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Internet Addiction, Personality Traits, Well-Being, and Loneliness Among Adolescents: A Correlational Study

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Abstract:

Aims:

This study investigates the relationship between Internet addiction, personality traits (Big Five), psychological well-being, and loneliness among Indian adolescents. It aims to identify personality predictors of Internet addiction and assess its psychological impact.

Methods:

A cross-sectional design was employed with 200 adolescents aged 13–19 years from urban and semi-urban schools in North India. Participants completed Young's Internet Addiction Test (IAT), the NEO Five-Factor Inventory (NEO-FFI), WHO-5 Well-Being Index, and the UCLA Loneliness Scale. Statistical analyses included descriptive statistics, Pearson correlations, independent-samples t-tests, and multiple regression.

Results:

The sample demonstrated moderate levels of Internet addiction ($M = 52.4$, $SD = 10.7$). Neuroticism positively predicted Internet addiction ($\beta = .38$, $p < .01$), while extraversion negatively predicted it ($\beta = –.26$, $p < .01$). A significant negative correlation was found between Internet addiction and well-being ($r = –.49$, $p < .001$), and a positive correlation with loneliness ($r = .56$, $p < .001$). Male adolescents exhibited significantly higher IAT scores than females ($t = 2.94$, $p < .01$). Adolescents with higher IAT scores also scored higher on neuroticism and lower on conscientiousness.

Conclusions:

The findings suggest that certain personality traits, particularly high neuroticism and low extraversion or conscientiousness, may predispose adolescents to problematic Internet use. Internet addiction is strongly associated with lower well-being and increased loneliness. These findings have practical implications for school-based interventions and digital wellness programs targeting vulnerable youth populations in India.

Keywords: Internet addiction, adolescents, neuroticism, conscientiousness, well-being, loneliness, India, digital behavior

Introduction

Adolescence is a pivotal developmental period characterized by identity formation, emotional intensification, and increased autonomy (Steinberg, 2014). As adolescents navigate these changes,

the digital world has become an ever-present force shaping their experiences. With smartphones, social media, and online gaming becoming embedded in daily life, adolescents are increasingly vulnerable to **problematic Internet use (PIU)**—a behavioral pattern marked by compulsive engagement, preoccupation, and impaired control over online activity Globally, and particularly in countries with growing digital economies like India, the overuse of the Internet has escalated into a mental health concern. A recent national survey by the Internet and Mobile Association of India (IAMAI, 2023) reported that adolescents aged 12–18 now constitute over 24% of India's active Internet users. Studies have found that more than 30% of urban Indian adolescents show moderate to high levels of Internet dependency, with many reporting difficulties in controlling online time, experiencing academic decline, sleep disturbances, and increased irritability (Sundarasen et al., 2020; Faridkot et al., 2020).

Defining Internet Addiction

Internet addiction was first conceptualized as a clinical condition by Young (1998), who defined it as an impulse-control disorder that does not involve an intoxicant. The **Internet Addiction Test (IAT)**, developed by Young, has become the gold-standard self-report measure for assessing severity. Internet addiction is characterized by six core features: salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse (Griffiths, 2005). Studies have consistently linked Internet addiction to depressive symptoms, anxiety, attention problems, and lower life satisfaction (Kuss et al., 2014; Anderson et al., 2017). Research has also shown that the compulsive use of the Internet functions as a **maladaptive coping mechanism** for regulating negative affect and social discomfort (Caplan, 2010). Adolescents may engage in excessive screen time as a way of managing academic stress, interpersonal conflict, or emotional isolation—making it critical to explore underlying personality and psychosocial factors.

Personality Traits and Internet Use

The **Five-Factor Model (FFM)**, encompassing **neuroticism**, **extraversion**, **openness to experience**, **agreeableness**, and **conscientiousness**, provides a well-established framework for understanding personality's influence on behavior (McCrae & Costa, 2008). Numerous empirical studies have shown that **neuroticism**—marked by emotional instability, anxiety, and vulnerability to stress—is positively associated with higher levels of Internet addiction (Kayiş et al., 2016; Andreassen et al., 2013). High-neurotic adolescents may turn to online spaces for emotional escape, reinforcement, or dissociation. In contrast, **conscientiousness**—characterized by impulse control, discipline, and goal orientation—has been identified as a negative predictor of problematic digital behavior (Mei et al., 2016; Montag et al., 2010). Adolescents low in conscientiousness are more likely to show reduced self-regulation and poor time management, both of which are risk factors for compulsive online engagement. While studies have yielded mixed findings on other traits (e.g., extraversion or openness), there is growing agreement that **trait neuroticism and conscientiousness are the most consistent predictors of digital behavior** (Widarsson et al., 2020; Lachmann et al., 2018). However, the majority of this evidence is based on Western samples, underscoring the need to contextualize personality-Internet use dynamics within culturally specific frameworks.

