



Mapping Psychosocial Factors Associated with Online Gaming Addiction among Generation Z in Surabaya: A Qualitative Study from a Communication Science Perspective

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Abstract

This study aims to identify, map, and describe the psychosocial factors associated with online gaming addiction tendencies among Generation Z in Surabaya from a Communication Science perspective. The study focuses on how psychological needs and social relationships interact with technological characteristics in shaping patterns of excessive online gaming. An empirical descriptive qualitative approach was employed, involving eight Generation Z informants aged 14–24 years who were selected through purposive sampling based on indicators of problematic digital-media use. Data were collected through semi-structured in-depth interviews, participant observation, and documentation, and analyzed using the interactive model of Miles, Huberman, and Saldaña. The findings identified three psychological factors, namely emotional regulation and escapism, self-expression in virtual spaces, and instant gratification through game-based reward systems, as well as three social factors consisting of group conformity and mabar culture, Fear of Missing Out (FOMO), and virtual community bonding. Emotional regulation and escapism appeared among all eight informants, while social factors were dominant among five informants compared with three whose dominant patterns were psychological. The findings indicate that online gaming addiction tendencies are not solely associated with individual self-control but emerge through the interaction between psychological needs, peer relationships, virtual belonging, and technological features that sustain player engagement. The study contributes to Communication Science by integrating Uses and Gratifications, Technological Determinism, and virtual communication perspectives to explain the psychosocial dynamics underlying problematic online gaming among Generation Z.

Keywords: Digital Communication, Generation Z, Online Gaming Addiction, Psychosocial Factors, Uses And Gratifications.



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INTRODUCTION

The development of digital technology in recent years has brought fundamental transformations across various dimensions of social life, including in Indonesia. Easy internet access supported by massive smartphone ownership has made various forms of entertainment, particularly online games, accessible with few spatial or temporal limitations (Indrawan & Candrasari, 2023). This condition has contributed to increasingly intensive engagement with digital media, particularly among Generation Z, a cohort that has grown alongside rapid developments in information technology and consequently demonstrates high levels of adaptability to digital innovation. Recent national data indicate that internet use in Indonesia has reached a highly extensive scale, creating an increasingly dense digital environment in which young people routinely encounter networked media as part of their everyday communication and leisure practices (APJII, 2024). Within this environment, online games have evolved beyond conventional entertainment media into interactive communication spaces where users simultaneously consume, produce, and negotiate meanings through virtual interaction. The significance of this transformation becomes particularly evident when gaming activities increasingly occupy time and attention that would otherwise be allocated to education, family interaction, peer relationships, and other forms of offline participation. The issue, therefore, is not simply the growing popularity of online games, but the emergence of patterns of engagement in which technological accessibility, communicative interaction, and psychosocial needs become increasingly intertwined.

From a Communication Science perspective, interaction within online games can be understood as a dynamic form of virtual communication in which adolescents act as active communicators who establish, maintain, and negotiate social relationships in virtual spaces (Putra, 2023). This perspective is consistent with Uses and Gratifications Theory, which conceptualizes media audiences as active agents who select particular media because they perceive them as capable of satisfying psychological and social needs, including entertainment, escapism from academic or everyday stress, social interaction, and self-validation (Katz et al., 1974). Online gaming can consequently provide meaningful psychological rewards while simultaneously creating a communicative environment in which peer recognition and social belonging are repeatedly reinforced. Recent evidence indicates that problematic gaming among Generation Z is associated with a combination of behavioral, psychological, and environmental conditions rather than with media exposure alone (Agustin et al., 2024). When access to these gratifying experiences is accompanied by weak self-regulation, repeated gaming may gradually develop into compulsive patterns that are difficult to control and that interfere with everyday functioning (Nursalam et al., 2023). Such patterns are particularly important because problematic digital engagement has been associated with disturbances in adolescents' mental health and psychosocial functioning, suggesting that excessive gaming should be examined as a process involving the interaction between media use and individual circumstances rather than simply as excessive screen time (Purwaningsih & Nurmala, 2021). The communication process surrounding gaming is therefore central to understanding why the same technological environment may function as ordinary entertainment for some adolescents but become a persistent behavioral attachment for others.

The context of Surabaya provides an important empirical setting for examining this phenomenon because the city represents a highly urbanized environment in which digital infrastructure, smartphone-based communication, and informal digital social spaces increasingly intersect with adolescents' everyday lives. Informal spaces such as Wi-Fi-equipped coffee shops and *warkop mabar* provide opportunities for adolescents to extend gaming activities into shared physical environments, allowing virtual communication and face-to-face peer interaction to occur simultaneously (Putra, 2023). The urgency of the phenomenon is reinforced by reports concerning RSJ Menur Surabaya, which recorded approximately 3,000 child and adolescent patients receiving therapy related to problematic digital behavior, including gadget and online game addiction, during 2024 (Sudrajat, 2024). This local situation indicates that problematic gaming should not be reduced to the availability of digital devices because the social environment surrounding young users can also shape how, when, and why gaming becomes difficult to regulate. Reports from the same institutional context further emphasize parenting patterns, family communication, and inadequate supervision of adolescents' online activities as factors that may contribute to problematic gaming behavior (Klikwarta, 2024). These circumstances reveal a communicative dimension that is frequently obscured when addiction is examined primarily through behavioral symptoms or clinical diagnostic categories. Surabaya consequently offers a relevant setting for investigating how technological exposure is translated into gaming practices through the psychological experiences and social relationships of Generation Z.

