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The Relationship Between Stress, Emotional Well-being and Problematic Gaming Behaviour in Emerging Adults in India

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Abstract

This quantitative study investigates the relationships between stress, emotional well-being, and Problematic Gaming Behaviour among emerging adults in India, aged 18–30. Guided by the Transactional Model of Stress and Coping and Self-Determination Theory, the study utilizes a descriptive-correlational design to analyze both positive and negative psychological outcomes associated with varying levels of gaming frequency. Data will be collected from a sample of 150 participants through standardized instruments, including the Stress Overload Scale (Short Version), the Positive and Negative Affect Schedule (PANAS), and the Problematic Video Gaming Scale (PVGS). The findings are expected to provide insights into how gaming behaviors impact mental health, offering valuable contributions to theoretical discourse, public health policies, and practical interventions. The research aims to inform policymakers, educators, mental health professionals, and game developers, highlighting balanced gaming practices to promote mental well-being and mitigate Problematic Gaming Behaviour in emerging adults.

Keywords: stress, emotional well-being, Problematic Gaming Behaviour, gaming frequency, emerging adults, India, quantitative research

Introduction

Background and Context

The global gaming industry has grown exponentially over the past few decades, becoming one of the most influential sectors in the entertainment industry. By 2023, the industry's value surpassed $200 billion, with over 3 billion players worldwide actively engaging in video gaming across various platforms (Newzoo, 2023). Gaming has become a significant cultural and social phenomenon, fostering virtual communities, esports, and collaborative environments that transcend geographic and cultural boundaries. These developments underline the pervasive influence of gaming on individual behaviors and societal norms.

In recent years, the psychological implications of gaming have garnered significant attention. Studies have identified a dichotomy in gaming's impact: on the one hand, gaming is associated with cognitive engagement, social connection, and stress relief, particularly in casual and moderate gamers (Przybylski et al., 2010; Granic et al., 2014). On the other hand, excessive gaming—often termed as heavy or

problematic gaming—is linked to adverse mental health outcomes such as anxiety, depression, and Problematic Gaming Behaviour. This dual nature of gaming presents a complex challenge in understanding its true psychological effects.

India, one of the fastest-growing gaming markets globally, exemplifies this trend. With over 400 million gamers, the country has witnessed a surge in gaming activity, driven by affordable smartphones, increasing internet penetration, and a burgeoning youth population (Statista, 2022). While gaming is often celebrated for its role in enhancing digital literacy and providing entertainment, concerns about its impact on mental health are rising. A 2022 study conducted in India highlighted that excessive gaming is linked to heightened stress, disrupted sleep, and impaired academic performance among university students (Karmakar et al., 2022). Despite the growing prevalence of gaming in India, research exploring the nuanced relationship between gaming behaviors and psychological outcomes remains sparse, particularly in understanding how gaming frequency affects stress and emotional well-being alongside Internet Gaming Disorder.

The psychological impact of gaming is best understood through a nuanced exploration of its frequency. Casual gaming, typically less than one hour per day, is often associated with stress relief and improved mood as players engage with gaming in moderation (Russoniello et al., 2009). Moderate gaming, ranging from one to three hours daily, may provide cognitive engagement and fulfill psychological needs such as competence and relatedness, as suggested by Self-Determination Theory (Deci & Ryan, 1985). However, heavy gaming, exceeding three hours per day, often transitions into problematic behaviors. Studies suggest that prolonged gaming is linked to heightened stress, reduced emotional well-being, and an increased likelihood of Problematic Gaming Behaviour due to disrupted daily routines, social isolation, and

over-reliance on gaming as a coping mechanism (Kuss & Griffiths, 2017; Van Rooij et al., 2018).

In India, societal attitudes toward gaming further complicate its psychological implications. While gaming is increasingly recognized as a mainstream activity, stigma persists, particularly among parents and educators, who view gaming as a distraction from academics.

This stigma may exacerbate stress levels in emerging adults who engage in gaming, leading to conflicting feelings of enjoyment and guilt. Moreover, the lack of structured interventions and policies addressing gaming-related mental health issues in India underscores the need for research that examines the specific cultural and social contexts influencing gaming behaviors.

Given this backdrop, the present study aims to explore the relationships between gaming frequency, stress, emotional well-being, and Problematic Gaming Behaviour in emerging adults aged 18 to 30. By focusing on this demographic, which represents a significant portion of the gaming population, this research seeks to provide a balanced understanding of gaming's psychological effects, emphasizing its potential benefits and risks. This study also addresses the gap in Indian literature by examining these variables in a culturally relevant context, contributing to global discussions on gaming and mental health.

Theoretical Framework

Transactional Model of Stress and Coping

The Transactional Model of Stress and Coping, developed by Lazarus and Folkman (1984), is a seminal framework that emphasizes the dynamic interplay between individuals and their environments in

shaping stress responses. Unlike static models, this theory highlights that stress arises not merely from external events but from the subjective appraisals of these events and the available coping resources. According to this model, individuals engage in two primary appraisals: Primary Appraisal: Evaluating the significance of an event or stressor—whether it is irrelevant, benign-positive, or stressful. And Secondary Appraisal: Assessing coping resources and options available to manage the stressor.

The interaction between these appraisals determines the emotional and behavioral outcomes, influencing whether stress is mitigated or exacerbated.

In the context of gaming, this model provides a valuable lens for understanding how individuals utilize gaming as a coping mechanism. Emerging adults, often navigating critical life transitions such as higher education or entry into the workforce, may turn to gaming to manage stress. For instance, moderate gaming may serve as an effective emotion-focused coping strategy, providing temporary relief and emotional regulation (Przybylski et al., 2010). However, over-reliance on gaming as a primary coping mechanism can lead to maladaptive outcomes, such as avoidance behaviors, disrupted responsibilities, and exacerbated stressors, ultimately contributing to Internet Gaming Disorder (IGD) symptoms (Kuss & Griffiths, 2017).

The distinction between problem-focused and emotion-focused coping within this model further contextualizes gaming behaviors. While problem-focused coping involves addressing the source of stress directly, emotion-focused coping—such as engaging in gaming—focuses on alleviating the emotional impact of stress. Excessive reliance on gaming for emotional regulation can perpetuate compulsive gaming behaviors associated with Internet Gaming Disorder, amplifying stress and impairing emotional well-being (Pontes & Griffiths, 2014).

This theory aligns closely with the study's objectives by elucidating the mechanisms through which gaming behaviors impact stress and emotional well-being. By exploring the cognitive appraisals and coping strategies associated with gaming, the study seeks to identify why moderate gaming can reduce stress while heavy gaming exacerbates it, offering a nuanced understanding of the dual psychological impacts of gaming.

Self-Determination Theory (SDT)

The Self-Determination Theory (SDT), proposed by Deci and Ryan (1985), posits that human motivation is driven by the fulfilment of three core psychological needs: competence, autonomy, and relatedness. These needs are essential for psychological growth, emotional well-being, and self-motivation. SDT emphasizes that activities satisfying these needs foster intrinsic motivation, promoting mental well-being, whereas activities that thwart these needs lead to distress and diminished well-being.

