

## Blurring Reality through Gaming Live Streaming: Implications for Youth Mental Health

Firayani<sup>□</sup>

UIN STS Jambi

e-mail: [firayani60@gmail.com](mailto:firayani60@gmail.com)

### ABSTRACT

The rapid growth of live streaming gaming has transformed how young people experience reality, creating immersive digital environments that increasingly blur the boundary between virtual and real life. This phenomenon generates complex implications for youth mental health, functioning both as a source of emotional support and as a psychosocial risk factor. This study aims to explore young people's experiences in live streaming gaming, the process of reality blurring, and its implications for mental health and psychosocial functioning. Using a qualitative interpretative phenomenological approach, in-depth interviews were conducted with young adults aged 18–30 actively engaged in live streaming gaming. Data were analyzed through thematic analysis to identify experiential patterns, psychological dynamics, and adaptive mechanisms. The findings indicate that blurred reality emerges through digital immersion, emotional attachment, and parasocial relationships, producing ambivalent mental health outcomes. While live streaming fosters emotional support and a sense of belonging, excessive involvement heightens the risks of anxiety, depression, sleep disturbances, and social dysfunction. The study highlights the urgent need for multidimensional interventions involving individuals, families, educational institutions, digital communities, and public policy to cultivate a healthy digital ecosystem for youth.

**Keyword:** *gaming, live streaming, mental health, virtual reality, youth.*

### INTRODUCTION

The blurring of the boundaries between physical reality and virtual reality has become a central phenomenon in the contemporary youth life landscape, especially through the rapidly growing practice of gaming live streaming as a medium of social interaction, identity expression, and emotion management. Platforms such as Twitch, YouTube Gaming, and Facebook Gaming no longer function simply as a means of digital entertainment, but have evolved into alternative social spaces that mediate interpersonal relationships, the construction of meaning in life, and the formation of the psychological identity of the younger generation. In this space, the subjective experience of youth is not only formed through direct interaction in the real world, but also through intensive engagement with digital representations, avatars, game narratives, as well as online communities that build their own value systems and norms (Li et al., 2020; De Wit et al., 2020). This process creates an increasingly complex landscape of experience, where physical reality and virtual reality are no longer strictly separate, but rather penetrate each other and form layered psychological experiences.

This phenomenon takes place in the context of an increasingly massive global digital transformation, characterized by the penetration of immersive technologies such as virtual reality, augmented reality, and metaverse environments that strengthen users' sense of presence and emotional engagement. Youth now do not only consume digital content passively, but live in a digital ecosystem that continuously mediates the way they think, feel, interact, and interpret the world. The Xu et al. (2025) study showed that virtual environments have the capacity to shape emotion regulation, self-perception, and stress responses in adolescents and young adults, especially when such digital experiences take place in high intensity and of long duration. Under such conditions, virtual experiences no longer function as a complement to reality, but develop into the psychological reality itself that affects the mental well-being of youth (Huang et al., 2022).

Globally, the increase in youth engagement in gaming and live streaming is taking place in line with increasing concerns about the mental health of younger generations. Paquin et al. (2025) through the Game-in-Action cohort in Quebec showed that gaming experiences, online social interactions, and consumption of live streaming content are significantly correlated with the dynamics of adolescent psychological well-being, including stress levels, anxiety, life satisfaction, and emotional regulatory capacity. Similar reports in various countries confirm that the digital gaming ecosystem has become a new structural factor shaping the mental health of young populations, both through protective functions in the form of social support and adaptive coping, as well as through pathological risks such as addiction, social isolation, and sleep disorders (Adekunle, 2025; Chan et al., 2022).

In Indonesia, this phenomenon is developing very quickly along with the expansion of the e-sports industry, the increasing number of gaming content creators, and the wider internet penetration among youth. Live streaming gaming is not only consumed as entertainment, but also part of lifestyle, a source of career aspirations, and the main medium for forming a social community. These virtual spaces provide an arena for self-expression, the search for social recognition, and psychological escape from the increasingly complex academic, economic, and social pressures of the younger generation. However, behind this positive potential, there is also growing concern about the long-term psychological implications of intensive engagement in virtual worlds that have the potential to blur the boundaries between reality and digital representation (Gandhi et al., 2021; Marques et al., 2023).