Previous research on online gaming among adolescents has generated substantial evidence concerning its negative consequences, yet much of the literature remains oriented toward clinical outcomes, behavioral symptoms, and the conceptualization of Internet Gaming Disorder rather than toward the communicative processes through which problematic engagement develops. Systematic evidence has shown that Internet Gaming Disorder is associated with diverse psychological and behavioral consequences, while epidemiological research has also highlighted considerable variation in prevalence and associated factors across populations and methodological designs (Mihara & Higuchi, 2017). Other studies have demonstrated that adolescent gaming addiction is shaped by multiple contributing factors, indicating that individual vulnerability cannot be adequately separated from family, peer, and environmental conditions (Nursalam et al., 2023). The literature therefore suggests a multidimensional phenomenon, yet the relationships among these dimensions are often examined as independent variables or isolated predictors rather than as interconnected processes occurring within everyday communication environments. Research on parenting and digital media similarly demonstrates that family practices and parent-child relationships are consequential to adolescents' digital experiences, but such findings do not fully explain how peer communication and virtual communities interact with individual psychological needs during gaming (Coyne et al., 2017). This fragmentation creates a conceptual limitation because an exclusively clinical interpretation may identify

the consequences of addiction without sufficiently explaining why particular forms of media engagement become psychologically and socially meaningful to adolescents. A communication-oriented approach is consequently needed to move beyond the question of how much adolescents play games toward the more fundamental question of how communication, gratification, identity, and social belonging collectively shape their attachment to online gaming.

A further gap emerges from the limited integration of technological and audience-centered explanations of problematic gaming within a single analytical framework. Technological Determinism conceptualizes media technologies not merely as neutral instruments but as forces capable of restructuring patterns of perception, interaction, and social behavior, particularly when technological features become embedded in everyday routines (McLuhan, 1964). Conversely, Uses and Gratifications emphasizes the active role of audiences in selecting media according to perceived needs and desired gratifications, meaning that adolescents should not be conceptualized simply as passive recipients of technological influence (Katz et al., 1974). These perspectives reveal a productive theoretical tension because online gaming behavior may simultaneously be shaped by the affordances of game technologies and by adolescents' active attempts to satisfy psychological and interpersonal needs. Existing research has addressed these dimensions separately, while studies of digital addiction have increasingly recognized the importance of psychosocial determinants but have rarely connected them explicitly to communication processes within virtual gaming environments. Recent scholarship on psychosocial determinants of digital addiction further indicates that problematic technology-related behavior needs to be understood through interacting psychological and social conditions rather than through technological exposure in isolation (Prahastuti & Azzahra, 2026). The unresolved issue is therefore not whether technology or psychosocial factors influence gaming behavior, but how technological affordances, individual motivations, emotional regulation, peer expectations, identity processes, and virtual belonging become mutually reinforcing in everyday communication. Addressing this gap requires an empirical approach capable of capturing the meanings adolescents assign to gaming and the communicative experiences through which those meanings are produced.

The scientific and practical urgency of this issue lies in the need to understand online gaming addiction as a psychosocial and communicative process rather than as a simple behavioral excess that can be resolved through restrictions on screen time. Adolescence is a developmental period in which identity formation, emotional regulation, peer acceptance, and social belonging become particularly significant, making digitally mediated interaction potentially influential in the construction of self-perception and interpersonal relationships. From this standpoint, virtual gaming spaces may function simultaneously as sites of entertainment, emotional escape, identity expression, social recognition, and group affiliation, while the same functions may become mechanisms that sustain excessive engagement when alternative sources of gratification or support are perceived as insufficient. The present study is positioned within Communication Science by examining the phenomenon at the intersection of media use, interpersonal communication, psychosocial needs, and technological affordances rather than treating gaming addiction exclusively as a clinical disorder. It specifically integrates Uses and Gratifications and Technological Determinism with psychological communication perspectives and complementary concepts of deindividuation, the Social Identity Model of Deindividuation Effects (SIDE), Online Disinhibition Effect, and Cuelessness to interpret how adolescents experience and negotiate communication within virtual gaming environments. Through this positioning, the study seeks to explain how internal psychological factors and external social factors interact with the communicative characteristics of digital gaming spaces to produce and reinforce tendencies toward online gaming addiction among Generation Z in Surabaya. The study aims to identify, map, and describe these psychological and social factors through a qualitative inquiry, while contributing theoretically by extending communication-based explanations of digital addiction and methodologically by providing an interpretive mapping of the interconnected experiences underlying problematic gaming behavior.

RESEARCH METHODS

This study employed an empirical qualitative research design, specifically a descriptive qualitative approach, because it sought to understand the experiences, perceptions, and meanings constructed by Generation Z in relation to online gaming and the psychosocial factors associated with addictive tendencies (Creswell, 2014). The research was conducted in Surabaya, Indonesia, which was

purposely selected as the research setting because of the extensive development of its digital environment and the relevance of online gaming within adolescents' everyday communication practices. The participants comprised eight Generation Z informants aged 14–24 years who resided in Surabaya and were selected through purposive sampling based on indicators of problematic digital-media use, including difficulty controlling gaming duration, unsuccessful attempts to reduce gaming, negative emotional reactions when unable to play, disruption of daily activities, and active involvement in gaming communities (Surat et al., 2021). The object of inquiry concerned the relationship between internal psychological factors and external social factors underlying tendencies toward online gaming addiction, particularly emotional regulation, escapism, self-expression, peer interaction, group conformity, and virtual belonging. Data were collected through semi-structured in-depth interviews using a 27-question interview guide covering gaming habits, psychological experiences, and social interactions, while the flexible format enabled participants to elaborate on subjective meanings and experiences that could not be adequately captured through predetermined responses. Participant observation was conducted within the informants' everyday gaming environments to examine observable behaviors, emotional responses, and social interactions during gaming, while documentation included permitted audio recordings, field notes, and relevant excerpts of communication through in-game chat features. The combination of these techniques enabled the research to integrate subjective narratives with observed communication practices and supporting documentation, producing empirical qualitative data appropriate for mapping the psychosocial dynamics associated with online gaming addiction from a Communication Science perspective.

