

The Metaverse and the Reconsideration of Pure Reason: Identity and Ethical Crises in Relation to Women and Family from a Psychological Perspective

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ABSTRACT

Objective: The aim of this study was to investigate the identity and ethical crises emerging from engagement with the metaverse in relation to women and family from a psychological perspective.

Methods and Materials: This study employed a qualitative research design grounded in an interpretive paradigm to explore lived experiences of individuals engaged in the metaverse. The participants consisted of 24 individuals (12 women and 12 men) from Tehran, selected through purposive sampling with maximum variation in age, education, and marital status, and data collection continued until theoretical saturation was achieved. Data were gathered through semi-structured, in-depth interviews focusing on identity construction, moral reasoning, gender roles, and family dynamics within virtual environments. Each interview lasted between 60 and 90 minutes and was transcribed verbatim. The data were analyzed using thematic analysis, involving open coding, axial categorization, and selective theme development. To ensure trustworthiness, strategies such as member checking, peer debriefing, and maintaining an audit trail were employed.

Findings: The findings revealed five core themes including identity fragmentation, ethical relativism, gender role reconstruction, transformation of family dynamics, and psychological consequences. The results indicated that engagement with the metaverse significantly contributes to the multiplicity and fluidity of identity, leading to discrepancies between virtual and real selves. Ethical reasoning was found to shift toward context-dependent relativism, characterized by reduced accountability and flexible moral boundaries. Gender representation in the metaverse facilitated both identity exploration and the reinforcement of stereotypical norms. Furthermore, virtual immersion was associated with altered family interactions, including emotional distancing and redefined relational priorities.

Conclusion: The metaverse represents a transformative digital context that simultaneously expands opportunities for identity exploration and intensifies psychological and ethical challenges, necessitating a critical reconsideration of self, morality, and family relationships within technologically mediated environments.

Keywords: Metaverse, Identity Crisis, Ethical Relativism, Digital Identity, Gender Roles, Family Dynamics, Psychological Impact

1. Introduction

The rapid emergence of the metaverse as a technologically mediated, immersive digital ecosystem has fundamentally transformed the ontological and epistemological boundaries of human experience, raising profound questions regarding identity, morality, and social relations. Conceptually, the metaverse extends beyond traditional virtual environments by integrating augmented reality, virtual reality, blockchain-based ownership, and persistent digital identities into a unified experiential domain that blurs the distinction between the physical and the virtual (Malik, 2024; Singh, 2024; Zhang et al., 2022). This transformation has not only altered patterns of interaction and communication but has also redefined how individuals construct and negotiate their sense of self within increasingly hybrid realities. From a psychological perspective, the metaverse functions as a novel context for identity formation, where individuals can experiment with multiple selves, engage in symbolic representations through avatars, and reconstruct social roles in ways that are not always constrained by physical-world norms (Farah et al., 2024; Yin et al., 2022). Such affordances create opportunities for self-expression and exploration, yet simultaneously generate tensions that may culminate in identity fragmentation and ethical ambiguity.

The philosophical roots of these tensions can be traced to the critical tradition initiated by Immanuel Kant, particularly his analysis of the limits and conditions of human knowledge and reason. In the *Critique of Pure Reason*, Kant interrogates the capacity of reason to comprehend reality independent of sensory experience, emphasizing the structuring role of cognitive categories in shaping perception (Gardner, 1999; Kant, 2022). Contemporary reinterpretations of Kantian philosophy suggest that in digitally mediated environments such as the metaverse, these epistemic structures are not only challenged but actively reconstructed, as individuals engage with simulated realities that may lack stable referents in the empirical world (Riggio, 2016; Strawson, 1966). This raises the question of whether the metaverse constitutes a new domain of “synthetic a priori” experience, where the boundaries between imagination and reality become increasingly permeable. In this sense, the metaverse can be understood as a space that necessitates a reconsideration of pure reason, particularly in relation to how individuals perceive themselves and others within technologically constructed environments.