Conceptually, the blurring of the boundaries of reality in live streaming gaming can be understood through the mechanisms of experiential immersion and social presence, where high cognitive and emotional engagement with the virtual environment creates a subjective experience that feels equal to or even more meaningful than real-world interaction. De Wit et al. (2020) show that live streaming viewers use this space as a coping strategy in dealing with the pressures of life, gaining a sense of community, emotional validation, and social support that were previously only available through face-to-face interactions. However, when emotional attachment to the virtual world becomes dominant, individuals begin to experience a shift in reality orientation, where the digital world becomes the center of psychological life and physical reality experiences a degradation of meaning (Marques et al., 2023; Pallavicini et al., 2022).

The scientific literature also shows the ambivalent nature of gaming and live streaming experiences on youth mental health. On the one hand, digital games have been shown to improve psychological well-being, reduce symptoms of depression and

anxiety, and strengthen a sense of belonging and purpose in life when used in an adaptive and structured manner (Townsend et al., 2022; Ferrari et al., 2022). On the other hand, excessive screen exposure, disrupted sleep patterns, lack of physical activity, and emotional dependence on virtual worlds increase the risk of mental health disorders, including gaming disorder and social dysfunction (Oswald et al., 2020; Solmaz et al., 2025).

In the context of live streaming gaming, psychological complexity is increasing because youth involvement is not only limited to gaming activities, but also includes parasocial relationships with streamers, online community dynamics, and the internalization of digital cultural norms and values. Gandhi et al. (2021) found that live streaming communities are a space for mental health discussions, sharing emotional experiences, and a source of social support for youth. However, intense parasocial relationships can reinforce psychological dependence on virtual spaces and accelerate the blurring of reality boundaries, especially when the digital world becomes the main source of emotional regulation and the fulfillment of psychosocial needs (Li et al., 2020; Marques et al., 2023).

Although the international literature has examined the relationship between gaming, live streaming, and mental health, there are still significant research gaps. First, most studies emphasize measuring the quantitative impact on mental health variables, while youth's subjective experiences of interpreting reality and self-identity in the midst of a virtual world have not been explored in depth (Paquin et al., 2025; Li et al., 2020). Second, studies such as Marques et al. (2023) and Pallavicini et al. (2022) highlight psychological outcomes, but have not specifically examined the process of blurring reality boundaries as a psychosocial mechanism that develops gradually. Third, studies that focus on the context of developing countries, especially Indonesia, are still very limited, even though the characteristics of digital culture, social norms, and family dynamics can moderate the psychological impact of youth involvement in the virtual world (Adekunle, 2025; Chan et al., 2022).

Based on this gap, this study presents a novelty in the form of an in-depth analysis of the phenomenon of blurring the boundaries of reality in live streaming gaming as a psychosocial process that shapes the mental health of youth in the socio-cultural context of Indonesia. This research aims to uncover how youth build meaning, identity, and emotion regulation through simultaneous interaction between the real world and the virtual world, as well as explain its implications for their psychological well-being and social functioning.

## **METHODOLOGY**

This study uses a qualitative approach with an interpretive phenomenological design to deeply understand the subjective experiences of youth in live streaming gaming and their perception of the boundary between physical and virtual reality. This approach was chosen because the phenomenon studied is complex, contextual, and rooted in personal experiences that cannot be reduced to purely quantitative indicators, especially in relation to the dynamics of mental health and the construction of youth identity in the digital space (Paquin et al., 2025; Gandhi et al., 2021). The focus of the research is directed at how youth interpret the digital immersion experience, build psychological relationships with online communities, and manage the emotional impact of intensive engagement in the live streaming gaming ecosystem (Marques et al., 2023; Li et al., 2020).

The study participants consisted of youth aged 18–30 years who were actively involved in live streaming gaming activities as players and spectators for at least the past six months. Participant recruitment was carried out using purposive sampling techniques by considering variations in usage intensity, social background, and the type of platform used. Data collection was conducted through semi-structured in-depth interviews lasting 60–90 minutes that explored digital immersion experiences, perception of reality, patterns of online social interaction, emotion regulation, and the psychological impact of engaging in live streaming gaming on participants' daily lives. Interviews were recorded, transcribed verbatim, and analyzed systematically to ensure depth and integrity of the data (De Wit et al., 2020; Pallavicini et al., 2022).