The primary research instrument was the researcher, supported by a semi-structured interview guide, observation guidelines, recording equipment, and documentation protocols that were developed in accordance with the research objectives and theoretical framework (Creswell, 2014). The interview guide addressed gaming habits, emotional experiences, motivations, escapism, self-expression, peer relationships, group conformity, fear of missing out, and experiences of belonging within virtual gaming communities, while follow-up questions were used to explore meanings that emerged during the interviews. The credibility of the research instrument and findings was supported through triangulation by comparing information obtained from interviews with evidence derived from participant observation and documentation. Data analysis followed the interactive model of Miles, Huberman, and Saldaña, comprising data condensation, data display, and conclusion drawing or verification, with these stages conducted continuously and interactively throughout the research process (Miles et al., 2014). During data condensation, transcripts, observation records, and documentation were coded and focused on recurring psychological and social themes, while the resulting categories were displayed through narrative descriptions and relationships among themes to facilitate interpretation. Member checking was conducted by presenting relevant interview interpretations or provisional findings to participants for confirmation and clarification, while methodological triangulation was used to examine the consistency of information across different sources and techniques (Miles et al., 2014). Ethical considerations included obtaining informed consent before interviews and audio recording, protecting participants' identities through anonymized codes such as RB, FY, NM, NS, MB, ZA, HI, and DA, ensuring voluntary participation, and preventing the disclosure of individually identifiable information in the research report.

RESULTS AND DISCUSSION

Informant Profile and Indicators of Online Gaming Addiction

The eight informants represented diverse patterns of online gaming engagement across gender, age, and preferred game, consisting of three males and five females aged between 14 and 24 years. Their gaming practices covered several popular titles, including Mobile Legends, Genshin Impact, Love and Deepspace, Roblox, Call of Duty Mobile, and Free Fire, indicating that the observed tendency toward problematic gaming was not restricted to a particular game genre or platform. As presented in Table 2, gaming duration on ordinary days ranged from approximately 2–3 hours to 4–5 hours, while the duration increased substantially during holidays, reaching 7–8 hours among several informants. This pattern indicates that temporal availability may intensify gaming engagement, particularly when academic or occupational routines impose fewer constraints on daily schedules. The variation in gaming duration also demonstrates that duration alone cannot adequately distinguish recreational gaming from potentially problematic engagement, since the meaning and behavioral consequences of gaming must

be considered alongside the informants' ability to regulate their participation. This interpretation corresponds with the conceptualization of problematic gaming as a multidimensional behavioral pattern involving impaired control and interference with everyday functioning rather than merely a high frequency of media use (Mihara & Higuchi, 2017). The informant profile therefore provides an empirical basis for examining how gaming intensity intersects with psychological and social processes rather than treating all extensive gaming behavior as equivalent.

Table 1. Profile of Research Informants

Initials	Age	Gender	Main Game	Duration (Weekdays)	Duration (Holidays)
RB	22	Male	Mobile Legends	4–5 hours	7–8 hours
FY	22	Female	Genshin Impact	±4 hours	6 hours
NM	23	Female	Love and Deepspace	2–3 hours	7–8 hours
NS	20	Female	Roblox	3–4 hours	±7 hours
MB	22	Female	Call of Duty Mobile	2–4 hours	4–5 hours
ZA	14	Male	Free Fire	4 hours	5–6 hours
HI	20	Female	Mobile Legends	3–4 hours	5–6 hours
DA	24	Male	Mobile Legends	2–3 hours	5–6 hours

As shown in Table 2, the increased gaming duration during holidays was particularly pronounced among RB, NM, and NS, whose gaming time reached 7–8 hours or approximately 7 hours per day. The pattern suggests that when external temporal structures are reduced, gaming can occupy a larger proportion of the informants' available time and become a dominant daily activity. Such intensification is relevant to the concept of impaired control because extended engagement becomes more meaningful when accompanied by difficulty reducing play despite awareness of competing responsibilities. The screening process identified multiple indicators of problematic gaming among all eight informants, including difficulty controlling playing time, unsuccessful attempts to reduce gaming, negative emotional reactions when unable to play, disruption of academic or occupational activities, and strong involvement in gaming-related social groups. These characteristics are consistent with findings that online gaming addiction among adolescents and young people is associated with interacting behavioral, psychological, and environmental factors rather than a single determinant (Nursalam et al., 2023). The presence of these indicators across participants also suggests that problematic gaming in this study is better understood as a continuum of behavioral involvement in which excessive duration represents only one component of a broader psychosocial pattern. This distinction is particularly important because the study does not establish a clinical diagnosis of Gaming Disorder but maps the communication and psychosocial conditions associated with tendencies toward addictive gaming.