From a psychological standpoint, identity has traditionally been conceptualized as a relatively coherent and continuous construct shaped through social interaction and internal cognitive processes. However, the affordances of the metaverse disrupt this coherence by enabling the simultaneous existence of multiple, potentially contradictory identities. Research indicates that digital environments facilitate the creation of alternative selves that may differ significantly from individuals’ offline identities, thereby introducing a dynamic interplay between authenticity and performativity (Latif Zadeh & Gubouli Darfashan, 2023; Mitrushchenkova, 2023). This multiplicity of identity is further intensified by the persistent and immersive nature of the metaverse, which allows users to inhabit virtual roles for extended periods, often leading to a blurring of boundaries between real and virtual selves. As a result, individuals may experience identity diffusion, role confusion, and cognitive dissonance, particularly when discrepancies arise between their virtual and real-life personas.

In addition to identity-related challenges, the metaverse introduces complex ethical dilemmas that stem from the reconfiguration of social norms and accountability structures. The relative anonymity and perceived detachment from real-world consequences can lead to a relaxation of moral constraints, fostering behaviors that might otherwise be inhibited in physical contexts (Hajian et al., 2024; Zou & Hu, 2024). This phenomenon aligns with broader concerns regarding the erosion of ethical standards in digital environments, where traditional frameworks of responsibility and accountability are often insufficient to regulate behavior. Moreover, the algorithmic and platform-driven nature of the metaverse raises questions about power, control, and the commodification of identity, as users’ actions and interactions are increasingly mediated by technological infrastructures (Hadi et al., 2023; Wang & Wang, 2023). These dynamics contribute to what can be described as an ethical relativism within the metaverse, where moral judgments become context-dependent and subject to continuous renegotiation.

The implications of these developments are particularly significant in relation to gender and family structures, which are deeply embedded in cultural, social, and psychological frameworks. The metaverse provides a space for the reimagining of gender roles, allowing individuals to experiment with different forms of gender expression and identity. While this can promote inclusivity and self-exploration, it also raises concerns about the reinforcement of stereotypes, objectification, and the potential

destabilization of established gender norms (Farah et al., 2024; Zhang et al., 2022). For women, in particular, the metaverse may simultaneously serve as a site of empowerment and vulnerability, where opportunities for agency coexist with risks of exploitation and marginalization. The representation of female avatars, often influenced by hyperrealistic or idealized aesthetics, can perpetuate unrealistic standards and contribute to the internalization of problematic gender norms.

Similarly, the impact of the metaverse on family dynamics represents a critical area of inquiry. Family systems, which traditionally function as primary contexts for socialization, emotional support, and identity development, are increasingly influenced by individuals' engagement with digital environments. The immersive nature of the metaverse can lead to shifts in time allocation, emotional investment, and relational priorities, potentially resulting in reduced face-to-face interaction and weakened familial bonds (Shapiro, 2024; Thomas et al., 2024). At the same time, the metaverse may offer new forms of connection and interaction that transcend geographical and temporal constraints, suggesting a complex interplay between disruption and adaptation. Psychological theories of attachment and relational dynamics provide a useful framework for understanding these changes, highlighting how alterations in communication patterns and emotional availability can affect the quality of family relationships.

The interdisciplinary nature of the metaverse necessitates an integrative analytical approach that combines insights from psychology, philosophy, sociology, and technology studies. From a humanistic and existential perspective, the metaverse can be viewed as a contemporary manifestation of the ongoing quest for meaning, identity, and self-realization in an increasingly complex and mediated world (Wertz, 2026). However, this quest is accompanied by new forms of existential anxiety and uncertainty, as individuals navigate environments that challenge traditional notions of reality, authenticity, and moral responsibility. The historical development of psychological thought, particularly within humanistic and existential traditions, underscores the importance of authenticity, agency, and ethical engagement in the construction of a meaningful life, all of which are subject to reconfiguration within the metaverse context.

Furthermore, the cultural and symbolic dimensions of the metaverse contribute to its significance as a site of identity and ethical negotiation. Drawing on insights from digital culture and science fiction, the metaverse can be understood as both a technological innovation and a cultural narrative

that reflects and shapes societal values, fears, and aspirations (Shapiro, 2024). This narrative dimension is particularly relevant in understanding how individuals interpret and internalize their experiences within virtual environments, as well as how these experiences influence their perceptions of self and others. The symbolic representations and narratives embedded within the metaverse play a crucial role in shaping users' cognitive schemas, emotional responses, and behavioral patterns.