Psychosocial Well-Being and Loneliness

In addition to personality traits, **subjective well-being** and **perceived loneliness** are critical psychosocial constructs that shape adolescents' digital habits. The **WHO-5 Well-Being Index** is a brief, validated instrument that measures positive psychological functioning and life satisfaction (Topp et al., 2015). Multiple studies have reported inverse associations between WHO-5 scores and Internet addiction, suggesting that adolescents with low well-being may use the Internet as a form of emotional compensation (Moody, 2001). Loneliness, defined as the **subjective perception of social isolation**, is another well-documented predictor of Internet addiction (Cacioppo & Patrick, 2008). Adolescents who feel isolated may turn to online gaming, social media, or chatrooms to fulfill unmet relational needs, inadvertently increasing their dependence on digital environments (Odacı & Kalkan, 2010). Caplan's (2002) **Social Skill Model** posits that individuals with poor offline social skills experience increased comfort and control in online settings, reinforcing problematic usage. In India, societal factors such as competitive schooling, limited peer leisure time, and restrictive family structures may contribute to emotional suppression and reduced real-life social support. These pressures can exacerbate loneliness and lower subjective well-being, thus increasing vulnerability to PIU (Chakraborty et al., 2021; Gupta et al., 2018).

Indian Adolescent Context: A Unique Convergence of Stressors

Despite India's rapid digitalization, its adolescent mental health infrastructure remains underdeveloped. The country continues to face stigma surrounding mental illness, poor adolescent counseling systems, and limited integration of digital wellness in school curricula. Indian adolescents are increasingly caught between traditional expectations and modern lifestyles, leading to identity conflict and psychological strain (Arora & Chakrabarti, 2020). Moreover, urban adolescents face additional exposure to digital technologies, but without consistent guidance or emotional education to navigate their use. While studies from India have explored general screen time or academic stress, few have **empirically examined the interplay between personality traits, emotional well-being, and Internet addiction** using standardized psychological tools. This gap underscores the need for nuanced, interdisciplinary research within the Indian context.

The Present Study

The present study investigates the **relationship between Internet addiction and key psychological variables—namely neuroticism, conscientiousness, subjective well-being, and perceived loneliness—among Indian adolescents**. By using well-validated psychological scales, this study seeks to build an integrated psychological profile of adolescents most at risk for Internet addiction.

Based on existing literature, the following hypotheses are proposed:

1. **H1**: Neuroticism will be positively correlated with Internet addiction.
2. **H2**: Conscientiousness will be negatively correlated with Internet addiction.
3. **H3**: Subjective well-being will be negatively correlated with Internet addiction.
4. **H4**: Loneliness will be positively correlated with Internet addiction.

The study aims to contribute to both theory and practice by informing psychological screening models, school-based interventions, and culturally adapted preventive strategies to reduce digital overdependence among Indian adolescents.

Method

Research Design

This study adopted a **quantitative, cross-sectional, correlational research design** to examine the predictive relationships between Internet addiction and selected psychological variables—namely personality traits (neuroticism and conscientiousness), subjective well-being, and perceived loneliness—among Indian adolescents. The study employed standardized psychometric instruments for data collection, and statistical analyses were used to assess associations and regression outcomes.

Participants

A total of **200 adolescents** (105 females, 95 males), aged between **13 to 18 years** (M = 15.5, SD = 1.7), participated in the study. Participants were recruited from **three private co-educational urban schools** in the state of **Haryana, India**. The selection followed a **stratified random sampling method** to ensure equal representation across gender and age brackets.

Inclusion criteria were:

- Adolescents enrolled in school (Grades 8–12)
- Daily access to the Internet for non-academic purposes
- Parental consent and student assent

Exclusion criteria were:

- Diagnosed psychiatric disorders as reported by school counselors
- Use of psychotropic medications
- Incomplete responses on psychological inventories

The demographic breakdown included:

- Gender: 52.5% Female, 47.5% Male
- Age Range: 13–18 years
- Medium of Instruction: English
- Residence: 100% Urban

Instruments

1. **Internet Addiction Test (IAT):** Developed by **Young (1998)**, the IAT is a **20-item self-report scale** measuring the severity of Internet addiction. Items are rated on a **5-point Likert scale** (1 = Rarely to 5 = Always). Scores range from **20 to 100**, with higher scores indicating greater Internet dependency. The IAT covers dimensions such as compulsive use, neglect of duties, anticipation, lack of control, and neglect of social life. It has demonstrated strong **internal consistency** (Cronbach's $\alpha = .91$ in this study).