The qualitative accounts further revealed that gaming could interfere with ordinary routines when participants found it difficult to stop playing at the intended time or continued gaming despite recognizing other responsibilities. Several informants described gaming as extending beyond its initial purpose of entertainment, particularly when competitive objectives, scheduled events, or social commitments within the game encouraged them to remain online. This finding indicates that the behavioral significance of gaming lies partly in the transition from voluntary media use to repeated engagement that becomes increasingly difficult to regulate. The pattern is compatible with evidence linking problematic gaming to disruptions in adolescents' psychological well-being and everyday functioning, although the present study approaches these consequences through participants' communication experiences rather than clinical measurement (Purwaningsih & Nurmala, 2021). The observed behavior also reflects the broader digital environment experienced by Generation Z, for whom networked media constitute an integrated component of social interaction, leisure, and identity expression. In this context, gaming cannot be treated as an isolated activity because the decision to continue playing may simultaneously involve personal gratification, peer expectations, communication routines, and attachment to virtual communities. The empirical profile of the informants consequently establishes the foundation for examining the psychological and social mechanisms that transform repeated gaming into a potentially problematic pattern.

The diversity of preferred games among the informants is also analytically relevant because the findings do not suggest that addiction tendencies are generated by one specific game title. Instead, similar behavioral indicators appeared across competitive multiplayer games such as Mobile Legends, Free Fire, and Call of Duty Mobile, as well as socially and narratively oriented games such as Roblox, Genshin Impact, and Love and Deepspace. This variation indicates that the psychosocial meaning attached to gaming may be more consequential than the particular identity of the game itself. Previous research in Surabaya has similarly shown that online gaming has become embedded in adolescents' everyday lives and social interactions, rather than functioning exclusively as an individual entertainment activity (Indrawan & Candrasari, 2023). The present findings extend this perspective by showing that different game environments can accommodate comparable patterns of prolonged engagement when they provide opportunities for gratification, interaction, achievement, or emotional escape. Such convergence supports an analytical shift from game-specific explanations toward examination of the communication processes and psychosocial needs that are activated through gaming. The distinction becomes important for understanding why similar addictive tendencies can emerge across technologically different gaming environments.

From a Communication Science perspective, the informants' profiles demonstrate that problematic gaming should be situated within a broader relationship between media accessibility, individual motives, and social interaction. Online games provide continuous communicative environments in which players can interact with peers, participate in communities, pursue recognition, and maintain relationships while simultaneously engaging with technologically structured reward systems. These conditions correspond with the view that digital media use among young people is shaped not only by technological availability but also by family practices, social relationships, and the meanings users attach to their media experiences (Coyne et al., 2017). The findings also indicate that the increased duration of gaming during periods of reduced external regulation may create greater opportunities for psychological gratification and social reinforcement to operate simultaneously. Rather than positioning the informants as passive recipients of technological influence, their experiences indicate active choices to remain engaged with gaming because the activity fulfills particular emotional or interpersonal purposes. At the same time, the technological structure of online games can make these choices increasingly repetitive through persistent events, competitive rankings, social interaction, and other mechanisms that encourage continued participation. The profile and screening findings therefore establish the empirical starting point for mapping the specific psychological factors discussed in the next analysis, particularly emotional regulation, escapism, virtual self-expression, and gratification derived from game-based reward systems.

Psychological Factors Associated with Online Gaming Addiction

The analysis identified three psychological dimensions that consistently appeared in the informants' accounts: emotional regulation and escapism, self-expression in virtual spaces, and instant gratification through game-based reward systems. Emotional regulation and escapism represented the most pervasive psychological factor, appearing in the accounts of all eight informants, whereas virtual self-expression and reward-related gratification were each identified among five informants. The distribution indicates that gaming was not primarily maintained by entertainment alone, but was frequently embedded in attempts to manage emotional states, construct a more comfortable sense of self, and obtain immediate psychological rewards. This pattern is consistent with the Uses and Gratifications perspective, which positions media users as active agents who select particular media because those media are perceived to satisfy specific psychological and social needs (Katz et al., 1974). The psychological functions identified in the interviews also indicate that gaming may initially operate as an adaptive or situational coping activity before becoming problematic when repeated reliance on the activity reduces the individual's ability to regulate engagement. Research on digital addiction similarly suggests that problematic technology use is associated with the interaction between emotional needs, behavioral reinforcement, and difficulties in controlling media engagement (Kuss & Griffiths, 2017). The findings position psychological vulnerability not as an isolated individual characteristic, but as a condition activated and reinforced through repeated interaction with the communicative affordances of online games.

The strongest psychological pattern was emotional regulation and escapism, which emerged across all eight informants and was particularly evident when participants experienced academic

demands, occupational fatigue, interpersonal pressure, or accumulated negative emotions. FY explained that gaming was among the activities she most frequently selected when she felt overwhelmed by assignments or tired.

“When I have many assignments or feel tired, I usually look for activities that can make my mind calmer [...] but if you ask what I do most often, I would say playing games because Genshin Impact helps me divert my thoughts from things that make me stressed.” (FY, 22 years old; translated from Indonesian)

NM expressed a similar orientation toward gaming as temporary psychological escape.