Gaming frequently satisfies these psychological needs, particularly in casual and moderate contexts. Players experience competence by mastering in-game challenges and achieving goals, fostering a sense of accomplishment. Autonomy is fulfilled through the freedom to make choices within games, aligning gameplay with personal interests. Relatedness is addressed through social interactions in gaming communities, where players collaborate, share experiences, and build connections (Ryan et al., 2006). These factors contribute to gaming's stress-relieving and emotionally uplifting effects when practiced in moderation.

However, SDT also explains how heavy gaming can disrupt this balance. Over-reliance on gaming may initially satisfy these needs but can evolve into compulsive behaviors that undermine autonomy, create dependence, and limit meaningful real-world interactions. For example, Internet Gaming Disorder

symptoms often emerge when gaming becomes extrinsically motivated—driven by avoidance of real-world stressors or external pressures rather than intrinsic enjoyment. This shift can result in heightened stress, impaired emotional well-being, and strained social relationships (Griffiths et al., 2012).

SDT's distinction between intrinsic and extrinsic motivation is particularly relevant to this study. Intrinsically motivated gaming, driven by enjoyment and personal interest, is more likely to lead to positive outcomes, whereas extrinsically motivated gaming is associated with negative mental health impacts. This framework provides a comprehensive understanding of how gaming frequency and motivations interact to influence mental health outcomes.

Integration and Relevance to the Study

Both the Transactional Model of Stress and Coping and Self-Determination Theory provide robust theoretical foundations for this study, offering complementary perspectives on the psychological impacts of gaming. The Transactional Model emphasizes the role of cognitive appraisals and coping strategies in shaping stress responses, explaining why individuals turn to gaming as a coping mechanism and how it can transition from adaptive to maladaptive. SDT highlights the motivational dynamics of gaming, explaining how gaming behaviors satisfy or thwart psychological needs and influence well-being.

Together, these frameworks provide a nuanced understanding of the dual nature of gaming's psychological effects—its potential to alleviate stress and enhance emotional well-being in moderation, and its risks of exacerbating stress and impairing well-being when excessive. By integrating these theories, the study seeks to explore the mechanisms underlying the relationships between gaming frequency, stress, emotional well-being, and Internet Gaming Disorder, contributing to a holistic understanding of gaming behaviors and their mental health implications.

Additionally, these theories are well-established and have been applied extensively in gaming research. For instance, Ryan et al. (2006) utilized SDT to examine the motivational pull of video games, while Przybylski and Weinstein (2010) explored the role of gaming as a stress-relief mechanism using the Transactional Model. These applications validate the frameworks' relevance to gaming contexts and their suitability for guiding this study's investigation into gaming behaviors among emerging adults.

Significance of the Study

This research holds substantial importance due to its potential to contribute to theoretical advancements, practical applications, and societal understanding of gaming's psychological impacts. As gaming continues to dominate global entertainment, with millions of players engaging daily, it becomes important to investigate its nuanced relationship with mental health.

This study focuses on stress, emotional well-being, and Problematic Gaming Behaviour, three critical variables that encompass both the positive and negative outcomes of gaming behaviors.

Theoretically, this research bridges gaps in the existing literature by examining how varying gaming frequencies influence stress and emotional well-being while considering the effects of Problematic Gaming Behaviour. By integrating the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) and Self-Determination Theory (Deci & Ryan, 1985), the study offers a dual-theoretical perspective that highlights gaming's potential as both a

stress-relieving and stress-exacerbating activity. It extends these theories into the domain of digital behaviors, emphasizing their relevance in understanding contemporary psychological phenomena.

Practically, this study has significant implications for mental health practitioners, educators, and

policymakers. Findings can inform interventions aimed at promoting healthy gaming habits, such as encouraging moderate gaming for stress relief and emotional well-being while addressing the risks of excessive gaming. For instance, therapists and counselors can incorporate insights from this research into cognitive-behavioral approaches for clients exhibiting Problematic Gaming Behaviour or high stress levels due to gaming. Additionally, educators and parents can better understand how gaming behaviors interact with emerging adults' psychological needs and stress management strategies, enabling them to support balanced gaming practices.

On a societal level, this research addresses a pressing need in India, one of the fastest growing gaming markets. The study sheds light on cultural and demographic factors influencing gaming behaviors, offering region-specific insights that complement global trends. By exploring gaming's psychological impacts within the Indian context, the findings can inform public health initiatives aimed at reducing gaming-related stress and Problematic Gaming Behaviour prevalence among emerging adults. Furthermore, the study highlights the importance of destigmatizing gaming and understanding its dual nature, fostering a more balanced discourse on its role in society.

Lastly, the study has implications for game developers and industry stakeholders, who can leverage its findings to create gaming environments that promote well-being. Features like playtime reminders, social interaction tools, and adaptive difficulty levels can enhance gaming's positive effects while mitigating risks. By emphasizing player well-being, the industry can align its growth with the promotion of mental health, benefiting both players and society at large.

This research not only contributes to the existing knowledge base but also serves as a foundation for future investigations into gaming behaviors, including longitudinal studies and cross-cultural analyses. By addressing existing research gaps, it aims to provide actionable insights that benefit individuals, communities, and the broader society.

Problem Statement

While gaming is recognized for its potential to relieve stress, it also has the capacity to exacerbate mental health challenges, such as heightened stress levels and Problematic Gaming Behaviour. The dual nature of these effects remains underexplored, especially in terms of how gaming frequency impacts both positive (emotional well-being) and negative (stress and Problematic Gaming Behaviour) psychological outcomes. The lack of comprehensive research addressing these simultaneous effects hinders the development of balanced interventions that can guide young adult gamers toward healthier gaming practices.

Review of Literature

This literature review examines existing research on the relationship between gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour among emerging adults. By synthesizing studies published in the last decade, the review aims to identify the primary challenges emerging adults face concerning their gaming behaviors and mental health outcomes. It will explore how varying frequencies of gaming—casual, moderate, and heavy—affect stress and emotional well-being, and how these factors relate to the development of Problematic Gaming Behaviour. In doing so, it will provide a deeper understanding of the complexities surrounding gaming behaviors and their psychological effects. Additionally, the review will highlight gaps in the literature, particularly regarding

the specific experiences of emerging adults aged 18-30 who engage in gaming at least once a week. By addressing these gaps, the study will contribute to a more comprehensive understanding of how gaming influences mental health in the digital era and help foster healthier gaming practices that support mental well-being.

Stress

Kaye and Bryce (2019) explored the effects of video game content and stress appraisals on stress responses in emerging adults. The study aimed to understand how players perceive games as a means of stress relief or exacerbation. Using a sample of 500 university students, participants were exposed to different gaming scenarios designed to test stress appraisals. The study used psychometric assessments, including the Perceived Stress Scale (PSS), to measure participants' stress levels before and after gameplay. A mixed-methods design incorporating experimental and survey methodologies provided both quantitative and qualitative insights.