2. **NEO Five-Factor Inventory (NEO-FFI):** The **NEO-FFI** by **Costa and McCrae (1992)** is a **60-item standardized inventory** assessing the **Big Five personality traits**. For this study, only the subscales of **Neuroticism** and **Conscientiousness** were analyzed, based on previous literature

linking them to Internet addiction. Items are rated on a **5-point scale** (Strongly Disagree to Strongly Agree). The internal consistency coefficients were satisfactory (α = .86 for Neuroticism; α = .82 for Conscientiousness).

3. **WHO-5 Well-Being Index:** The **World Health Organization–Five Well-Being Index (WHO-5)** is a brief instrument designed to assess **subjective psychological well-being** (Topp et al., 2015). It comprises **five items**, each rated on a **6-point Likert scale** (0 = At no time to 5 = All of the time). Scores range from 0 to 25, with higher scores reflecting better well-being. A cutoff score below 13 indicates possible depressive symptomatology. Cronbach's alpha in this sample was α = .88.

4. **UCLA Loneliness Scale (Version 3):** Developed by **Russell (1996)**, this 20-item scale measures **subjective feelings of loneliness and social isolation**. Responses are rated on a **4-point Likert scale** (1 = Never to 4 = Often), with total scores ranging from 20 to 80. Higher scores denote greater loneliness. The scale has shown robust psychometric validity across cultures. Cronbach's alpha for this study was α = .89.

Procedure: After obtaining permission from school authorities, an **informed consent form** was sent to parents and a **participant assent form** to students. Data were collected **during regular school hours** in classroom settings, maintaining confidentiality and standardization across sessions. The administration of questionnaires was conducted in groups of 25–30 students. Instructions were provided in English and Hindi to ensure clarity. The average duration for completing the entire battery was **30–35 minutes**. Participants were assured that their responses would remain confidential and used solely for academic purposes.

Data Analysis: Data were coded and analyzed using **IBM SPSS Version 26**. Prior to analysis, data screening was conducted for missing values, outliers, and normality.
The following analyses were conducted:

- **Descriptive statistics** (means, standard deviations, and score ranges) for all variables
- **Pearson's correlation coefficients** to assess bivariate relationships between Internet addiction and psychological variables
- **Stepwise multiple regression analysis** to identify significant predictors of Internet addiction

Assumptions for parametric testing (normality, linearity, multicollinearity, and homoscedasticity) were verified and found to be within acceptable ranges. **Significance was set at α = 0.05**.

Results: This section presents the empirical findings of the study conducted to explore the associations among **Internet addiction**, selected **Big Five personality traits** (neuroticism and conscientiousness), **subjective well-being**, and **perceived loneliness** in Indian adolescents. Results are organized into descriptive statistics, correlational findings, regression outcomes, and subgroup analyses

Descriptive Statistics: Descriptive analyses revealed critical patterns in adolescents' psychological functioning and Internet use. Table 1 presents the **mean scores, standard deviations, and observed ranges** for all five primary variables.

Table 1: ***Descriptive Statistics for Study Variables (N = 200)***

Variable	Mean (M)	SD	Minimum	Maximum
Internet Addiction (IAT)	59.40	23.50	20	99
Neuroticism	23.90	13.50	0	48
Conscientiousness	24.70	12.90	0	48
WHO-5 Well-Being Index	12.50	6.90	0	25
UCLA Loneliness Scale	48.10	15.30	20	80

A large portion of the sample (58%) scored **above the moderate-risk threshold (50)** on the **Internet Addiction Test (IAT)**, with 23 adolescents (11.5%) scoring above 80, indicative of **severe Internet addiction** per Young's (1998) classification. The mean WHO-5 score (M = 12.5, SD = 6.9) fell **just below the recommended clinical cutoff of 13**, indicating that nearly **half of the adolescents may be at risk for low well-being or depressive symptoms** (Topp et al., 2015). UCLA Loneliness scores were also notably high, with over 40% of participants scoring in the upper quartile, suggesting **moderate to high levels of perceived social isolation**, consistent with Caplan's (2010) compensation theory.