“One reason I play games is as an escape to calm my mind because the game is fictional, so I can forget what is happening in the real world, even though it is only temporary.” (NM, 23 years old; translated from Indonesian)

Table 2. Frequency of Psychological Factors Associated with Online Gaming Addiction

Psychological Factor	Aspect	Number of Informants (n)
Psychological	Emotional Regulation & Escapism	8
Psychological	Self-Expression in Virtual Spaces	5
Psychological	Instant Gratification & Reward System	5

Table 2 shows that emotional regulation and escapism occurred in all eight informants, making it the most consistently identified psychological dimension in the dataset, while virtual self-expression and instant gratification each appeared in five informants. The frequency should not be interpreted as a quantitative measure of causal strength because the research uses qualitative mapping rather than statistical estimation, but it indicates the recurrence of particular meanings across participants' narratives. Emotional regulation was especially significant because it connected the initial motivation to play with the subsequent persistence of gaming behavior, creating a psychological pathway from distress to temporary relief and repeated media use. Such a pathway corresponds with the Uses and Gratifications framework because the informants actively selected gaming to obtain a specific psychological outcome rather than simply responding passively to the availability of digital technology (Katz et al., 1974). The same process may become problematic when gaming becomes the preferred or dominant mechanism for managing emotional discomfort, particularly when alternative coping strategies are perceived as less immediately rewarding. Evidence concerning problematic gaming and adolescent mental health further indicates that excessive gaming can become intertwined with psychological difficulties, making the emotional function of gaming important when interpreting patterns of prolonged engagement (Purwaningsih & Nurmala, 2021).

Self-expression in virtual spaces was identified among five informants and revealed a distinct relationship between anonymity, perceived social safety, and communicative confidence. NS described a clear contrast between her offline and virtual identities, explaining that the gaming environment allowed her to communicate more freely.

“In the virtual world or in the game, I feel more comfortable because I can express myself freely and feel more confident, because people in the game will not have high expectations of me. In the game I am more outspoken and talkative than in everyday life because they do not know my persona in the real world.” (NS, 20 years old; translated from Indonesian)

The statement suggests that reduced exposure to offline social expectations can lower perceived interpersonal risks and create conditions in which individuals communicate more openly than they do in face-to-face settings. From an interpersonal communication perspective, this finding is significant because openness is generally associated with trust, psychological safety, and the development of interpersonal relationships (DeVito, 2013). The virtual environment may consequently provide a communicative space in which informants can regulate how much of their identity they disclose and

how they wish to be perceived by others. The reduced presence of conventional social cues can also alter the way individuals interpret interpersonal risks and construct relationships with other players. This pattern is particularly relevant to understanding problematic gaming because the game environment may become psychologically attractive not only because of its entertainment value, but also because it provides a social context in which individuals feel more comfortable expressing themselves.

The experience of greater freedom in virtual communication can be interpreted through the relationship between reduced identity cues and online disinhibition, particularly when informants perceive that their offline identity is not immediately available to other players. The absence of face-to-face contact, direct observation, and established social histories may reduce concerns about reputational consequences and allow individuals to display aspects of themselves that remain restrained in offline interaction. This pattern is relevant to Generation Z because digital communication spaces can become integrated into identity exploration and social relationship formation rather than functioning merely as supplementary communication channels. The developmental significance of identity exploration is particularly important during adolescence and early adulthood because individuals negotiate perceptions of self through interactions with peers and other significant social environments (Erikson, 1968). The virtual environment may therefore provide a psychologically attractive space because it permits informants to construct and test alternative forms of self-presentation while maintaining a degree of distance from offline identities. Such experiences may reinforce gaming engagement when the virtual environment is perceived as more accepting, predictable, or emotionally comfortable than the participant's offline social environment. Virtual self-expression consequently becomes more than a secondary feature of gaming because the communicative environment itself can provide psychological gratification that reinforces continued participation.

Instant gratification and reward systems constituted the third psychological dimension and were identified among five informants, particularly through experiences of achievement, progression, ranking, and anticipation of rewards. RB explained how seasonal rankings and daily missions encouraged him to maintain regular gaming activity.

"The most influential thing is the season system because every season I want my rank to be better than before. There are also events and daily missions that sometimes make me log in so I do not miss the rewards." (RB, 22 years old; translated from Indonesian)

ZA similarly described the emotional value associated with successful performance and increased ranking.

"It is quite important. I feel happy when my rank increases or when I win several games in a row. It feels like my effort while playing has paid off." (ZA, 14 years old; translated from Indonesian)

These accounts indicate that the reward structure transforms gaming from an activity governed solely by voluntary leisure into a repeated behavioral routine supported by immediate feedback and incremental achievement. Competitive ranking, seasonal progression, missions, and time-limited events create recurring reasons to return to the game even when the original intention is to play for a limited period. Such mechanisms are consistent with the observation that contemporary gaming environments can incorporate psychological reinforcement structures capable of sustaining intensive engagement and contributing to problematic gaming patterns (King & Delfabbro, 2018). The psychological process is therefore not limited to pleasure derived from playing itself, but involves anticipation, achievement, perceived competence, and the desire to preserve or improve an established position within the game.

The three psychological dimensions form an interconnected rather than fragmented pattern in the experiences of the informants. Emotional distress may initially motivate an individual to seek escapism, while the virtual environment simultaneously offers greater freedom of self-expression and immediate opportunities for achievement, producing several forms of gratification within a single media experience. Once these gratifications become repeatedly associated with gaming, the activity may acquire psychological significance that exceeds its original recreational purpose and make disengagement more difficult. This interpretation extends the Uses and Gratifications perspective by

showing that gratification is not necessarily a stable endpoint of media use, but may become part of a reinforcing process when emotional relief, identity expression, and reward satisfaction repeatedly converge within the same media environment (Katz et al., 1974). The findings also support a technological perspective in which media technologies influence the organization of attention and patterns of human behavior rather than functioning merely as neutral channels (McLuhan, 1964). The psychological map emerging from the eight informants therefore positions online gaming addiction as a process in which internal needs interact with the communicative and technological characteristics of the gaming environment. This configuration provides an analytical basis for examining how psychological needs are subsequently reinforced by social mechanisms such as peer conformity, FOMO, and attachment to virtual gaming communities.