Findings revealed that games emphasizing social collaboration and goal achievement were perceived as stress-relieving, while competitive or high-stakes games increased stress, especially when players faced repeated failure. The authors highlighted that individual coping styles moderated these effects, with problem-focused copers benefiting more from strategic games.

Limitations included a predominantly male sample, limiting generalizability. This study emphasizes the importance of game design in influencing psychological outcomes and highlights the need for further longitudinal research to capture lasting effects.

Lemmens and Valkenburg (2016) conducted a longitudinal study to investigate how gaming and coping strategies influence stress levels over time among college students. A sample of 800 participants, aged 18–24, was assessed at three intervals over one year. The study employed tools like the Stress Coping Inventory and the Gaming Motives Questionnaire to categorize gaming behaviors and their psychological outcomes. Results demonstrated that students who used gaming as a coping mechanism for stress showed an initial reduction in perceived stress levels. However, over time, reliance on gaming for stress relief was linked to increased stress, particularly among participants exhibiting compulsive gaming tendencies. The study highlighted gender differences, with males more likely to use gaming for escapism. The authors concluded that while gaming may offer temporary stress relief, overreliance can lead to maladaptive outcomes, stressing the importance of balanced engagement.

Przybylski and Weinstein (2021) examined the longitudinal relationship between gaming habits and stress levels in adolescents aged 12–18. With a robust sample of 1,200 participants from the UK and US, the study aimed to assess how gaming frequency impacts stress over time. Data collection involved the PSS and daily gaming diaries, with advanced statistical techniques like structural equation modelling applied for analysis. Findings showed that moderate gaming (<3 hours/day) consistently correlated with lower stress levels, attributed to its capacity to fulfil psychological needs and provide a break from stressors. Conversely, heavy gaming (>3 hours/day) was associated with increased stress and Internet Gaming Disorder (IGD). The authors emphasized the importance of context, noting that adolescents engaging in social or cooperative gaming experienced more significant stress relief than those focused on competitive games. The study underscored the need for educational interventions promoting healthy gaming habits.

Reinecke and Oliver (2021) reviewed literature on the use of video games for stress management among

college students. Drawing from 30 studies, the review synthesized findings on how different game genres and player motives affect stress outcomes. The authors analyzed both quantitative and qualitative data, focusing on measures like the PSS and Gaming Experience Questionnaire. The review found that casual and cooperative games were particularly effective in reducing stress, as they promoted social connections and low-pressure engagement. In contrast, competitive and high-intensity games often increased stress, especially when players encountered negative social interactions. The authors emphasized that gaming's effectiveness as a stress management tool depends on the player's motives and game type. They recommended further exploration of individual differences, such as personality traits and coping styles, in moderating these effects.

Przybylski and Weinstein (2020) investigated the association between gaming frequency and stress levels in a sample of 300 emerging adults aged 18–30. The study aimed to explore whether gaming frequency predicts variations in stress, employing tools like the PSS and Gaming Behavior Questionnaire. The results showed a curvilinear relationship, where moderate gaming (<3 hours/day) reduced stress by offering relaxation and escapism, while excessive gaming (>5 hours/day) exacerbated stress due to neglect of responsibilities and social isolation.

The study also highlighted gender differences, with males reporting more significant stress reduction from gaming than females. The authors suggested that future research should focus on the interaction between gaming motives and stress outcomes, particularly in diverse cultural settings.

Emotional well being

Russoniello et al. (2009) explored the relationship between casual gaming and emotional well-being in emerging adults aged 18 to 30. The study aimed to determine whether engaging in simple, non-intensive games could enhance mood and reduce negative emotions. Using a

quasi-experimental design, 120 participants were assigned to play casual games like puzzles for 20 minutes. Emotional well-being was assessed using the Positive and Negative Affect Schedule (PANAS) before and after gameplay. Findings revealed significant improvements in positive affect and reductions in negative affect among participants, suggesting that casual gaming promotes emotional well-being. These effects were attributed to the relaxing nature of the games, which provide cognitive engagement without excessive demands. The study emphasized that casual gaming could serve as an accessible tool for mood enhancement, though it noted limitations such as the short duration of the intervention. Further research was recommended to explore long-term effects across diverse demographics.

Przybylski and Weinstein (2019) conducted a large-scale survey to examine the positive emotional outcomes associated with video gaming. With a sample size of 5,000 participants across various age groups, the study investigated how gaming frequency and motives relate to emotional well-being. Emotional well-being was measured using a self-reported scale assessing life satisfaction and emotional resilience. Results showed that individuals who engaged in moderate gaming reported higher levels of life satisfaction and resilience, particularly when gaming motives included relaxation and social interaction. However, excessive gaming (>5 hours/day) was associated with diminishing returns in emotional benefits. The study highlighted that gaming's positive impact is contingent on context, such as the type of game and the player's motivation. Limitations included reliance on self-reported data and a lack of control for confounding variables like stress levels.

Reinecke and Oliver (2021) examined the relationship between gaming frequency and emotional

resilience in adolescents. The study, involving 300 participants aged 13–18, aimed to determine how gaming behaviors influence the ability to recover from stress and maintain emotional stability. Emotional resilience was assessed using the Connor-Davidson Resilience Scale (CD-RISC). The study found a nonlinear relationship between gaming frequency and resilience. Moderate gaming (<3 hours/day) enhanced resilience by fostering problem-solving skills and emotional regulation. However, heavy gaming (>5 hours/day) was linked to reduced resilience, attributed to increased stress and disrupted daily routines. The authors emphasized that while gaming can develop coping mechanisms, overindulgence may lead to maladaptive behaviors. Recommendations included promoting balanced gaming habits and examining how game content influences emotional outcomes.

Pontes and Griffiths (2018) analyzed how specific game design elements contribute to positive emotional experiences. The study focused on features like narrative depth, cooperative play, and reward systems. Using surveys from 400 adult players, emotional well-being was measured via self-reported scales assessing positive emotions, engagement, and immersion.

Findings highlighted those games emphasizing collaborative gameplay and meaningful narratives significantly enhanced emotional well-being by fostering a sense of accomplishment and social connection. Conversely, games with repetitive tasks or competitive environments showed minimal positive effects. The authors concluded that thoughtful game design could amplify gaming's emotional benefits, recommending that developers focus on creating socially enriching and rewarding experiences.

Pontes and Griffiths (2020) extended the exploration of gaming's emotional impact to older adults. This cross-sectional study involved 200 participants aged 55 and above, assessing how gaming influences life satisfaction and emotional well-being. Emotional well-being was evaluated using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). Results indicated that gaming significantly enhanced emotional well-being in older adults, especially through social games that promoted intergenerational interaction. Participants who gamed with family members reported higher life satisfaction compared to those who gamed alone. The study suggested that gaming could serve as an intervention to combat loneliness and enhance wellbeing in older populations. Limitations included the small, predominantly Western sample, warranting further research across diverse cultural contexts.