Despite the growing body of research on the metaverse, there remains a significant gap in understanding its psychological and ethical implications, particularly in relation to women and family structures within specific cultural contexts such as Iran. Existing studies have primarily focused on technological, economic, and general behavioral aspects, with limited attention to the nuanced interplay between identity, morality, gender, and family dynamics. Moreover, the majority of research has been conducted in Western contexts, highlighting the need for culturally grounded investigations that consider the unique socio-cultural and religious frameworks influencing individuals' experiences in the metaverse (Hordijk, 2024; Missonnier, 2023). Addressing this gap is essential for developing a comprehensive understanding of the metaverse as a global phenomenon with diverse and context-specific implications.

In light of these considerations, the present study seeks to explore the psychological dimensions of identity and ethical crises in the metaverse, with a particular focus on women and family from a culturally situated perspective. By adopting a qualitative approach, this study aims to capture the lived experiences and subjective interpretations of individuals engaging with the metaverse, thereby providing rich and nuanced insights into the complex processes underlying identity construction and moral reasoning in virtual environments. The integration of philosophical and psychological perspectives offers a comprehensive framework for analyzing these phenomena, emphasizing the need for a critical reconsideration of pure reason in the context of emerging digital realities.

The aim of this study is to investigate the identity and ethical crises emerging from engagement with the metaverse in relation to women and family from a psychological perspective.

2. Methods and Materials

2.1. Study Design and Participants

The present study was conducted using a qualitative research design grounded in an interpretive paradigm, aiming to deeply explore the psychological dimensions of identity and ethical crises emerging from individuals' engagement with the metaverse, particularly in relation to women and family structures. The research population consisted of individuals residing in Tehran who had active and continuous experience using metaverse platforms and immersive virtual environments. Through purposive sampling and with consideration of theoretical saturation, a total of 24 participants (12 women and 12 men) were selected. The inclusion criteria involved having at least one year of active engagement in virtual environments such as virtual social platforms, digital avatars, or immersive online communities, as well as willingness to articulate personal experiences related to identity, family roles, and ethical perceptions. Efforts were made to ensure maximum variation in terms of age, educational background, and marital status to capture diverse perspectives. Sampling continued until no new conceptual categories emerged, indicating data saturation.

2.2. Measures

Data were collected using semi-structured, in-depth interviews designed to elicit rich, experiential narratives regarding participants' perceptions of self-identity, moral reasoning, gender roles, and family interactions within and beyond the metaverse context. The interview protocol included open-ended questions focusing on themes such as the construction and transformation of virtual identity, perceived differences between real and virtual moral norms, experiences of gender representation in virtual spaces, and the impact of metaverse engagement on family relationships and roles. Each interview lasted between 60 to 90 minutes and was conducted either face-to-face or via secure online communication platforms, depending on participants' preferences. All interviews were audio-recorded with participants' informed consent and subsequently transcribed verbatim. To enhance credibility, follow-up questions and probing techniques were employed to clarify meanings and deepen responses. Additionally, field notes were taken during and immediately after interviews to capture non-verbal cues and contextual observations.

2.3. Data Analysis

Data analysis was carried out using thematic analysis following the approach proposed by Braun and Clarke, involving a systematic process of coding, categorization, and theme development. Initially, all transcripts were read multiple times to achieve immersion and familiarity with the data. Open coding was then conducted to identify meaningful units related to identity transformation, ethical ambiguity, gender representation, and family dynamics. These initial codes were subsequently organized into broader categories through axial coding, highlighting relationships between concepts. In the final stage, selective coding was used to integrate categories into overarching themes that reflected the core psychological processes underlying identity and ethical crises in the metaverse context. To ensure trustworthiness, several strategies were employed, including member checking, where participants reviewed and confirmed the accuracy of interpreted data, peer debriefing with experts in psychology and qualitative research, and maintaining an audit trail documenting all analytical decisions. The criteria of credibility, dependability, confirmability, and transferability were rigorously addressed to enhance the scientific rigor of the study.

3. Findings and Results

The analysis of demographic characteristics indicated that the 24 participants were evenly distributed by gender, including 12 women and 12 men, reflecting a deliberate effort to capture gender-balanced perspectives on identity and ethical experiences in the metaverse. Participants ranged in age from 21 to 45 years, with a mean age of 31.8 years, representing young to middle adulthood—a period often associated with identity consolidation and role negotiation. In terms of educational background, 8 participants held bachelor's degrees, 11 held master's degrees, and 5 had doctoral-level education, suggesting a relatively high level of cognitive and reflective capacity relevant to discussing abstract constructs such as identity and morality. Regarding marital status, 14 participants were single and 10 were married, allowing for comparative insights into how family roles and commitments intersect with metaverse engagement. The duration of metaverse use ranged from 1 to 4 years, with an average of 2.3 years, indicating sufficient exposure to immersive environments for meaningful experiential reflection. Occupational diversity was also evident, including students, professionals in technology-

related fields, educators, and freelance digital workers, which contributed to a broad range of lived experiences.