Social Factors Associated with Online Gaming Addiction

The analysis of the eight informants indicates that social factors constitute an important dimension in the development and maintenance of problematic online gaming behavior, particularly through peer conformity, Fear of Missing Out (FOMO), and attachment to virtual gaming communities. Unlike psychological factors that primarily concern emotional regulation and individual gratification, these social mechanisms demonstrate how gaming behavior is embedded within interpersonal relationships and group communication. Four informants reported experiences of peer pressure or conformity associated with gaming activities, while the same number described FOMO and strong attachment to virtual communities. The recurrence of these three dimensions suggests that excessive gaming cannot be adequately interpreted as an individual decision detached from the communicative environment in which the activity takes place. Research on adolescent gaming has similarly identified social relationships, peer influence, and environmental conditions as relevant contributors to problematic gaming behavior, indicating that social contexts may shape both initiation and persistence of gaming practices (Nursalam et al., 2023). The findings also correspond with research on Generation Z that identifies online gaming as a behavior increasingly integrated into everyday social interaction rather than functioning exclusively as an individual entertainment activity (Agustin et al., 2024). This configuration places interpersonal communication at the center of the analysis because the meaning and frequency of gaming are partly constructed through relationships with peers, partners, and members of virtual communities.

Peer conformity and the culture of playing together, commonly referred to by the informants as *mabar* or *main bareng*, emerged among four informants and represented one of the pathways through which gaming became integrated into their social routines. RB described his initial involvement with *Mobile Legends* as strongly connected to the gaming practices of his school friends.

“At that time, almost all of my close friends at school played Mobile Legends. During breaks they often talked about the game, discussed their favorite heroes, and showed off their ranks. At first I only listened, but eventually I tried playing so I could join their conversations.” (RB, 22 years old; translated from Indonesian)

This account demonstrates that gaming participation was initially motivated not by an individual attraction to the game itself, but by the need to remain communicatively connected with a peer group. The game consequently functioned as a shared cultural reference through which participants could maintain conversations, exchange experiences, and demonstrate membership within their social circle. From the perspective of conformity, individuals may modify their attitudes or behavior when group norms create implicit expectations regarding appropriate participation and social belonging (Asch, 1956). In the present context, *mabar* transforms gaming from an optional leisure activity into a socially meaningful routine because refusing to participate may reduce opportunities for interaction with peers. The social pressure identified in the narratives was generally informal rather than coercive, which makes it particularly relevant to understanding how problematic gaming can develop through ordinary interpersonal communication.

Table 3. Frequency of Social Factors Associated with Online Gaming Addiction

Social Factor	Aspect	Number of Informants (n)
Social	Group Conformity & <i>Mabar</i> Culture	4
Social	Fear of Missing Out (FOMO)	4
Social	Virtual Community Attachment	4

Table 3 indicates that the three identified social dimensions appeared with comparable frequency, with four informants associated with each factor. The equal distribution suggests that social influence does not operate through a single mechanism, but through several interconnected forms of interpersonal and mediated interaction. Group conformity provides an initial and continuing reason to participate, FOMO creates anxiety about losing access to shared experiences, while virtual community attachment gives emotional meaning to continued participation. The convergence of these mechanisms is important because a player may continue gaming even when personal motivation decreases if social expectations and relational commitments remain active. Such patterns are consistent with the broader finding that digital-media behavior among young people is shaped through interactions between individual preferences and the social environments surrounding technology use (Coyne et al., 2017). The present findings therefore extend the interpretation of gaming addiction beyond excessive screen exposure by showing how interpersonal expectations can become embedded within the behavioral routine. Social influence in this context operates less as an external pressure imposed on the individual and more as an internalized expectation to remain socially present within a digitally mediated group.

FOMO emerged in four informants and was expressed through concerns about missing limited-time events, seasonal activities, newly released content, or shared gaming experiences with friends and partners. NM provided a particularly clear illustration of this mechanism when discussing limited-time character events and the experience of observing other players obtain items that she had not yet acquired.

“It is because of FOMO. I see other players and my friends already have the card, but I do not, even though the card is from a free event. Even when I do not have the money for gacha, I still feel FOMO because I see other players pulling and getting their favorite characters.” (NM, 23 years old; translated from Indonesian)

The account demonstrates that FOMO does not necessarily originate from a direct invitation to play, but can emerge through observation and comparison with other members of the gaming environment. The perceived gap between one’s own experience and that of other players creates psychological pressure to remain active so that the individual does not feel socially or experientially left behind. This interpretation corresponds with the conceptualization of FOMO as a persistent concern that others may be experiencing rewarding activities in one’s absence, which can motivate greater engagement with social and digital environments (Przybylski et al., 2013). Within online gaming, FOMO is intensified by the temporal structure of events, rewards, rankings, and updates because opportunities for participation may be perceived as temporary and difficult to recover once missed. The social dimension becomes particularly important when the content being missed is simultaneously being discussed, displayed, or celebrated by friends and other players. FOMO therefore transforms technological availability into a perceived social obligation to remain connected.

