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ASSOCIATION OF PSYCHOPATHIC PERSONALITY TRAITS WITH INTERNET ADDICTION AMONG ADOLESCENTS AND YOUTH

Susmita Neogi Professor, Department of Home Science University of Calcutta 20 b, Judges Court Road, Kolkata – 700027

Papri Mondal M.Sc. Student, Department of Home Science University of Calcutta 20 b, Judges Court Road, Kolkata – 700027

ABSTRACT

The internet is a tool that has socioeconomic, cultural and political dimensions in information society. The internet has made life a lot easier by making information more accessible to all and creating connections with different people around the world. However, it has also led a lot of people to spend too much time on the internet and sometimes it becomes the centre of their lives and they may become addicted. Internet addiction means pathological compulsive internet usage and it is a type of impulse control disorder similar to other addictions. The present study examined the relationship between psychopathic personality traits and internet addiction among adolescents and youth. A cross-sectional correlational design was used with a sample of 98 participants aged 15 – 20 years from Kolkata, India. Data were collected using the Psychopathic Personality Traits Scale–Revised (PPTS-R) and the Internet Addiction Test (IAT). One-way ANOVA, correlation and regression analysis was done and the results revealed a statistically significant moderate positive correlation between psychopathic personality traits and internet addiction ($r = .410$, $p < .001$). The findings suggest that individuals with higher psychopathic traits tend to report greater levels of problematic internet use. The study highlights the importance of considering personality traits when addressing digital addiction among adolescents and youth.

INTRODUCTION

In our country the internet has become an integral part of daily life as it is all over the world. The Internet has made life a lot easier by making information more accessible to all and creating connections with different people around the world. Demir (2006) believes computer and internet usage has the potential to develop and change the existing social structure. The internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link billions of devices worldwide. It began in California in 1969 and began connecting to networks on other continents in 1988. It is a network of networks ("internet" is short for "internetworking") that consists of millions of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries an extensive range of information resources and services, such as mobile apps including social media apps, the inter-linked hypertext documents and applications of the World Wide Web (WWW), electronic mail, multiplayer online games, telephony, and peer-to-peer networks for file sharing.

Internet has now become an essential part of our everyday life, and its use is more among young people. There is no doubt regarding the merits of this tool, but the negative impacts of its use, especially the over or misuse, cannot be overlooked. Psychologists, such as Greenfield (2000), have tried to make us aware about its negative impact on our physical and mental health. The most commonly reported problem is internet addiction (Murali & George, 2007; Shapira, Lessig, Goldsmith et al., 2003; Young, 1998). The term "Internet addiction" implying pathological compulsive internet usage was proposed by Ivan Goldberg (1995). This term has been used to describe problematic, excessive, or mal-adaptive use of the internet. Internet addiction is a type of impulse control disorder and the symptoms as described by Young (1996) include excessive mental effort on internet, spending hours even though being intended to spend couple of minutes, continuously waiting for the next connection time, feeling more comfortable contacting people over internet than talking face-to-face, feeling a continuous desire for checking e-mails whether there is something new, decrease in meals, decrease in work efficiency, continuously feeling sleepless and tired because of staying connected to the internet until late, failure in attempts to decrease the internet usage, etc. In extreme cases an individual may experience withdrawal syndrome due to decrease in the internet usage, tell lies to family members, therapist or others to be able to stay connected to the internet, affection changes when remaining connected to the internet. Further, Young highlighted that adolescents and young adults are particularly vulnerable due to developmental factors such as impulsivity and emotional instability. The latest edition of the Diagnostic and Statistical Manual of Mental Disorders actually includes it as a disorder that needs further study and research.

Different research studies suggest that Internet addiction is becoming more prevalent among young people. An addiction to the Internet is manifested in both physical and emotional symptoms. Physical Symptoms are backache, headache, sleep disturbance, weight gain or loss etc. Emotional Symptoms typical of online addicts include feeling of guilt, anxiety, depression, agitation, isolation, unable to keep schedules etc. These symptoms may have short-term (unfinished tasks, forgotten responsibilities and weight gain) or long-term effects (backache, neck pain, carpal tunnel syndrome, vision problems, financial problems and even bankruptcy) or both.