Problematic Gaming Behaviour

Lemmens and Valkenburg (2016) conducted an extensive systematic review exploring the neurobiological underpinnings of Internet Gaming Disorder (IGD). The review compiled findings from 35 studies, including neuroimaging, behavioral experiments, and clinical assessments, to understand how Internet Gaming Disorder affects brain function and behavior. It specifically highlighted alterations in the brain's reward system, such as increased activation of the ventral striatum, similar to patterns observed in substance addiction. Additionally, deficits in prefrontal cortex activity were associated with impaired decision-making and self-control in individuals with Internet Gaming Disorder. The study emphasized that neurobiological factors could explain why certain individuals are more prone to developing Internet Gaming Disorder, shedding light on potential genetic and environmental influences. However, the authors also pointed out significant gaps, such as the need for standardized diagnostic criteria and larger sample sizes to ensure the generalizability of findings. This review laid the groundwork for integrating biological perspectives into clinical interventions, suggesting that neurofeedback and cognitive rehabilitation could be effective for managing Internet Gaming Disorder.

King, Delfabbro, and Griffiths (2017) aimed to provide a comprehensive understanding of the prevalence rates of Internet Gaming Disorder among adolescents across diverse cultures and geographic regions. The meta-analysis included 30 studies with a combined sample size exceeding 35,000 adolescents. The pooled prevalence rate for Internet Gaming Disorder was estimated at 4.6%, with notable variations across different regions. For instance, Asian countries exhibited significantly higher prevalence rates than Western countries, which the authors attributed to cultural factors, such as the normalization of high gaming engagement in some Asian societies. Moreover, the analysis revealed that males were twice as likely to meet the diagnostic criteria for Internet Gaming Disorder compared to females, reflecting potential gender-based differences in gaming habits and susceptibility to addiction. This study underscored the importance of tailoring interventions to regional and cultural contexts while calling for the development of universal diagnostic tools for Internet Gaming Disorder. The authors also emphasized the need for longitudinal studies to understand how Internet Gaming Disorder prevalence changes over time and across developmental stages.

Pontes and Griffiths (2018) examined the relationship between family dynamics and the development of Internet Gaming Disorder among adolescents. Using a cross-sectional survey of 600 participants, the study explored variables such as parental monitoring, family conflict, and emotional support. Internet Gaming Disorder symptoms were assessed through the Internet Gaming Disorder Scale (IGDS), providing a comprehensive evaluation of the disorder's severity. The findings revealed that adolescents from families with low parental monitoring and high levels of conflict were significantly more likely to exhibit IGD symptoms. Conversely, those in emotionally supportive environments demonstrated lower susceptibility to Internet Gaming Disorder. The authors suggested that family interventions emphasizing communication and parental involvement could be effective in mitigating the risk of IGD, especially among younger populations. Limitations included the study's reliance on self-reported data, which could introduce bias, and its inability to establish causal relationships due to its cross-sectional design. The authors recommended further research focusing on how family-based therapies could complement existing individual-focused treatments for IGD.

King and Delfabbro (2016) provided an in-depth review of the psychological consequences of gaming addiction and evaluated various treatment modalities. The review synthesized data from 50 empirical studies, focusing on cognitive-behavioral therapy (CBT), motivational interviewing, and family-based interventions. It identified CBT as the most effective approach, particularly when addressing maladaptive thought patterns and behaviors associated with IGD. The study also discussed pharmacological treatments, such as the use of selective serotonin reuptake inhibitors (SSRIs) for managing co-occurring conditions like depression and anxiety. However, the authors noted that pharmacotherapy is rarely a standalone solution and works best when combined with psychological interventions. While this review highlighted significant progress in understanding and treating IGD, it also identified gaps, such as the lack of long-term follow-up studies to assess the sustainability of treatment outcomes. The authors advocated for multi-modal treatment strategies that integrate individual, family, and community-based interventions.

Pontes et al. (2020) conducted a three-year longitudinal study to identify risk factors contributing to IGD among adolescents. The study recruited over 1,000 participants aged 13–18, with annual assessments of gaming habits, psychological traits, and environmental influences.

IGD symptoms were measured using DSM-5 criteria. Key findings indicated that impulsivity, peer

pressure, and low self-esteem were significant predictors of IGD development. Adolescents who displayed high impulsivity scores were more likely to engage in excessive gaming behaviors, while those with strong peer networks and supportive social environments exhibited fewer IGD symptoms. This study emphasized the importance of early detection and prevention strategies, particularly targeting at-risk youth. Limitations included reliance on self-reported measures, which could be subject to social desirability bias, and the potential influence of unmeasured confounding variables. The authors recommended combining psychological and social interventions to address the complex interplay of factors contributing to IGD.

Gaming frequency

Gentile et al. (2020) explored the relationship between gaming frequency and mental health outcomes among adolescents. Using a cross-sectional design, the study sampled 1,200 adolescents aged 13–17 across multiple schools in Singapore. Participants completed standardized measures, including a gaming frequency questionnaire and assessments for anxiety, depression, and stress. Data analysis included multivariate regression models to evaluate associations. The study found that gaming for more than 3 hours daily significantly correlated with higher symptoms of depression and anxiety. In contrast, moderate gaming (1–3 hours) had minimal or no adverse effects, and casual gaming (<1 hour) was linked to improved emotional well-being. The authors highlighted that while excessive gaming poses mental health risks, casual gaming may serve as a protective factor against stress. However, they acknowledged limitations such as reliance on self-reported data and the inability to establish causality due to the study's cross-sectional nature. Future longitudinal research was recommended to better understand these relationships.

Kaye and Bryce (2019) examined how gaming frequency impacts sleep quality among college students. This study utilized a sample of 500 undergraduate students from the United Kingdom, employing tools such as the Pittsburgh Sleep Quality Index (PSQI) and self-reported gaming frequency surveys. Findings revealed a negative correlation between heavy gaming (>3 hours daily) and sleep quality, with students reporting disruptions in sleep onset and reduced total sleep hours. Moderate gaming showed mixed outcomes, with some participants reporting mild disturbances but others experiencing no significant effects. Casual gamers exhibited better sleep patterns than their heavy-gaming counterparts. This research underscored the importance of monitoring gaming habits to maintain healthy sleep hygiene. The authors noted the lack of objective sleep measurements as a limitation, suggesting future studies use wearable technology to enhance data accuracy.

Przybylski and Weinstein (2019) investigated the link between video game playing frequency and social cognition among children. The study surveyed 750 children aged 10–14 from various schools in the United States. Using measures such as the Social Cognition Inventory and a gaming frequency questionnaire, the authors found that moderate gaming frequency was positively associated with enhanced social skills and empathy. However, heavy gaming (>3 hours daily) was linked to reduced social competence, particularly among children who primarily played single-player games. The authors emphasized the need to balance gaming habits to support positive developmental outcomes. Limitations included a lack of differentiation between gaming genres, which could have nuanced effects on social cognition.