Data analysis was carried out using thematic analysis with layered procedures that included data familiarization, open coding, conceptual categorization, and the development of key themes that represent youth experience patterns. The analysis process is carried out iteratively and reflectively, involving discussions between researchers to minimize interpretation bias. The validity of the findings is maintained through source triangulation, member checking, and trail audits to ensure the credibility, dependability, and confirmability of research results. Ethical considerations are strictly applied through informed consent, protection of participant confidentiality, and psychological referral procedures when significant emotional distress appears during the interview (Ferrari et al., 2022; Oswald et al., 2020).

## **RESULTS AND DISCUSSION**

The phenomenon of blurring the boundaries of reality in live streaming gaming cannot be understood solely as a change in media consumption behavior, but rather as a fundamental transformation in the structure of the psychological experience of youth in the digital era. In this context, reality is no longer represented binarily between the physical world and the virtual world, but is integrated in a layered experiential landscape, where individual cognitive, affective, and relational activities take place simultaneously in both spaces. Live streaming gaming amplifies this experience through intense digital immersion mechanisms, presenting a sensation of social presence, emotional engagement, and continuity of experience that creates the feeling as if the virtual world is an integral part of real life (Li et al., 2020; De Wit et al., 2020).

The immersion generated by live gaming live streaming is unique in that it involves real-time interaction between players, streamers, and audiences, forming a digital social network with a relational structure that resembles a real community. Youth not only consume content, but actively participate in building collective meaning through online community conversations, symbols, and norms. Gandhi et al. (2021) show that live streaming chat rooms become an arena for emotional discussion, where individuals express psychological difficulties, seek validation, and build affective bonds with fellow users. This repetitive emotional engagement creates a system of psychological affiliation that deepens attachment to the virtual world and weakens the cognitive boundary between digital reality and physical reality (Marques et al., 2023).

From the perspective of psychological development, the youth phase is a period that is very vulnerable to the influence of the social and technological environment due to the ongoing process of identity exploration, the formation of life goals, and the search for existential meaning. In this context, live streaming gaming provides a rich symbolic space for identity experimentation, where youth can construct self-representation through avatars, playstyles, community preferences, as well as specific digital

affiliations. This process, while providing opportunities for identity reinforcement, also has the potential to create identity fragmentation when the boundaries between the actual self and the virtual self become blurred, resulting in individuals experiencing existential confusion and psychological dependence on the digital world (Paquin et al., 2025; Pallavicini et al., 2022).

The blurring of reality boundaries is also reinforced by the mindfulness economy in the live streaming ecosystem, where the platform's algorithms are designed to maintain user engagement through continuous stimulation, social notifications, and psychological reward systems. This pattern reinforces the cycle of emotional attachment and creates a state of hyper-connectivity that disrupts the capacity for self-reflection and timing, so that the virtual world increasingly dominates the structure of youth's daily lives (Chan et al., 2022; Adekunle, 2025).

Cumulatively, these findings suggest that the blurring of reality boundaries in live streaming gaming is a complex psychosocial process, involving the interaction between technological mechanisms, youth developmental needs, and online community dynamics, which fundamentally changes the way youth make sense of the world and themselves (Xu et al., 2025; Li et al., 2020).

The change in the structure of the reality experience triggered by live streaming gaming has far-reaching and ambivalent implications for youth mental health. On the one hand, the virtual world provides a space of psychological compensation that allows individuals to escape the pressures of life, gain social support, and manage negative emotions adaptively. The study of De Wit et al. (2020) confirms that live streaming helps youth overcome difficult periods of life through experiences of togetherness and affective reinforcement gained from online communities. Ferrari et al. (2022) and Townsend et al. (2022) also showed that game-based interventions may provide therapeutic benefits for youth with depression and anxiety.