There is a growing body of literature indicating an association of internet addiction with psychopathic personality. Psychopathy is considered a subclinical or clinical personality pattern that falls within the broader spectrum of antisocial personality tendencies. Individuals with high psychopathic traits often show persistent patterns of violating social norms, disregarding the rights of others, and engaging in risky or harmful behaviours without experiencing guilt or remorse. The traits include a constellation of maladaptive personality characteristics marked by lack of empathy, superficial charm, manipulativeness, impulsivity, shallow emotional responses, and antisocial behaviour. Historically, the concept of psychopathy was first systematically described by Hervey Cleckley (1941) in his book "The Mask of Sanity", where he outlined key features such as emotional detachment, egocentricity, superficial charm, and absence of anxiety. Theodore Millon (1998) described psychopathic personality traits as involving lack of empathy, disregard for others' rights, impulsivity, deceitfulness, and irresponsible behaviour, often linked to antisocial personality patterns.

Developmental psychologists believe that psychopathic

traits may emerge during adolescence and young adulthood. This period is marked by identity formation, emotional instability, and increased sensitivity to peer influence. Adolescents with higher levels of impulsivity and low empathy may be more likely to engage in deviant or problematic behaviours, including excessive internet use, cyber bullying, and online risk-taking activities. Neurobiological theories postulate that psychopathy is associated with dysfunction in brain regions responsible for emotional processing and behavioural regulation, particularly the amygdala and prefrontal cortex. These abnormalities may contribute to reduced fear conditioning, poor decision-making, and lack of moral reasoning. Psychopathic traits are also strongly associated with the Dark Triad personality construct, which includes psychopathy, narcissism, and Machiavellianism. Individuals high in dark personality traits tend to engage in manipulative interpersonal strategies, show reduced empathy, and demonstrate exploitative tendencies in both offline and online environments.

Ko et al. (2006) report that personality traits such as impulsivity, hostility, and low self-esteem significantly predict internet addiction among adolescents. The results of this study suggest that adolescents with poor emotional regulation may use the internet as a coping mechanism. The findings of Buckels, Trapnell, and Paulhus (2014) reveal that individuals high in psychopathy and sadism report greater enjoyment of causing distress to others online. The study on adolescents by Zhang et al (2021) highlights psychopathic traits are associated with antisocial online engagement and individuals with reduced emotional sensitivity may engage more frequently in compulsive online behaviour.

Some of the studies carried out in India also report similar findings. For instance, Verma, Sharma, and Larson (2020) have found impulsivity and poor behavioural control significantly predicted excessive smartphone use or smartphone addiction among Indian adolescents. Kumar et al. (2021) have examined problematic social media use among Indian young adults and have found that personality traits related to emotional instability and aggression are significantly associated with addiction-like symptoms.

Against this backdrop, the present study has been undertaken to determine the nature of association between psychopathic personality and internet addiction among adolescents and youth of Kolkata. So the study attempts to address the following specific objectives:

1. To examine the influence of level of psychopathic personality on internet addiction.
2. To find out the relationship between psychopathic personality traits and internet addiction.
3. To examine the nature of association between psychopathic personality and internet addiction.

Methodology

Hypotheses:

H_{a1}: There is a significant influence of level of psychopathic personality on internet addiction.

H_{a2}: There is a significant association between psychopathic personality traits and internet addiction.

H_{a3}: Psychopathic personality traits can significantly predict internet addiction behaviours.

Sample: Purposive sampling technique was used to select 98 adolescents (15 to 20 years) participants for the present study. The selection criteria included - Sex: Male and Female, Socio-economic Status: Middle Class (₹15,000 to ₹25,000 per month), Locality/Area: Urban and rural areas of West Bengal, Marital Status: Unmarried, Educational status: School and College students with access to internet, Health: No diagnosed serious physical or mental illness.

Tools Used: An Information Blank for collecting personal information like name, age, sex, religion, mother tongue, education, family history, residence, use of internet (how much time spent on the internet, which website is used the most, purpose of using, etc.) and two standardized questionnaires - Psychopathic Personality Traits Scale – Revised (PPTS-R) and Internet Addiction Test (IAT) were administered. The PPTS-R, developed by Boduszek, Debowska, and McDermott (2022), is a 28-item self-report instrument designed to assess subclinical psychopathic traits in both forensic and non-forensic populations. The revised version is based on the Psychopathic Personality Traits Model (PPTM) and evaluates psychopathy across four dimensions - Affective Responsiveness (lack of empathy, emotional detachment), Cognitive Responsiveness (lack of guilt or remorse), Interpersonal Manipulation (deceptiveness, egocentricity) and Egocentricity (self-centeredness, entitlement). Each item is rated on a 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree". The PPTS-R has demonstrated strong construct validity and internal reliability, making it suitable for adolescent samples in general populations. Internet Addiction Test developed by Dr. Kimbley Young in 1996 is a reliable and valid measure of addictive use of the internet. It consists of 20 items that measure mild (one is an average online user, may surf the web a bit too long at time, but have control over one's usage), moderate (one is experiencing occasional or frequent problems because of the internet, should consider their full impact on life) and severe (one's internet usage is causing significant problems in life and addresses the problem directly caused by one's internet usage) levels of Internet Addiction. The items are rated in a five point Likert Scale. Internal consistency (α= 0.88), test-retest reliability (r= 0.88) and biserial r (r= 0.72) indicate acceptable reliability as well as content and convergent validity.