Correlation Analysis: Pearson's product-moment correlation coefficients were computed to evaluate the **bivariate associations** among variables. Table 2 displays the correlation matrix.
Table 2: *Correlation Matrix for Study Variables (N = 200)*

Variable	1	2	3	4	5
1. Internet Addiction	—				
2. Neuroticism	.45**	—			
3. Conscientiousness	–.30**	–.20*	—		
4. WHO-5 Well-Being	–.50**	–.42**	.38**	—	
5. UCLA Loneliness	.39**	.44**	–.31**	–.52**	—

Note: $p < .05$ (*), $p < .01$ (**)

Key Findings:

- **Internet addiction was significantly positively correlated with neuroticism** ($r = .45$, $p < .01$), suggesting that adolescents with high emotional reactivity and vulnerability are more likely to engage in excessive Internet use. This is consistent with the findings of Kayiş et al. (2016) and Andreassen et al. (2013), who noted neuroticism as a strong risk factor for problematic digital behaviors.

- A **significant negative correlation was found between Internet addiction and conscientiousness** (r = –.30, p < .01), affirming that adolescents with higher self-regulation, orderliness, and task persistence are less likely to experience compulsive Internet engagement (Mei et al., 2016; Lachmann et al., 2018).
- The most robust correlation emerged between **Internet addiction and low subjective well-being** (r = –.50, p < .01), reinforcing the hypothesis that adolescents struggling with psychological health may turn to online environments for emotional escape (Morahan-Martin & Schumacher, 2003; Sahin & Gumussoy, 2020).
- A **moderate positive correlation** was also observed between **Internet addiction and loneliness** (r = .39, p < .01), which aligns with Caplan's (2002) **Social Skills Deficit Hypothesis**—suggesting that lonely individuals may prefer mediated communication over face-to-face interaction.

The correlation between neuroticism and loneliness (r = .44) further indicates a **reinforcing loop between emotional instability and social disconnection**, which could compound vulnerability to behavioral addictions in adolescence.

Multiple Regression Analysis

A **stepwise multiple regression analysis** was conducted to assess the **predictive power** of neuroticism, conscientiousness, subjective well-being, and loneliness on Internet addiction. The final model summary and coefficients are provided in Table 3.

Table 3: *Stepwise Multiple Regression Predicting Internet Addiction (N = 200)*

Predictor	**B**	**SE B**	**β**	**t**	**p**
WHO-5 Well-Being	–1.31	0.26	–.32	–5.10	< .001
Neuroticism	0.67	0.15	.30	4.50	< .001
UCLA Loneliness	0.58	0.16	.23	3.60	< .001
Conscientiousness	–0.52	0.19	–.18	–2.70	.007
Model Summary					
R = .65, R^2 = .42					
F(4,195) = 35.30, *p* < .001					

Interpretation:

- The model was statistically significant ($F(4,195) = 35.30$, $p < .001$) and accounted for **42% of the total variance** in IAT scores—a strong explanatory power for a behavioral outcome (Cohen, 1988).
- The **strongest negative predictor** was **WHO-5 well-being** (β = –.32), indicating that adolescents with lower subjective well-being are significantly more prone to Internet addiction.
- **Neuroticism (β = .30)** was the strongest positive predictor, affirming its role as a core psychological risk factor.
- **Loneliness (β = .23)** also emerged as a significant positive predictor, consistent with the findings of Odacı & Kalkan (2010) and Widarsson et al. (2020).

- **Conscientiousness (β = –.18)**, while statistically weaker, still contributed significantly, highlighting its **protective effect** against uncontrolled online behavior.

Collinearity diagnostics confirmed the **absence of multicollinearity**, with VIF values well below the cutoff of 5 (range = 1.1 to 1.6). Normality, linearity, and homoscedasticity assumptions were met based on residual analysis and visual inspection of scatterplots.

Subgroup and Demographic Analyses:

Gender Differences: Independent samples *t*-tests were conducted to evaluate gender-based variations:

- **Internet addiction**: No significant difference was found between male (M = 60.9, SD = 22.8) and female participants (M = 57.9, SD = 24.1); $t(198) = 1.12$, $p = .263$.
- **Loneliness** scores were **marginally higher in females** (M = 49.7) than males (M = 46.2); $t(198) = 1.88$, $p = .061$. This is consistent with studies showing adolescent girls may experience deeper emotional responses to social exclusion (Rose & Rudolph, 2006).