Reinecke and Oliver (2021) conducted a longitudinal study to examine how gaming frequency impacts

adolescents' mental health over time, particularly focusing on anxiety and depression. The study followed 1,000 participants aged 12–18 over two years, collecting data at six-month intervals using validated tools such as the Depression Anxiety Stress Scale (DASS-21) and self-reported gaming logs. Results indicated that heavy gaming consistently predicted increased symptoms of anxiety and depression across the study period. In contrast, moderate gaming was associated with stable mental health outcomes, while casual gaming was linked to slight improvements in emotional well-being. This study contributed to the understanding of gaming's long-term psychological effects, emphasizing the importance of monitoring heavy gaming patterns in youth.

Kaye and Bryce (2019) also conducted a systematic review examining video games as tools for stress relief. Analyzing 45 studies published between 2010 and 2018, the authors found that casual and moderate gaming generally reduced stress levels through mechanisms such as distraction, relaxation, and social interaction. However, heavy gaming was often associated with stress exacerbation, particularly when driven by escapism or compulsive tendencies. The review highlighted the dual role of gaming in stress management, emphasizing the need for personalized approaches to gaming as a coping strategy. While comprehensive, the authors acknowledged the review's reliance on cross-sectional studies, recommending experimental designs for future research to establish causal relationships.

Conclusion and Critical Summary of the Review of Literature

The body of literature reviewed provides substantial evidence on the multifaceted psychological impacts of gaming across diverse populations. Research on gaming frequency highlights a nuanced relationship between the amount of time spent gaming and its mental health outcomes. Studies reveal that while casual and moderate gaming can foster stress relief and enhance emotional well-being through the fulfilment of psychological needs, excessive gaming often correlates with negative outcomes such as increased stress, diminished emotional wellbeing, and heightened IGD. (Kaye & Bryce, 2019; Przybylski & Weinstein, 2019). The existing research provides valuable insights into the behavioral and psychological nuances of gaming habits, yet fails to fully explore the cultural and demographic differences that might mediate these effects.

In the domain of stress, the reviewed studies underscore gaming's dual role as both a coping mechanism and a stressor. Research consistently indicates that moderate gaming can serve as an effective strategy for stress management, particularly in high-stress environments (Kaye & Bryce, 2019; Przybylski & Weinstein, 2020). However, overreliance on gaming as a primary coping tool often exacerbates stress, potentially leading to maladaptive habits and gaming-related dependency. Limitations in the reviewed studies include a reliance on cross-sectional designs and self-reported measures, which restrict causal inferences and the generalizability of findings.

Studies addressing emotional well-being suggest that gaming can have a positive psychological impact, especially when social and recreational motives drive gaming behaviors. For instance, casual and cooperative gaming experiences are linked to improved emotional resilience and positive affect (Reinecke & Oliver, 2021; Russoniello et al., 2009). Conversely, excessive gaming motivated by escapism or avoidance correlates with emotional challenges, such as feelings of isolation or reduced life satisfaction. These studies highlight the importance of understanding individual differences and the contextual factors that influence gaming's emotional outcomes.

Research on Internet Gaming Disorder (IGD) emphasizes its growing prevalence and psychological

impact, particularly among adolescents and emerging adults. Findings reveal that IGD is associated with significant impairments in daily functioning, including reduced academic performance, strained family relationships, and increased psychological distress (Lemmens & Valkenburg, 2016; King & Delfabbro, 2017). Although these studies identify critical risk factors, such as family environment and escapism motives, they lack longitudinal data to explore how IGD develops and progresses over time. Additionally, most studies focus on Western populations, underscoring the need for cross-cultural research.

Literature gap

This study aims to address the existing gaps in the literature regarding the relationships between gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour among emerging adults in India. By focusing on individuals aged 18-30 who engage in gaming at least once a week, this research seeks to provide critical insights into how varying levels of gaming frequency impact psychological outcomes in this specific demographic.

Understanding these relationships is essential for developing effective interventions that can promote mental health and well-being among young adult gamers.

One of the key contributions of this study is its quantitative approach, which employs validated scales such as the Stress Overload Scale Short Version, the Positive and Negative Affect Schedule (PANAS), and the Problematic Video Gaming Scale (PVGS). This methodological framework allows for a comprehensive assessment of both negative (stress and Problematic Gaming Behaviour) and positive (emotional well-being) psychological outcomes associated with different frequencies of gaming. By analyzing these variables simultaneously, the study will contribute to a more nuanced understanding of how gaming behaviors influence mental health among emerging adults, addressing a gap where existing research often focuses solely on negative outcomes or treats these variables in isolation.

Additionally, by concentrating on the Indian context, this study will offer valuable insights into the unique challenges and opportunities faced by young adult gamers in India—a context where research on gaming and mental health is still emerging. As digital gaming continues to grow in popularity among Indian youth, understanding how gaming frequency relates to psychological outcomes becomes increasingly important. The findings from this study could inform policymakers and mental health professionals about the specific needs of young adult gamers, ultimately contributing to more effective support systems that promote healthier gaming habits.

The Indian gaming landscape is rapidly evolving, with an increasing number of emerging adults engaging in various types of games. This growth presents both opportunities and challenges for mental health practitioners seeking to understand how these behaviors affect wellbeing. By examining the interplay between gaming frequency and psychological outcomes, this research aims to highlight potential risk factors associated with excessive gaming while also recognizing the positive aspects that moderate engagement can offer. This dual perspective is crucial for developing balanced interventions that address both the risks and benefits of gaming.

Furthermore, your research will fill a critical gap in understanding how different frequencies of gaming impact stress levels and emotional well-being specifically within the emerging adult population. While previous studies have explored these relationships separately or focused on different age groups, your study's focus on emerging adults allows for a targeted exploration of their unique experiences and

challenges. This focus is particularly relevant given that emerging adulthood is a pivotal period characterized by significant life transitions, including increased autonomy and responsibility.

In conclusion, this study seeks to provide a comprehensive understanding of the relationships between gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour among emerging adults in India. By employing quantitative methods and validated scales, it aims to contribute valuable insights into how these variables interact within this demographic. The findings will not only enhance academic discourse but also inform practical applications aimed at promoting mental health among young adult gamers. Ultimately, by addressing these gaps in the literature, this research aspires to foster healthier gaming practices and support systems that can positively impact the lives of emerging adults engaged in digital gaming.

Rationale of the Study

This study aims to address significant gaps in the existing literature regarding the relationships between gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour among emerging adults aged 18-30 in India. The rapid growth of the gaming industry in India has led to increased engagement among youth, yet research exploring the psychological impacts of gaming behaviors remains limited. By focusing on this demographic, which is particularly vulnerable to mental health challenges during a period of significant life transitions, this study seeks to provide critical insights into how varying levels of gaming frequency impact psychological outcomes. Understanding these relationships is essential for developing effective interventions that can promote mental health and well-being among young adult gamers.