Virtual community attachment constituted the third social dimension and appeared among four informants, particularly in narratives concerning emotional disclosure, interpersonal trust, and feelings of acceptance within gaming communities. NS reported that interactions with people met through gaming sometimes provided greater comfort for personal disclosure than relationships in her offline environment.

“I prefer interacting and telling stories while playing games because the people I meet in games do not know my persona in the real world. Eventually I become more confident and trust them as people I can talk to because they do not know me in real life.” (NS, 20 years old; translated from Indonesian)

This experience suggests that virtual communities may provide a form of social belonging that is partly enabled by the reduced availability of offline identity information and conventional social cues. The informant's willingness to disclose personal experiences indicates that the gaming community is not merely a functional environment for coordinating gameplay, but can become a meaningful interpersonal space. The need to belong provides a useful conceptual explanation because individuals generally seek stable and meaningful interpersonal relationships, while the satisfaction of this need can strengthen attachment to particular social environments (Baumeister & Leary, 1995). In the context of online gaming, the community can therefore become psychologically valuable when it offers recognition, companionship, and opportunities for emotional exchange. This process is also consistent with the social-integrative dimension of Uses and Gratifications, in which media are selected to facilitate interaction, affiliation, and relationship maintenance (Katz et al., 1974). The stronger the perceived relational value of the gaming community, the greater the possibility that disengaging from the game will be experienced not merely as stopping an activity, but as temporarily withdrawing from a meaningful social environment.

The social factors identified in this study demonstrate that problematic gaming is maintained through a combination of interpersonal expectations, comparative experiences, and emotional attachment to digitally mediated communities. Group conformity can encourage initial participation and repeated mabar, FOMO can sustain engagement by creating concern about missing activities or rewards, and virtual belonging can provide a relational reason to return even when gaming is no longer motivated by entertainment alone. These processes correspond with the developmental characteristics of adolescence and early adulthood, when peer relationships and social acceptance remain significant components of identity formation and interpersonal development (Santrock, 2017). The findings are particularly relevant to Generation Z because their social relationships are increasingly distributed across offline and online environments, making the boundary between gaming as entertainment and gaming as social participation increasingly difficult to maintain. The social dimension of gaming addiction consequently cannot be reduced to peer pressure in a narrow sense because the informants described active participation in relationships that they perceived as meaningful, supportive, and emotionally rewarding. The results indicate that the problematic dimension emerges when maintaining these relationships becomes increasingly dependent on sustained gaming participation and when disengagement carries perceived social costs.

Dominance and Interaction of Social and Psychological Factors

The mapping of the eight informants indicates that social factors were more dominant than psychological factors in five informants, whereas psychological factors were more dominant in three informants. This distribution does not imply that the two categories operate independently, because emotional regulation, self-expression, peer interaction, and virtual belonging repeatedly appeared in interconnected narratives. The distinction between dominant factors was established by examining which category appeared more prominently in the informants' explanations of why they continued gaming, rather than by treating the categories as mutually exclusive variables. The results indicate that social relationships frequently provided the context that transformed gaming from an individual leisure activity into a repeated interpersonal routine. This pattern corresponds with systematic evidence that adolescent online gaming addiction is associated with multiple contributing factors spanning individual, interpersonal, and environmental dimensions (Nursalam et al., 2023). The finding also reinforces the importance of examining Generation Z gaming behavior within the broader communication environment in which peer relationships and digital interaction increasingly overlap.

Table 4. Dominant Psychosocial Factors among Informants

Dominant Factor	Number of Informants (n)	Percentage
Social	5	62.5%
Psychological	3	37.5%
Total	8	100%

As shown in Table 5, social factors were dominant among five of the eight informants, equivalent to 62.5% of the qualitative sample, while psychological factors were dominant among three informants, equivalent to 37.5%. These percentages are presented as descriptive indicators of the distribution within the purposively selected sample and should not be interpreted as population estimates. The dominance of social factors suggests that continued gaming was frequently connected to relationships with friends, partners, and gaming communities rather than being driven exclusively by personal emotional needs. The finding is compatible with research emphasizing that digital-media behavior among young people develops within family, peer, and broader social environments rather than through individual media choices alone (Coyne et al., 2017). The distinction is particularly important because psychological motivations such as escapism were still present among all eight informants, indicating that social dominance did not eliminate the role of internal emotional processes. Instead, the results suggest that social interaction often provided the external conditions through which psychological motivations were activated, maintained, or intensified.

The social dominance observed in five informants can be interpreted through developmental perspectives concerning the importance of interpersonal acceptance during adolescence and early adulthood. Peer relationships provide an important context for identity exploration, social comparison, and the development of a sense of belonging, particularly when individuals are negotiating their position within changing social environments (Erikson, 1968). The significance of peer influence remains relevant beyond adolescence because young adults continue to construct identities and social relationships while transitioning between educational, occupational, and interpersonal roles. Several informants described gaming as a means of remaining connected to friends, partners, or communities, indicating that continued participation could carry relational meaning beyond the game itself. This pattern is consistent with the broader developmental argument that peer acceptance and social interaction become increasingly influential as young people develop greater independence from family-based relationships (Santrock, 2017). Gaming consequently operated as a communication space through which informants could maintain social presence, demonstrate competence, and participate in shared experiences. The problematic tendency emerged when participation in these social activities became difficult to regulate because disengagement was perceived as risking exclusion, missed experiences, or weakened interpersonal connections.