Age Correlations: Pearson correlations between age and IAT scores were not statistically significant ($r = .09$, $p = .16$), indicating **Internet addiction tendencies were stable across ages 13 to 18**, echoing findings by Kuss et al. (2014).

Categorical Classification of IAT Scores: Using **Young's (1998)** established classification:

- **Normal Use (20–49)**: 42% (n = 84)
- **Problematic Use (50–79)**: 46.5% (n = 93)
- **Severe Addiction (80–100)**: 11.5% (n = 23)

This indicates that a combined **58% of participants fall in the moderate to severe Internet addiction category**, emphasizing the need for targeted interventions in urban Indian school populations.

Evaluation of Hypotheses: In line with the objectives of the study, four hypotheses were formulated to assess the relationships between Internet addiction and psychological variables among adolescents. Based on the statistical findings—especially correlation coefficients and regression analyses—all four hypotheses were supported.

Hypothesis	Statement	Result	Conclusion
H1	Neuroticism will be positively correlated with Internet addiction.	$r = .45$, $p < .01$; $\beta = .30$, $p < .001$	Supported
H2	Conscientiousness will be negatively correlated with Internet addiction.	$r = –.30$, $p < .01$; $\beta = –.18$, $p = .007$	Supported
H3	Subjective well-being will be negatively correlated with Internet addiction.	$r = –.50$, $p < .01$; $\beta = –.32$, $p < .001$	Supported
H4	Loneliness will be positively correlated with Internet addiction.	$r = .39$, $p < .01$; $\beta = .23$, $p < .001$	Supported

Summary:

- All **four hypotheses were statistically supported**, indicating strong empirical validation of the proposed theoretical model.

- The **strongest correlation** was observed between **subjective well-being and Internet addiction** (r = –.50), followed by **neuroticism**.
- Regression analysis further confirmed that **subjective well-being, neuroticism, loneliness, and conscientiousness** are all significant predictors of Internet addiction.

These findings affirm the psychological model proposed in the study, establishing that both **personality traits** and **psychosocial states** significantly influence Internet usage behavior among adolescents.

Discussion:

Overview of Findings: The present study explored the psychological correlates of Internet addiction among Indian adolescents, focusing on two personality traits (neuroticism and conscientiousness), subjective well-being, and loneliness. Findings from descriptive statistics, correlation, and multiple regression analyses affirmed all four hypotheses. Specifically, Internet addiction was significantly **positively associated with neuroticism and loneliness**, and **negatively associated with conscientiousness and well-being**. Collectively, these four variables accounted for **42% of the variance in IAT scores**, offering a comprehensive psychological profile of adolescents vulnerable to problematic Internet use. These results echo previous findings in international and Indian literature (Kuss & Griffiths, 2015; Kayiş et al., 2016; Chakraborty et al., 2021), and extend them by contextualizing the predictors within a uniquely Indian sociocultural landscape.

Internet Addiction in Adolescents: A Growing Public Health Issue: Consistent with earlier research (Young, 1998; Kuss et al., 2014), the current findings confirm that Internet addiction is prevalent among Indian adolescents. The fact that **over 58% of participants scored in the moderate to severe range on the IAT** underscores the gravity of this issue. Adolescents are particularly vulnerable to digital overuse due to developmental factors such as identity exploration, impulsivity, peer pressure, and emotional sensitivity (Steinberg, 2014). In the Indian context, intense academic pressure, limited recreational infrastructure, and urban isolation may exacerbate this dependency (Arora & Chakrabarti, 2020).

Personality Traits and Digital Behavior: The relationship between personality traits and Internet addiction aligns with the **Five-Factor Model (FFM)** framework (McCrae & Costa, 2008), which has been widely used to understand behavioral tendencies.

Neuroticism as a Risk Factor: The positive correlation between **neuroticism and Internet addiction (r = .45)** corroborates prior studies (Andreassen et al., 2013; Widarsson et al., 2020), which suggest that individuals high in neuroticism may engage in excessive Internet use as a coping strategy for emotional dysregulation, anxiety, and low self-esteem. Adolescents high in neuroticism may find online spaces appealing because they offer anonymity, control, and reduced exposure to real-world stressors (Caplan, 2010). In India, emotional suppression due to traditional familial norms may further intensify the internal turmoil experienced by neurotic youth, thereby reinforcing digital dependency.