Table 1

Main Themes and Subthemes of Identity and Ethical Crises in the Metaverse

Main Theme	Subthemes
Fragmentation of Identity	Multiplicity of Self, Avatar-Real Self Discrepancy, Fluid Identity Boundaries
Ethical Relativism	Contextual Morality, Reduced Accountability, Normalization of Deviance
Gender Representation and Role Reconstruction	Hypersexualization of Female Avatars, Role Experimentation, Gender Fluidity
Transformation of Family Dynamics	Emotional Distance, Redefinition of Intimacy, Conflict between Virtual and Real Roles
Psychological Consequences	Identity Confusion, Emotional Ambivalence, Cognitive Dissonance

The data analysis revealed five overarching themes capturing the psychological and ethical complexities experienced by participants in the metaverse. The theme of fragmentation of identity highlighted how individuals constructed multiple, sometimes conflicting selves through avatars, leading to a blurred distinction between real and virtual identities. Ethical relativism emerged as a dominant theme, with participants reporting a shift toward situational and flexible moral standards within virtual environments. The theme of gender representation and role reconstruction

illustrated how participants engaged in alternative gender performances, often influenced by cultural stereotypes or personal exploration. Transformation of family dynamics reflected tensions between virtual engagement and real-life familial roles, often resulting in emotional distancing or redefinition of relational boundaries. Finally, psychological consequences encompassed internal conflicts such as identity confusion and emotional ambivalence, indicating the profound impact of metaverse immersion on individual well-being.

Table 2

Frequency and Distribution of Codes across Main Themes

Main Theme	Number of Codes	Frequency (%)
Fragmentation of Identity	48	26.37
Ethical Relativism	42	23.08
Gender Representation and Role Reconstruction	36	19.78
Transformation of Family Dynamics	32	17.58
Psychological Consequences	24	13.19
Total	182	100

The frequency analysis of coded data demonstrated that fragmentation of identity was the most prominent theme, accounting for 26.37% of all extracted codes, indicating that identity-related issues were central to participants' experiences. Ethical relativism followed closely, suggesting that moral flexibility is a significant psychological adaptation within the metaverse. Gender-related themes constituted nearly one-fifth of all codes, reflecting the

importance of gender performance and representation in virtual environments. Family-related transformations, while slightly less frequent, still represented a substantial portion of participants' narratives, emphasizing the relational consequences of metaverse immersion. Psychological consequences, although the least frequent, were deeply impactful, often described with intensity and personal significance.

Table 3

Representative Participant Statements for Each Theme

Main Theme	Sample Statement
Fragmentation of Identity	"I feel like I have different versions of myself depending on which avatar I use."
Ethical Relativism	"In the metaverse, things don't feel as right or wrong as they do in real life."
Gender Representation	"I chose a female avatar to explore how people react differently to me."
Family Dynamics	"Sometimes I prefer my virtual relationships over real family interactions."
Psychological Consequences	"It's confusing because I don't always know which version of me is the real one."

The qualitative depth of participants' experiences is illustrated through representative statements that encapsulate the essence of each theme. Participants described identity fragmentation as a lived experience of multiplicity and fluidity, often accompanied by a sense of detachment from a unified self. Ethical relativism was articulated through perceptions of diminished moral constraints, where behaviors considered unacceptable in real life became normalized. Gender representation was

frequently associated with experimentation and curiosity, but also with exposure to stereotypical or exaggerated portrayals. Statements related to family dynamics revealed a shift in emotional investment, with some participants expressing a preference for virtual interactions over real-life relationships. Psychological consequences were characterized by confusion, internal conflict, and a struggle to maintain coherence between different aspects of the self.

