. As unique digital symbols, they can capture and reinforce elements of a patient's identity, transforming abstract achievements into concrete tokens. By harnessing well-established psychological principles from token economies and gamification, NFT-based systems may significantly boost motivation, engagement, and adherence in therapy. The blockchain foundation of NFTs further supports patient autonomy and privacy, key values in patient-centered care. On a theoretical level, using NFTs in therapy aligns with self-determination theory: tokens and achievements satisfy needs for competence and autonomy, while community aspects can meet relatedness. (Lee et al., 2025)

Given these promising connections, clinicians and researchers should explore NFT interventions empirically. We recommend pilot studies where therapy programs (for example, digital CBT apps) include NFT rewards for homework completion. Outcomes like session attendance, patient engagement scores, and symptom improvement could be compared to control groups. Qualitative feedback from patients about how the tokens affected their motivation and identity perception would also be valuable. Simultaneously, collaboration with ethicists and patients is important to ensure these tools respect agency and do not inadvertently stigmatize or exclude any group.





Ultimately, NFTs are a tool, not a substitute for clinical skill. But if applied carefully, they may enrich therapy by making progress visible, celebrating growth, and putting patients in control of their digital therapy narrative. Future work should address practical hurdles (e.g. digital divide, data security) and refine designs (e.g. best tokenomics for behavior change). In the evolving landscape of digital health, NFTs could become a part of the therapeutic toolkit, a novel bridge between technology and psychology that helps patients see themselves as active authors of their recovery.





Referencias

- Sibanda, K., Ndayizigamiye, P., & Twinomurinzi, H. (2024). Non-fungible tokens (NFTs) in healthcare: a thematic analysis and research agenda. *Frontiers in Digital Health*, 6, 1377531. DOI: https://doi.org/10.3389/fdgth.2024.1377531
- Regnier, S. D., Traxler, H. K., Devoto, A., & DeFulio, A. (2022). A systematic review of treatment maintenance strategies in token economies: implications for contingency management. *Perspectives on Behavior Science*, 45(4), 819-861. DOI: https://doi.org/10.1007/s40614-022-00358-7
- Castellano-Tejedor, C., & Cencerrado, A. (2024). Gamification for Mental Health and Health Psychology: Insights at the First Quarter Mark of the 21st Century. *International Journal of Environmental Research and Public Health*, 21(8), 990. https://doi.org/10.3390/ijerph21080990
- Nunes, T., da Cunha, P. R., de Abreu, J. M., Duarte, J., & Corte-Real, A. (2024). Non-Fungible Tokens (NFTs) in Healthcare: A Systematic Review. *International Journal of Environmental Research and Public Health*, 21(8), 965. DOI: https://doi.org/10.3390/ijerph21080965
- Lawson McLean, A. (2023). Non-fungible token integration in neurosurgery: a technical review. *Neurosurgical Review*, 46(1), 207. DOI: https://doi.org/10.1007/s10143-023-02119-9
- Afrashtehfar, K. I., & Abu-Fanas, A. S. H. (2022). Metaverse, Crypto, and NFTs in Dentistry. *Education Sciences*, 12(8), 538. https://doi.org/10.3390/educsci12080538
- Gross, M. S., Hood, A. J., & Miller Jr, R. C. (2021). Nonfungible tokens as a blockchain solution to ethical challenges for the secondary use of biospecimens. *JMIR Bioinformatics and Biotechnology*, 2(1), e29905. DOI: https://doi.org/10.2196/29905
- Wang, Q., Li, R., Wang, Q., & Chen, S. (2021). Non-fungible token (NFT): Overview, evaluation, opportunities and challenges. *arXiv* preprint arXiv:2105.07447.
- Banaeian Far, S., & Hosseini Bamakan, S. M. (2023). NFT-based identity management in metaverses: challenges and opportunities. *SN Applied Sciences*, 5(10), 260.
- Lee, M. F., Li, J. T., Lin, W. R., & Wang, Y. H. (2025). Evaluation of Digital Asset Investment Platforms: A Case Study of Non-Fungible Tokens (NFTs). *AppliedMath*, 5(1), 3.