However, as involvement in live streaming gaming takes place excessively and becomes central to psychological life, the negative impact on mental health is increasingly real. Intensive digital exposure contributes to sleep disturbances, mental fatigue, decreased physical activity, as well as increased anxiety and depressive symptoms. Oswald et al. (2020) assert that high screen time correlates with a variety of psychological problems and a decline in subjective well-being in children and adolescents, whose impact patterns continue into adolescence (Solmaz et al., 2025; Adekunle, 2025).

In the context of emotion regulation, emotional attachment to the virtual world shifts youth coping strategies from internal emotion processing to external regulation based on digital stimulation. This dependence weakens reflective capacity and self-control, increases the risk of addictive behavior, and narrows the range of adaptive emotional experiences (Marques et al., 2023; Pallavicini et al., 2022). The social impact cannot be ignored either. When the virtual world becomes the main space for fulfilling affective needs, social interactions in the real world are degraded, increasing the risk of social isolation, loneliness, and relational dysfunction. Gandhi et al. (2021) show that although online communities provide emotional support, they often do not completely replace the quality of face-to-face relationships in building long-term psychological well-being.

To clarify the spectrum of impacts, the following is presented a literature synthesis table:

Domain	Positive Impacts	Negative Impacts	Key References
Emotional Well-being	Stress relief, mood enhancement	Anxiety, depression, emotional dysregulation	De Wit et al., 2020; Pallavicini et al., 2022
Social Functioning	Sense of belonging, peer support	Social isolation, parasocial dependency	Gandhi et al., 2021; Marques et al., 2023
Cognitive Regulation	Attention, commitment, motivation	Sleep disturbance, cognitive fatigue	Oswald et al., 2020; Solmaz et al., 2025
Behavioral Health	Coping through gaming	Gaming disorder, reduced physical activity	Chan et al., 2022; Adekunle, 2025

Table 1. Psychological Impacts of Blurred Reality in Live Streaming Gaming

The table shows that the impact of blurring reality in gaming live streaming is dualistic and contextual. When use is carried out in a controlled manner and integrated with real social life, live streaming has the potential to strengthen the psychological well-being of youth. Conversely, excessive involvement amplifies the risk of mental health disorders through mechanisms of emotional dependence, social dysfunction, and self-regulation disorders, thus underscoring the importance of a balanced and mental health-based approach to managing digital media use (Paquin et al., 2025; Xu et al., 2025).

The phenomenon of blurring the boundaries of reality in gaming live streaming demands a systematic adaptive response from various stakeholders, especially in the realm of youth mental health. Youth who are intensely involved in the virtual world do not only experience changes in behavior patterns, but face a reconstruction of psychological experiences that touch the dimensions of emotions, cognition, identity, and social relationships. Therefore, an effective intervention approach must go beyond the framework of pathologizing the use of technology and focus on strengthening the capacity for self-regulation, digital literacy, and healthy integration between the virtual world and real life (Paquin et al., 2025; Xu et al., 2025).

At the individual level, the development of emotion regulation and impulse control skills is a key foundation in helping youth navigate digital immersion experiences adaptively. Mindfulness-based interventions, cognitive-behavioral therapy, and psychoeducational approaches have been shown to be effective in strengthening self-awareness, reflection skills, and healthier decision-making in the use of digital media. Ferrari et al. (2022) and Townsend et al. (2022) affirm that clinically designed game-based interventions are able to improve emotional well-being and lower symptoms of depression and anxiety in youth, while strengthening their capacity to manage engagement with the virtual world in a more balanced manner.

In the context of community and education, school institutions, universities, and youth organizations have a strategic role in building comprehensive digital mental health literacy. Education programs that integrate an understanding of the risks and benefits of digital technology, healthy use strategies, and psychosocial coping skills can strengthen youth resilience in the face of the pressures of an increasingly complex digital ecosystem. Wen et al. (2025) show that physical activity and active play can moderate the negative impact of gaming on mental health, so the integration of physical fitness programs and real social activities becomes an important component of prevention strategies (Solmaz et al., 2025; Chan et al., 2022).