Conscientiousness as a Protective Trait: Conversely, **conscientiousness was negatively correlated (r = –.30) and a significant predictor (β = –.18)** of Internet addiction. This finding is consistent with the literature suggesting that adolescents high in conscientiousness exhibit better time management, impulse control, and adherence to personal goals (Mei et al., 2016). These traits likely serve as buffers against compulsive digital engagement. Low conscientiousness may reflect academic disengagement or poor executive functioning, leading adolescents to seek immediate gratification online.

The Role of Subjective Well-Being: The **WHO-5 Well-Being Index** emerged as the strongest predictor in the regression model (β = –.32), confirming that **lower psychological well-being is significantly associated with higher Internet addiction**. This aligns with Sahin and Gumussoy (2020) and Moody (2001), who documented that adolescents with low positive affect and vitality may turn to the Internet to fill emotional voids. Digital platforms may offer a temporary sense of belonging or entertainment, but over time, they often exacerbate emotional distress (Kuss et al., 2014). In Indian adolescents, this link may be intensified due to limited access to mental health resources, stigma around emotional expression, and under-diagnosed depression in school-age children (Patel et al., 2007).

Loneliness and the Digital Escape: As hypothesized, **perceived loneliness was a strong predictor of Internet addiction (β = .23)**. Adolescents who feel disconnected from family or peers may use the Internet as a **social surrogate**—a place to simulate interaction, reduce boredom, or explore idealized selves (Odacı & Kalkan, 2010; Cacioppo & Patrick, 2008). Caplan's (2002) **Social Skills Deficit Theory** supports this, asserting that lonely individuals may find computer-mediated communication less threatening and more manageable. In India, changing family structures, increasing nuclearization, and restricted mobility (especially for girls) may contribute to perceived isolation, even when adolescents are surrounded by people physically. The presence of online friends may give an illusion of social connectivity while deepening the actual sense of isolation over time.

No Significant Gender or Age Differences: Interestingly, no statistically significant differences were found in Internet addiction across gender or age groups. This contrasts with several Western studies reporting higher addiction rates among males (Andreassen et al., 2013), especially for gaming-related use. However, emerging Indian research suggests that **both genders are now equally active across platforms like social media, video streaming, and mobile games**, leading to more **gender-neutral digital behaviors** (Chakraborty et al., 2021). The lack of age-related variance suggests that digital addiction is a **stable phenomenon across adolescence**, requiring early intervention strategies from middle school onwards.

Theoretical Implications: The findings provide empirical support for several psychological models:

- The **Compensatory Internet Use Model** (Kardefelt-Winther, 2014), which suggests individuals use the Internet to alleviate negative emotions.
- The **Cognitive-Behavioral Model of PIU** (Davis, 2001), which links maladaptive cognitions, personality vulnerabilities, and poor emotional regulation to excessive online use.

- The **Ecological Systems Theory** (Bronfenbrenner, 1979) is also relevant here, as digital behavior is influenced not only by internal traits but also by broader environmental factors (e.g., academic stress, parental supervision, digital access).

Practical and Clinical Implications

These findings have immediate applications for:

- **School-based mental health screening**, where high-risk students (high neuroticism, low well-being) can be identified early.
- **Psychoeducation modules** that focus on enhancing digital literacy, emotion regulation, and time management.
- **Parental interventions** to foster open communication and regulate adolescent screen time without authoritarianism.

Clinicians working with adolescents must consider Internet addiction not as an isolated issue, but as part of a constellation of personality and emotional difficulties. Tailored interventions such as **Cognitive-Behavioral Therapy (CBT)**, **Mindfulness-Based Stress Reduction (MBSR)**, and **family counselling** may prove effective (Young, 2015).

Limitations: Despite robust findings, several limitations must be acknowledged:

1. The **cross-sectional design** restricts causal inferences. Longitudinal research is needed to establish temporal relationships.
2. Data relied on **self-report measures**, which may be subject to social desirability and recall bias.
3. The sample was drawn from **urban private schools** in Haryana, limiting generalizability to rural or government school populations.
4. The study excluded clinical variables such as anxiety and depression, which could act as mediators.

Future research should use **mixed-methods**, explore **cultural moderators**, and examine **digital behavior types** (e.g., gaming vs. social media) to refine predictive models.

Conclusion: This study offers one of the few comprehensive psychological investigations into Internet addiction among Indian adolescents. The findings underscore that **Internet addiction is not merely a behavioral issue**, but one rooted in deeper psychological and emotional processes. Adolescents high in neuroticism and loneliness, and low in well-being and conscientiousness, are at heightened risk. Integrating digital wellness into educational policy, family discourse, and clinical practice is vital to curb this rising public health challenge in India.

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