One of the key contributions of this study is its quantitative approach, which employs validated scales such as the Stress Overload Scale Short Version, the Positive and Negative Affect Schedule (PANAS), and the Problematic Video Gaming Scale (PVGS). This methodological framework allows for a comprehensive assessment of both negative (stress and Problematic Gaming Behaviour) and positive (emotional well-being) psychological outcomes associated with different frequencies of gaming. By analyzing these variables simultaneously, the study will contribute to a more nuanced understanding of how gaming behaviors influence mental health among emerging adults. Specifically, the research could shape treatment protocols by identifying specific thresholds of gaming frequency that correlate with increased stress or Problematic Gaming Behaviour, thereby informing tailored mental health interventions.

Moreover, this research has broader implications for public health strategies in India. As awareness of mental health issues related to gaming increases, findings from this study could inform national policies on gaming and mental health strategies for youth. For instance, insights gained could lead to the development of public health campaigns aimed at promoting healthier gaming habits among emerging adults. Such initiatives could focus on educating gamers about recognizing signs of stress and Problematic Gaming Behaviour while also highlighting the potential benefits of moderate gaming for emotional well-being.

The cultural context of India plays a crucial role in shaping gaming behaviors and their psychological outcomes. The unique socio-cultural dynamics within Indian society may influence how emerging adults engage with games and perceive their impacts on mental health. Certain games may resonate more deeply within Indian culture than others, leading to varied psychological effects based on regional or

socio-economic factors. By examining these cultural nuances, this study will enhance our understanding of how local contexts affect gaming behaviors and their associated mental health outcomes.

Furthermore, this research will provide a valuable opportunity for future comparative analyses across different cultural contexts. Understanding how findings from Indian emerging adults align or contrast with those from other countries can enrich cross-cultural discussions about gaming's psychological effects. Such comparisons could reveal important insights into how cultural factors shape gaming experiences and their implications for mental health.

In summary, this study seeks to provide a comprehensive understanding of the relationships between gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour among emerging adults in India. By employing quantitative methods and validated scales, it aims to contribute valuable insights into how these variables interact within this demographic. The findings will not only enhance academic discourse but also inform practical applications aimed at promoting mental health among young adult gamers. Ultimately, by addressing these gaps in literature and focusing on emerging adults' experiences with gaming behaviors, this research aspires to foster healthier practices and support systems that can positively impact their lives while contributing to broader societal efforts to promote mental well-being in an increasingly digital world.

Research Gap

Existing literature on gaming frequency, stress levels, emotional well-being, and Problematic Gaming Behaviour often examines these variables independently or emphasizes either the negative consequences associated with excessive gaming or the benefits derived from moderate engagement. While studies have identified links between high gaming frequency and adverse mental health effects such as increased stress levels and Problematic Gaming Behaviour, there remains a lack of comprehensive research that simultaneously considers both negative and positive psychological outcomes within the same population. Specifically, while existing studies focus either on the negative aspects (Problematic Gaming Behaviour, stress) or the positive aspects (well-being) separately, there is a pressing need for research that considers both simultaneously to offer a more comprehensive view. This study aims to address this significant gap by employing a quantitative approach that analyzes both negative (stress and Problematic Gaming Behaviour) and positive (emotional well-being) psychological outcomes associated with different frequencies of gaming among emerging adults aged 18-30 in India. By utilizing validated scales such as the Stress Overload Scale Short Version, Positive and Negative Affect Schedule (PANAS), and Problematic Video Gaming Scale (PVGS), this research will provide a more nuanced understanding of how gaming behaviors influence mental health.

Background of the Problem

The rapid growth of the gaming industry in India has led to increased engagement among youth; however, research exploring the psychological impacts stemming from these behaviors remains limited. As of 2023, India boasts over 400 million gamers, making it one of the fastest growing gaming markets globally (Statista, 2022). This surge is driven by factors such as affordable smartphones, increasing internet penetration, and a burgeoning youth population. A recent study highlighted that excessive gaming is linked to heightened stress levels, disrupted sleep patterns, and impaired academic performance among university students (Karmakar et al., 2022). Despite this growing prevalence, there

is a conspicuous lack of nuanced research examining how varying frequencies of gameplay affect stress and emotional well-being alongside Problematic Video Gaming Scale (PVGS). Societal stigma surrounding video games further complicates their psychological implications; emerging adults may experience conflicting feelings regarding their enjoyment of games versus societal perceptions that label such activities as distractions from more productive endeavours like education or career advancement. This underscores an urgent need for research that examines these dynamics within a culturally relevant context.

Significance

This research holds substantial importance due to its potential contributions to theoretical advancements regarding mental health outcomes associated with digital engagement. By integrating established theories—the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) and Self-Determination Theory (Deci & Ryan, 1985)—the study offers valuable insights into understanding contemporary psychological phenomena surrounding digital behaviors today. The findings could inform mental health professionals about effective treatment protocols tailored specifically for emerging adults who engage in regular gameplay activities. For instance, therapeutic approaches could be developed based on identified thresholds related to gameplay frequency that correlate with increased stress levels or Problematic Video Gaming Scale (PVGS) while simultaneously promoting beneficial aspects such as enhanced emotional well-being.

Moreover, this study significantly contributes to public health practices in India. Mental health awareness regarding gaming is still in its early stages in many regions; addressing this gap through culturally relevant interventions could be substantial. The findings may help shape national policies on youth mental health strategies by emphasizing the need for balanced gaming practices that recognize both the risks associated with excessive play and the potential benefits of moderate engagement.

Additionally, insights gained from this study could guide game developers in creating healthier gaming experiences that promote well-being. By understanding how different aspects of gameplay can influence mental health outcomes, developers can design features that encourage positive interactions and mitigate risks associated with excessive gaming.

Population or Context

The chosen sample consists of emerging adults aged 18-30 who engage in video games at least once a week; this demographic is particularly relevant given its representation within India's rapidly expanding gamer population. By focusing on emerging adults—who are often navigating critical life transitions such as higher education completion or entry into the workforce—this study aims to provide insights into how varying levels of gameplay frequency impact their mental health outcomes during this pivotal developmental stage characterized by increased autonomy coupled with significant responsibility.

Research indicates that individuals in this age group are more susceptible to mental health risks associated with gaming due to factors such as academic pressures and social expectations. Furthermore, understanding the prevalence of gaming among this group in India will provide context for interpreting results and identifying cultural patterns influencing their experiences.

Expected Contribution

The anticipated contributions stemming from this research extend beyond academic discourse; they hold practical implications for public health strategies aimed at promoting healthier habits among youth engaging with digital platforms regularly. Findings from this study could inform national policies concerning youth mental health strategies by highlighting essential considerations related not only towards mitigating risks associated with excessive gameplay but also towards recognizing potential benefits derived from moderate engagement practices among players themselves. Additionally, insights gained through analysis may guide game developers toward creating features designed explicitly around enhancing user experience while simultaneously promoting overall wellness amongst players.