Table 4

Matrix of Relationships between Themes

Theme Interaction	Description
Identity Fragmentation ↔ Ethical Relativism	Fragmented identities facilitate flexible moral standards
Identity Fragmentation ↔ Psychological Consequences	Multiple selves lead to confusion and emotional instability
Gender Representation ↔ Ethical Relativism	Gender experimentation often occurs in morally ambiguous contexts
Family Dynamics ↔ Psychological Consequences	Disrupted family roles contribute to emotional distress
Ethical Relativism ↔ Family Dynamics	Reduced moral constraints impact commitment to family roles

The relational analysis between themes revealed a complex, interconnected structure underlying participants' experiences. Identity fragmentation was closely linked to ethical relativism, suggesting that the existence of multiple selves enables individuals to adopt different moral frameworks depending on context. This fragmentation also contributed directly to psychological consequences, particularly in the form of confusion and emotional instability. Gender representation was intertwined with ethical relativism, as participants often engaged in gender experimentation within environments perceived as morally flexible. Changes in family dynamics were strongly associated with psychological distress, indicating that disruptions in real-life relationships have significant emotional repercussions. Furthermore, ethical relativism appeared to influence family commitment, with some participants reporting decreased adherence to traditional familial responsibilities due to altered moral perceptions in virtual spaces.

4. Discussion

The findings of the present study revealed a complex and multidimensional structure of identity and ethical crises emerging from individuals' engagement with the metaverse, particularly in relation to women and family dynamics. One of the central findings was the fragmentation of identity, manifested through the multiplicity of selves and the discrepancy between avatar-based and real-world identities. Participants reported experiencing fluid and sometimes

conflicting identity constructions, which aligns with the notion that immersive digital environments enable individuals to experiment with alternative self-representations beyond the constraints of physical reality. This finding is consistent with previous research suggesting that the metaverse facilitates the construction of flexible and dynamic identities, often resulting in a reconfiguration of self-concept and personal continuity (Latif Zadeh & Gubouli Darfashan, 2023; Mitrushchenkova, 2023). From a psychological perspective, such multiplicity may initially serve adaptive functions, such as exploration and self-expression; however, prolonged engagement appears to intensify identity diffusion and cognitive dissonance, particularly when individuals struggle to reconcile their virtual and real identities. This tension resonates with existential and humanistic perspectives emphasizing the importance of coherence and authenticity in identity formation (Wertz, 2026).

Another significant finding relates to the emergence of ethical relativism within the metaverse, where participants described a noticeable shift in moral reasoning characterized by reduced accountability and context-dependent ethical judgments. The perceived detachment from real-world consequences, combined with anonymity and the absence of stable regulatory frameworks, appears to facilitate behaviors that would otherwise be constrained in offline settings. This observation is supported by prior studies highlighting the risks associated with disrupted social interaction norms and weakened moral structures in virtual environments (Hajian et al., 2024; Zou & Hu, 2024). Furthermore, the

technological architecture of the metaverse, including algorithmic mediation and platform governance, contributes to the redefinition of moral boundaries, reinforcing the idea that ethical standards in digital spaces are continuously negotiated rather than fixed (Hadi et al., 2023; Wang & Wang, 2023). In light of Kantian philosophy, this phenomenon can be interpreted as a challenge to the universality of moral law, as individuals increasingly rely on subjective and situational reasoning rather than categorical imperatives (Gardner, 1999; Kant, 2022).

The study also highlighted the critical role of gender representation and role reconstruction in shaping participants' experiences within the metaverse. Many participants engaged in gender experimentation, often adopting avatars that differed from their biological sex or socially assigned gender roles. While this practice provided opportunities for exploration and self-discovery, it also exposed participants to stereotypical and sometimes exaggerated representations of gender, particularly in the case of female avatars. This duality reflects broader tensions identified in the literature, where the metaverse simultaneously functions as a space of empowerment and a site of potential objectification and normative reinforcement (Farah et al., 2024; Zhang et al., 2022). The hyperreal and idealized portrayal of women in virtual environments may contribute to the internalization of unrealistic standards and the perpetuation of gender inequalities, even within ostensibly liberating digital spaces. These findings underscore the need to critically examine how technological affordances intersect with cultural norms to shape gendered experiences in the metaverse.