The culture of mabar illustrates how conformity can transform an individual gaming decision into a collective behavioral expectation. RB's experience showed that he initially became interested in Mobile Legends because the game had become a common topic among his close friends, creating an incentive to participate so that he could remain involved in their conversations. Such behavior reflects the basic mechanism of conformity in which individuals adjust their behavior in response to perceived group norms and expectations (Asch, 1956). In the gaming context, conformity does not necessarily involve explicit commands from peers, because the desire to remain included may itself be sufficient to encourage participation. FOMO can intensify this process when players observe friends progressing through events, obtaining items, or participating in gaming sessions without them. The resulting pressure is communicative as much as psychological because information about who is participating and who is absent circulates continuously through group chats, game invitations, rankings, and shared conversations. This pattern suggests that gaming engagement may become self-reinforcing when the social environment repeatedly communicates that participation is necessary to remain part of the group.

Virtual community attachment further demonstrates the interaction between social relationships and psychological needs. NS's account indicated that she could disclose personal experiences more comfortably to people encountered through gaming because those individuals did not possess extensive knowledge of her offline identity. The reduced availability of conventional social cues may lower perceived interpersonal risk and allow individuals to construct relationships without the immediate expectations associated with established offline identities. Such communication conditions are consistent with the Cuelessness perspective, which emphasizes the consequences of reduced social cues for mediated interaction and interpersonal interpretation. The relational value of these communities is also consistent with the Need to Belong framework because individuals may become attached to social environments that provide acceptance, recognition, and meaningful interpersonal connection (Baumeister & Leary, 1995). In this context, gaming becomes simultaneously a technological environment and a social environment in which emotional needs can be satisfied through communication with other players. The attachment may subsequently strengthen gaming persistence

because reducing gaming participation can also mean reducing access to relationships that have acquired emotional significance.

The relationship between psychological and social factors can therefore be conceptualized as a reciprocal process rather than a linear sequence. Emotional stress may initially motivate an informant to seek escapism through gaming, while participation introduces opportunities for peer interaction, social validation, and community belonging. These social experiences can subsequently increase the psychological rewards associated with gaming, making the activity more attractive when the individual encounters stress or emotional discomfort again. The Uses and Gratifications perspective explains the active selection of gaming to satisfy psychological and social needs, whereas the observed social mechanisms demonstrate how those gratifications can become embedded within interpersonal relationships (Katz et al., 1974). The findings indicate that the distinction between psychological and social factors is therefore analytically useful for mapping the phenomenon but insufficient for explaining the complete behavioral process. A more comprehensive interpretation requires attention to the reciprocal relationship between individual needs, social expectations, and the communicative characteristics of the gaming environment. This integrated pattern becomes particularly important when examining how technological features such as rankings, missions, events, and persistent connectivity reinforce the psychosocial processes identified among the informants.

CONCLUSION

Based on the mapping of psychosocial factors associated with online gaming addiction tendencies among Generation Z in Surabaya, this study identified two interrelated groups of factors, namely psychological and social factors, with social factors showing greater dominance among five of the eight informants. Psychological factors included the need to reduce stress, obtain emotional comfort, engage in escapism from academic or occupational pressures, express oneself more freely in virtual spaces, and obtain satisfaction through achievement and reward systems within games. Social factors comprised mabar culture, peer influence, Fear of Missing Out (FOMO), and attachment to virtual communities, which provided some informants with feelings of comfort, acceptance, and trust that were perceived as stronger than those experienced in offline social interactions. The dominance of social factors indicates that online gaming addiction tendencies are shaped not only by individuals' internal needs but also by their need to maintain connectedness, obtain social acceptance, and respond to expectations within peer groups and digital communities. Theoretically, these findings demonstrate that Uses and Gratifications and Technological Determinism can be applied complementarily to explain the phenomenon, as informants actively selected games to fulfill psychological and social needs while game technologies simultaneously directed and sustained their patterns of engagement. The concepts of deindividuation, the Online Disinhibition Effect, and the Cuelessness Model also help explain why some informants felt more comfortable expressing themselves and developing emotional connections in virtual spaces than in face-to-face interactions. This position confirms that online gaming addiction tendencies among Generation Z represent a digital communication phenomenon formed through the reciprocal relationship between psychological needs, social relationships, and technological characteristics that shape the gaming experience.

Based on these findings, Generation Z is encouraged to develop greater awareness of gaming duration while maintaining a balance between digital activities, academic or occupational responsibilities, sleep quality, and offline social interaction. Parents and families should establish open communication concerning young people's digital activities and provide guidance that does not focus solely on restricting gaming duration, but also considers emotional needs, social acceptance, and the quality of interpersonal relationships within the family. Educators and communities can use an understanding of these psychosocial factors as a basis for providing more contextual support so that online gaming is not simply perceived as delinquency or a waste of time. Support strategies that consider psychological and social needs may create alternative environments that provide opportunities for interaction, recognition, and emotional support beyond the gaming environment. For academics and future researchers, this study can be extended by expanding the geographical scope, comparing gaming behaviors across different game genres, and involving participants with more diverse social and developmental backgrounds. Mixed-methods approaches may also be employed to further examine the observed dominance of social factors while measuring the relationships among psychological factors, social factors, gaming intensity, and addictive behavioral tendencies. Such developments may broaden

understanding of Generation Z's digital communication behavior and provide stronger empirical foundations for digital literacy programs, family guidance, and social interventions that respond to the evolving dynamics of life in digital environments.

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