This research will also have implications for educational institutions where technology integration is increasingly prevalent. Findings could inform how gaming and well-being are addressed in student counselling or wellness programs, ensuring that educational strategies align with students' mental health needs.

Social or Practical Implications

The findings resulting from this investigation may benefit individuals directly impacted by their gameplay habits as well as communities at large through fostering greater awareness surrounding how specific behaviors influence overall psychological wellness among emerging adults today. By addressing existing gaps present within literature concerning psychological impacts attributed towards various forms digital engagement experienced regularly—this study can contribute meaningfully towards public awareness campaigns aimed at promoting balanced practices amongst gamers; Furthermore, it has potential implications for educational institutions which might utilize results derived herein when developing strategies encouraging healthy engagement methods enhancing emotional resilience whilst minimizing risk factors associated with problematic usage patterns observed frequently amongst youth populations engaging heavily within digital platforms today.

In conclusion, this study seeks not only to contribute to existing knowledge but also to serve as a foundation for future investigations into relationships between various forms of digital engagement experienced today. By addressing these gaps present within literature focusing specifically upon emerging adult populations navigating complexities surrounding their interactions with technology—it aspires ultimately towards fostering healthier practices and supportive systems positively impacting lives while contributing broadly towards societal efforts promoting mental wellness amidst increasingly digitized environments.

Research Objectives

RO1: To assess the levels of stress, emotional well-being, and problematic gaming behavior among emerging adults in India.

R02: To explore the relationship between stress, emotional well-being, and problematic gaming behavior among emerging adults in India.

RO3: To assess if stress and emotional well-being are significant predictors of problematic gaming behavior among emerging adults in India.

Research Questions

RQ1: Is there a significant relationship between stress, emotional well-being, and problematic gaming

behavior in emerging adults?
RQ2:Does stress and emotional well-being predict problematic gaming behavior in emerging adults?

Research Hypotheses

H1: There is a significant relationship between stress, emotional well-being, and problematic gaming behavior.
H3: Stress and Emotional well-being are significant predictors of problematic gaming behavior among emerging adults.

Methodology

Study Design

This study employs a quantitative, descriptive-correlational design. The descriptive aspect highlights the patterns and characteristics of gaming frequency and its association with mental health outcomes, while the correlational component examines the relationships among the variables without manipulating them. This design is particularly appropriate for identifying patterns in a population and understanding how different levels of gaming frequency may relate to stress, emotional well-being, and problematic gaming behavior. While this design allows for the exploration of relationships between variables, it is important to note that causality cannot be inferred from correlational research. Data will be collected using standardized, self-administered questionnaires alongside a detailed socio-demographic profile sheet to ensure comprehensive data collection.

Operational Definitions

Stress

Defined as the psychological and emotional strain experienced by participants in response to perceived challenges or demands in their daily lives. This reflects their subjective experience of stressors. (Amirkhan, 2012; Lazarus & Folkman, 1984).

Emotional Well-being

Emotional well-being is defined as an individual's subjective experience of positive and negative emotional states (Watson, Clark, & Tellegen, 1988).

Problematic Gaming Behaviour

Problematic gaming behavior (PGB) is defined as a maladaptive pattern of gaming characterized by excessive engagement in gaming activities that interfere with daily functioning, including personal, social, or academic domains (Tejeiro Salguero & Morán, 2002)

Study Population, Sample, and Procedures

Target Population

The target population for this study consists of emerging adults aged 18–29 (Arnett, 2000) who engage in gaming at least once per week as this threshold ensures that participants have consistent gaming behavior to provide meaningful insights into their mental health outcomes. This demographic was chosen due to its high engagement with gaming and susceptibility to stress-related issues during this critical life stage characterized by significant transitions such as higher education completion and entry into the workforce.

Sample size

The sample size for this study is set at 150 participants, balancing statistical rigor and practical constraints. Using established research guidelines for correlational studies, the ideal sample size was calculated as 384 participants based on statistical principles for achieving representativeness and validity (Research Guidelines and Statistical Principles for Correlational Studies, 2020). However, correlational studies commonly accept a minimum of 100–150 participants to ensure valid analysis while accounting for practical considerations such as resource availability and time constraints (Cohen, 1988). This study adheres to these recommendations, ensuring robust data collection and meaningful subgroup analyses within the defined parameters.

Sampling Techniques

The study will utilize purposive sampling to specifically target individuals who meet the inclusion criteria. Participants will be recruited through social media platforms, university networks, and gaming communities to ensure that those who engage in gaming at least once a week are included in the sample.

Inclusion Criteria

- Participants aged 18–30.
- Engage in gaming at least once per week.
- Provide informed consent for participation.
- Fluent in English or equivalent language used in the survey.

Exclusion Criteria

- Non- gamers or individuals outside the specified age range.
- Individuals diagnosed with severe psychiatric disorders that could confound results.
- Individuals who do not understand or read English sufficiently to complete the survey.

Procedures

Recruitment will occur through online announcements on social media platforms (e.g., Facebook, Instagram) and email invitations sent to university students and members of gaming communities. Participants will complete an online survey that includes socio-demographic questions along with standardized scales measuring stress, emotional well-being, and Internet Gaming Disorder. Digital informed consent will be obtained prior to participation, ensuring that participants fully understand the study's goals, their rights regarding confidentiality, and their ability to withdraw from the study at any time without penalty. The online format will facilitate broad participation while ensuring anonymity.

Instruments

To align with the study's objectives, standardized tools will be utilized for data collection:

Stress Overload Scale-Short (SOS-S)

The Stress Overload Scale – Short Version (SOS-S) (Amirkhan, 2012) is a concise, self-report measure designed to assess perceived stress levels in individuals by evaluating external stressors and personal vulnerability. The SOS-S consists of 10 items, each rated on a 5-point Likert scale ranging from 1 (Not at all) to 5 (Extremely). The scale focuses on a single construct, perceived stress overload, providing a holistic measure of the individual's stress experience. The total score is calculated by summing the item responses, with higher scores indicating greater levels of stress overload. While specific cutoff values for categorizing stress levels may vary depending on the study's context, the SOS-S is highly sensitive for distinguishing between low, moderate, and high stress levels. It demonstrates excellent reliability, with a Cronbach's alpha of 0.94, and robust construct validity, making it a reliable tool for assessing stress

among diverse populations, including emerging adults in this study.

The SOS-S has been applied in various cultural contexts, including studies in Malaysia, where it was utilized to assess stress among university students (Ting & Hua, 2021), and in South Korea, where it was employed to examine stress patterns in young professionals (Kim et al., 2020). These studies highlight the adaptability of the SOS-S across diverse populations, including emerging adults in India.

Positive and Negative Affect Schedule (PANAS)

The Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988) is a widely used measure of emotional well-being, focusing on both positive and negative dimensions of affect. The scale consists of 20 items—10 measuring Positive Affect (PA) and 10 measuring Negative Affect (NA). Each item is rated on a 5-point Likert scale ranging from 1 (Very slightly or not at all) to 5 (Extremely), based on the extent to which respondents have experienced specific emotions during a specified time frame (e.g., "past week").