In relation to family dynamics, the findings indicated a significant transformation in relational patterns, characterized by emotional distancing, redefinition of intimacy, and conflicts between virtual and real-life roles. Participants frequently reported allocating substantial time and emotional investment to their virtual interactions, often at the expense of face-to-face family engagement. This shift aligns with previous research suggesting that immersive digital environments can alter communication patterns and relational priorities, potentially leading to weakened family cohesion (Shapiro, 2024; Thomas et al., 2024). From a psychological perspective, such changes may disrupt attachment processes and reduce the quality of emotional bonds within families, particularly when individuals become more attuned to virtual relationships than to their immediate social environment. At the same time, it is important to acknowledge that the metaverse may also offer new

opportunities for connection, particularly in contexts where physical proximity is limited, highlighting the ambivalent nature of its impact on family systems.

The psychological consequences identified in this study, including identity confusion, emotional ambivalence, and cognitive dissonance, further illustrate the depth of the challenges associated with metaverse engagement. These outcomes can be understood as the cumulative effect of fragmented identities, ethical ambiguity, and disrupted relational structures. Previous research has similarly emphasized the potential of immersive digital environments to influence cognitive schemas and emotional regulation, particularly in individuals with pre-existing vulnerabilities (Yin et al., 2022). The metaverse's capacity to reshape schema modes and influence personality-related processes suggests that its psychological impact extends beyond surface-level behaviors to affect core aspects of self-perception and emotional functioning. Additionally, the rapid technological evolution of the metaverse, as highlighted in recent studies, introduces further uncertainty and complexity, making it difficult for individuals to establish stable reference points for identity and morality (Richter et al., 2025; Singh, 2024).

From a philosophical standpoint, the findings of this study reinforce the relevance of revisiting Kant's critical philosophy in the context of digital modernity. The metaverse challenges traditional distinctions between phenomena and noumena, as individuals engage with simulated realities that are experienced as subjectively real yet lack a stable ontological grounding. This blurring of boundaries necessitates a reconsideration of the conditions under which knowledge, identity, and moral judgment are constructed. Scholars have argued that contemporary digital environments may represent a new frontier for the application and reinterpretation of Kantian concepts, particularly in relation to the limits of reason and the nature of experience (Riggio, 2016; Strawson, 1966). In this sense, the metaverse can be viewed as a space that both expands and destabilizes human cognitive and moral capacities, highlighting the need for an updated philosophical framework that accounts for the complexities of technologically mediated existence.

5. Conclusion

Finally, the interdisciplinary nature of the metaverse underscores the importance of integrating insights from psychology, philosophy, and technology studies to develop

a comprehensive understanding of its implications. The findings of this study contribute to this integrative effort by providing empirical evidence of how identity and ethical processes are experienced and negotiated in virtual environments. They also highlight the need for culturally sensitive research that considers the specific social and normative contexts in which individuals engage with the metaverse. Given the relative novelty of this phenomenon, ongoing research is essential to capture its evolving dynamics and to inform the development of ethical guidelines, regulatory frameworks, and psychological interventions aimed at mitigating its potential risks.

6. Limitations & Suggestions

One of the primary limitations of this study is its reliance on a qualitative design with a relatively small and context-specific sample drawn exclusively from Tehran, which may limit the generalizability of the findings to other cultural or geographical contexts. The subjective nature of qualitative data, while valuable for capturing depth and nuance, also introduces the possibility of researcher bias in data interpretation despite efforts to ensure credibility and rigor. Additionally, the study focused on individuals with prior experience in the metaverse, which may exclude perspectives from those who are less engaged or have different patterns of use. The rapidly evolving nature of metaverse technologies also means that the findings represent a snapshot in time and may not fully capture future developments or emerging trends.

Future research should consider employing mixed-methods or longitudinal designs to examine the long-term psychological and ethical effects of metaverse engagement across diverse populations. Expanding the sample to include participants from different cultural, socio-economic, and age groups would enhance the generalizability and comparative value of findings. Further studies could also explore specific subdomains such as the impact of metaverse use on parenting styles, marital satisfaction, and adolescent development. Additionally, investigating the role of personality traits, digital literacy, and coping mechanisms in moderating the effects of metaverse engagement could provide more nuanced insights into individual differences. Interdisciplinary collaborations integrating psychology, law, and technology studies would be particularly valuable in addressing the complex challenges identified in this study.