From a public policy perspective, this phenomenon demands the formulation of mental health policies that are responsive to digital transformation. Regulation of the use of digital platforms, protection of vulnerable groups, and strengthening community-based and digital mental health services are important prerequisites in creating an ecosystem that supports the psychological well-being of youth. Kaimara et al. (2021) emphasized that the development of virtual technology must be accompanied by ethical evaluations and clear protection policies to minimize psychological risks in the younger generation, especially in the context of exposure to immersive content and intense parasocial relationships.

The long-term implications of failing to address the blurring of reality boundaries in live streaming gaming have an impact not only on individuals, but also on the social and economic structure of society. Youth with impaired mental health are at risk of decreased productivity, social dysfunction, and difficulty integrating into the world of work and community life. Therefore, investment in digital understanding-based mental health prevention and interventions is an essential human development strategy in the era of technological transformation (Adekunle, 2025; Oswald et al., 2020).

In addition to the direct intervention approach, it is also important to consider the role of the family as a primary support system in helping youth navigate the reality boundaries between the virtual world and real life. The quality of family communication, parenting patterns, and the level of emotional involvement of parents have been proven to moderate the psychological impact of the use of digital technology on the mental health of youth. A supportive family environment that is open to dialogue about young people's digital experiences can strengthen their sense of psychological security, increase emotional regulation capacity, and reduce the risk of maladaptive attachment to the virtual world. These findings are in line with the literature emphasizing the importance of proximal social context in the formation of youth psychological resilience amid intensive technology exposure (Paquin et al., 2025; Adekunle, 2025).

At the level of online communities, strengthening healthy collective norms also has significant implications for the psychological well-being of youth. A live streaming community that adopts the principles of content moderation, psychosocial support, and the reinforcement of the values of empathy and social responsibility can serve as a protective environment that reduces the risk of emotional dysfunction and addictive behaviors. Gandhi et al. (2021) show that mental health discussion spaces in live streaming communities have the potential to create a climate of openness and solidarity, which, if managed systematically, can improve collective well-being while suppressing the negative impact of excessive digital engagement.

Furthermore, the long-term implications of the phenomenon of blurring the boundaries of reality in live streaming gaming demand the integration of scientific research, technological innovation, and public policy oriented towards mental health. The development of a digital platform that applies design principles centered on user well-being, including time reminder features, content exposure management, and integration of online counseling services, is a strategic step in creating a healthier digital ecosystem. This approach not only strengthens the capacity of individuals to manage the use of technology, but also places ethical responsibility on the digital industry as a key actor in the protection of the mental health of young generations (Xu et al., 2025; Kaimara et al., 2021).

## CONCLUSION

This article emphasizes that the blurring of the boundaries of reality in live streaming gaming is a complex psychosocial phenomenon that fundamentally shapes the subjective experiences, patterns of social relationships, and mental health of youth in the digital era. Through the mechanisms of immersion, emotional attachment, and the dynamics of online communities, the virtual world no longer functions simply as a space for entertainment or escape, but has become an integral part of the psychological life structure of the younger generation. This phenomenon creates ambivalent consequences, where digital engagement can provide emotional support and belonging, while increasing the risk of emotional regulation disorders, anxiety, depression, sleep disorders, and social dysfunction when such engagement takes place without healthy control.

Theoretically, these findings broaden the understanding of the relationship between digital technologies, reality construction, and youth mental health by placing the blurring of reality boundaries as a key mechanism in the transformation of the psychological experiences of the digital generation. This article shows that the impact of technology cannot be reduced to a mere variable of use, but must be understood as a psychosocial process that shapes the identity, regulation of emotions, and the meaning of life of youth in a sustainable manner. This perspective opens up space for the development of new conceptual frameworks in developmental psychology and mental health that are more responsive to contemporary socio-technological dynamics.

Practically, the results of this study confirm the urgency of developing multidimensional intervention strategies involving individuals, families, educational institutions, digital communities, the technology industry, and public policymakers. These efforts include strengthening digital mental health literacy, developing self-regulation skills, providing counseling services that are adaptive to digital culture, and formulating policies that protect youth from the psychological risks of an increasingly complex virtual environment. Continued investment in digital understanding-based mental health prevention and promotion is not only a clinical need, but also a strategic foundation for future human resource quality development.

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