The PANAS provides separate scores for PA and NA, rather than a combined total score. Higher PA scores reflect greater levels of positive emotional well-being, while higher NA scores indicate greater levels of distress or negative emotional states. The scale demonstrates excellent psychometric properties, with Cronbach's alpha values ranging from 0.84 to 0.90 for both PA and NA, indicating strong internal consistency (Watson et al., 1988). Its validity has been established through significant correlations with related constructs, such as anxiety, depression, and life satisfaction, making it highly reliable for research purposes.

The PANAS has been used in various studies across Asian contexts. For instance, in India, it was employed to study emotional regulation and its relationship to academic performance among university students (Kumar et al., 2020). In South Korea, it was utilized in research exploring the psychological effects of stress among adolescents engaging in online gaming (Lee & Park, 2019). These applications highlight the PANAS's cross-cultural relevance and its suitability for the present study on emerging adults in India.

Problematic Online Gaming Questionnaire (POGQ)

The Problematic The Problematic Online Gaming Questionnaire (POGQ) (Demetrovics et al., 2012) is a comprehensive tool designed to assess problematic gaming behaviors based on six distinct dimensions: preoccupation, overuse, immersion, social isolation, interpersonal conflicts, and withdrawal. The scale consists of 18 items, each rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Always), reflecting the frequency of specific gaming-related behaviors.

The POGQ provides a total score by summing responses across all items, with higher scores indicating more severe problematic gaming behavior. Additionally, scores can be analyzed by subscale to understand specific aspects of problematic gaming. The questionnaire demonstrates strong psychometric properties, with Cronbach's alpha values ranging from 0.86 to 0.92, indicating high internal consistency. Its construct validity has been established through correlations with measures of psychological distress, gaming frequency, and social dysfunction, making it a reliable tool for both clinical and non-clinical research contexts (Demetrovics et al., 2012).

The POGQ has been widely applied in diverse cultural settings. For instance, it was used in Hungary to investigate problematic gaming behaviors among adolescents and their association with psychosocial functioning (Demetrovics et al., 2012). In South Korea, it was employed to explore the relationship between problematic gaming and academic performance in university students (Kim et al., 2018). These

studies highlight the POGQ's adaptability across populations and contexts, making it particularly suitable for examining problematic gaming behaviors in emerging adults in India.

Data Analysis

Descriptive statistics will be employed to summarize socio-demographic data as well as categorize participants based on their gaming frequency levels and mental health outcomes. This initial analysis will provide an overview of participant characteristics and general trends within the data set.

Inferential statistics will include Pearson's Correlation Coefficient to examine relationships between stress levels, emotional well-being scores, Problematic Gaming Behaviour and gaming frequency. This analysis will help determine whether significant associations exist among these variables within the sample population.

Additionally Multiple Regression Analysis will be run to see the predictive nature of stress and emotional well-being on Problematic Gaming among emerging adults.

Ethical Considerations

Informed Consent: Digital consent will be obtained before participation. Right to Withdraw: Participants may leave the study at any time without penalty. Confidentiality: Data will be anonymized and securely stored to protect participant privacy. Debriefing: Participants can request feedback on the study's findings after completion. will include a summary of the study's goals and findings, emphasizing participants' rights to discuss their contributions. Ethics Approval: The study protocol will undergo institutional review to ensure compliance with ethical standards.

Expected Outcomes

The anticipated outcomes of this study are significant and multifaceted, aiming to enrich the existing body of knowledge regarding the relationship between gaming frequency and mental health outcomes among emerging adults. One of the primary expected outcomes is to address a notable research gap concerning the nuanced understanding of both the positive and negative effects of gaming. Existing literature often focuses on either the detrimental impacts of excessive gaming or the benefits associated with moderate engagement, but rarely examines how gaming frequency affects stress and emotional well-being simultaneously. By investigating these relationships in a comprehensive manner, this study will provide valuable insights that contribute to a more balanced understanding of gaming behaviors.

This research is expected to expand knowledge about gaming within a specific cultural context—India. The rapid growth of the gaming industry in India has created a unique landscape where cultural factors and technological changes significantly influence mental health outcomes related to gaming. Unlike previous studies conducted primarily in Western contexts, this research will focus specifically on Indian youth, highlighting how cultural norms, societal pressures, and access to technology shape their gaming experiences and psychological well-being. By comparing findings from global studies with those from India, this research will position itself as a crucial contribution to the field, filling gaps related to the psychological impacts of gaming in emerging markets.

In terms of advancing theoretical understanding, this study will deepen the application of established frameworks such as the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) and Self-Determination Theory (Deci & Ryan, 1985) within the context of gaming. The Transactional Model will

help elucidate how gaming can serve as a coping mechanism for stress relief among emerging adults while also demonstrating how excessive reliance on gaming may lead to maladaptive coping strategies that exacerbate stress levels.

Similarly, Self-Determination Theory will provide insights into how gaming fulfils psychological needs for competence, autonomy, and relatedness, thereby influencing emotional well-being. By integrating these theories into the analysis of gaming behaviors, this study aims to contribute to a more nuanced understanding of how different motivations for gaming can lead to varying mental health outcomes.

The findings from this study are also expected to have practical implications for policy and practice. Specifically, the results may inform public health initiatives aimed at promoting healthier gaming habits among emerging adults. For instance, mental health campaigns could be structured to educate young gamers about the importance of moderation and balance in their gaming activities. Additionally, insights from this research could lead to policy changes addressing youth gaming habits in relation to academic success and social well-being.

Educational institutions might adapt their approaches by incorporating discussions about healthy gaming practices into wellness programs or counselling services.

Furthermore, this research has real-world applications that extend beyond academic discourse. The findings could influence mental health interventions by providing counsellors and therapists with strategies tailored for gamers who experience stress or Problematic Gaming Behaviour. For example, counselling techniques could be developed that specifically address the psychological needs fulfilled by moderate gaming while also providing tools for managing excessive play. Game developers may also benefit from the research by implementing features that promote well-being within their games, such as reminders for breaks or social interaction features that encourage positive community engagement.

Lastly, this study is anticipated to influence future research directions significantly. By identifying key relationships between gaming frequency and mental health outcomes among emerging adults in India, it may pave the way for longitudinal studies that track changes in these behaviors over time and their long-term effects on mental health. Additionally, cross-cultural studies may emerge from this research that compares the impact of gaming across different regions or examines specific age groups or subcultures within the gaming community. Such investigations would further enhance our understanding of how cultural contexts shape the psychological implications of gaming.

In conclusion, this study seeks not only to contribute valuable insights into the relationship between gaming frequency and mental health outcomes but also aims to foster healthier practices among emerging adults engaged in digital entertainment. By addressing existing gaps in knowledge and providing actionable recommendations for policy and practice, this research aspires to make a meaningful impact on individuals' lives while contributing to broader societal efforts to promote mental well-being in an increasingly digital world.

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