Practitioners, policymakers, and developers should prioritize the development of ethical guidelines and user-

centered design principles that promote psychological well-being and responsible engagement within the metaverse. Educational programs aimed at increasing digital awareness and critical thinking skills can help users navigate identity and moral challenges more effectively. Mental health professionals should be trained to recognize and address issues related to identity fragmentation and digital immersion, incorporating these considerations into therapeutic interventions. Furthermore, families and communities should be encouraged to establish balanced patterns of technology use that support healthy relationships and emotional connection. The integration of cultural values and social norms into the design and governance of metaverse platforms may also contribute to more sustainable and ethically grounded digital environments.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors have equally contributed to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

References

- Farah, M. F., Ramadan, Z., & Nassereddine, Y. (2024). When Digital Spaces Matter: The Influence of Uniqueness and Place Attachment on Self-identity Expression With Brands Using Generative AI on the Metaverse. *Psychology and Marketing*, 41(12), 2965-2976. <https://doi.org/10.1002/mar.22097>
- Gardner, S. (1999). *Kant and the Critique of Pure Reason*. Routledge.
- Hadi, R., Melumad, S., & Park, E. S. (2023). The Metaverse: A New Digital Frontier for Consumer Behavior. *Journal of Consumer Psychology*. <https://doi.org/10.1002/jcpy.1356>
- Hajian, a., Daneshgar, S., Sadeghi R, K., Ojha, D., & Katiyar, G. (2024). From Theory to Practice: Empirical Perspectives on the Metaverse's Potential. *Technological Forecasting and Social Change*, 201, 123224. <https://doi.org/10.1016/j.techfore.2024.123224>
- Hordijk, R. (2024). Spectral Inheritance : Unlearning the Maturity-Trope. <https://doi.org/10.3384/9789180754781>
- Kant, I. (2022). *Critique of Pure Reason*. Qoqnos Publishing.
- Latif Zadeh, M., & Gubouli Darfashan, M. M. (2023). Introducing digital identity in the metaverse: Identifying related legal challenges and solutions. *Private Law Studies Quarterly*, 53(2), 349-372.
- Malik, S. (2024). Exploring Current Technologies, Applications, and Challenges in the Metaverse: A Comprehensive Survey. *Journal of Graphic Era University*, 105-124. <https://doi.org/10.13052/jgeu0975-1416.1217>
- Missonnier, S. (2023). The Genesis of Perinatal Clinical Psychology and Its Contemporary Issues. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1090365>
- Mitrushchenkova, A. N. (2023). Personal Identity in the Metaverse: Challenges and Risks. *Kutafin Law Review*, 9(4), 793-817. <https://doi.org/10.17803/2313-5395.2022.4.22.793-817>
- Richter, S., Mohammadhossein, N., Richter, A., & Trier, M. (2025). Augmented Reality and the Metaverse - Speculating About the Future. *Ajis*, 29. <https://doi.org/10.3127/ajis.v29.5429>
- Riggio, A. (2016). The violence of pure reason: Neoreaction. *Social Epistemology Review and Reply Collective*, 5(9), 1-15. https://social-epistemology.com/wp-content/uploads/2016/09/riggio_review.pdf
- Shapiro, A. N. (2024). Decoding Digital Culture With Science Fiction. <https://doi.org/10.1515/9783839472422>
- Singh, R. (2024). Metaverse. 81-102. <https://doi.org/10.4018/979-8-3693-4038-7.ch006>
- Strawson, P. F. (1966). *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason*. Routledge.
- Thomas, J., Kuhail, M. A., & Al-Beyahi, F. (2024). The Metaverse, Religious Practice and Wellbeing: A Narrative Review. *Cyberpsychology Behavior and Social Networking*, 27(1), 57-63. <https://doi.org/10.1089/cyber.2023.0003>
- Wang, S., & Wang, W. (2023). A Review of the Application of Digital Identity in the Metaverse. *Security and Safety*, 2, 2023009. <https://doi.org/10.1051/sands/2023009>
- Wertz, F. J. (2026). A History of Humanistic and Existential Psychology: The Possibility and Cultural Contexts of Renewal in Science. 3-46. <https://doi.org/10.1037/0000431-001>
- Yin, B., Wang, Y., Fei, C.-Y., & Jiang, K. (2022). Metaverse as a Possible Tool for Reshaping Schema Modes in Treating Personality Disorders. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1010971>
- Zhang, X., Chen, Y. C., Hu, L., & Wang, Y. (2022). The Metaverse in Education: Definition, Framework, Features, Potential Applications, Challenges, and Future Research Topics. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1016300>
- Zou, J., & Hu, X. (2024). Risks of social interaction order in metaverse and legal responses. *[Journal Name]*, 721-739.