Procedure: The adolescents whose ages were between 15-20 years were selected according to the sampling technique and the inclusion criteria mentioned above. Rapport was established with the participants before data collection through the Information blank and the above mentioned standardized questionnaires. The investigator checked whether the respondents were relaxed and willing to participate. Then proper instructions were provided for filling up the questionnaire. No time limit was given to the respondents while answering the questionnaire. However, it was found that most of the respondents completed the questionnaire within scheduled time. The respondents were asked to answer the questions freely and frankly. When the respondent completed the forms it was checked whether they had responded for all the statements. After collection of data, scoring was done for each test and the scores were subjected to statistical analysis. Suitable descriptive and inferential statistical techniques (Pearson product moment correlation and One-way ANOVA and Regression analysis) were applied.

RESULTS AND DISCUSSION

The empirical findings derived from the data collected through structured and standardized questionnaires have explored the nature of association between psychopathic tendencies and internet addiction among adolescents and youth. The dataset comprises responses related to internet usage behavior and psychological disposition with psychopathic traits of the participants across varying socio-demographic backgrounds.

Table 1: Distribution of the Sample According to Age

AGE	Frequency	Percentage	Valid Percentage	Cumulative Percentage
15 to 16	40	40.8	40.8	40.8
17 to 18	34	34.7	34.7	75.5
19 to 20	24	24.5	24.5	100.0
Total	98	100.0	100.0	

The majority of the sample belongs to the age group of 15 to 16 years (40.8%) suggesting that the participants are mostly adolescents.

Table 2: Distribution of the sample according to Gender				
Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	40	40.8	40.8	40.8
Female	58	59.2	59.2	100.0
Total	98	100.0	100.0	

The representation of females (59.2%) is more than males (40.8%) in the sample.

Table 3: Cross-tabulation representing Use of internet according to Gender				
GENDER	USE of INTERNET			Total
	Rarely	Regularly	Frequently	
Male	1	38	1	40
Female	0	55	3	58
Total	1	93	4	98

Table 3 shows that 95% boys as well as girls use the internet regularly.

Table 4: Distribution of Responses According to Some Statements Related to Internet Usage Behaviour

STATEMENTS	Strongly Disagree	Disagree to large extent	Disagree to some extent	Agree to some extent	Agree to large extent	Strongly Agree
Fear that life without internet be boring	22	18	22	9	14	13
Lose sleep for being online	32	20	17	10	8	11
Difficulty in under-standing feelings of other people	16	23	26	19	14	-
Total	70 (54%)	61 (62%)	65 (39%)	38 (19%)	36 (28%)	24 (24%)

The above table reveals the frequency distribution of the responses to some statements of internet usage behaviour that have been asked in the Information Blank. The frequencies and percentages of total indicate that majority of the participants disagree with the statements. However, for the statement – 'Difficulty in understanding feelings of other people', the number of respondents in 'Strongly Disagree' category is relatively less than that for the other two statements. On the other hand, the number of respondents in 'Agree to some extent' category is relatively more than that for the other two statements. This trend suggests lack of empathy is prevalent among a good number of participants.

Table 5: Descriptive Statistics of Psychopathic Traits (PPT) and Internet Addiction (INT-ADD) According to Use of Internet

USE OF INTERNET		PPT	INT-ADD
Rarely	Mean	20.000	6.000
	N	1	1
	Std. Deviation		
Regularly	Mean	48.957	40.688
	N	93	93
	Std. Deviation	16.1622	16.3959
Frequently	Mean	54.500	35.750
	N	4	4
	Std. Deviation	23.2164	11.1467
Total	Mean	48.888	40.133
	N	98	98
	Std. Deviation	16.5628	16.4897

The above table shows that the majority of participants (n = 93) are regular internet users, with a mean (Psychopathic Personality) of 48.96 and 40.69 in Internet Addiction. The mean of psychopathic trait score (M = 54.50) of a small group of frequent users (n = 4) is higher but internet addiction score (M = 35.75) is lower. Only one participant reported no use of the internet for work, making this category statistically uninformative. The lower mean score in internet addiction for frequent internet users is probably due to the small sample size (n = 4). However, it may also suggest a threshold effect, presence of certain psychopathic tendencies (impulsivity, emotional coldness) exert a strong influence on behaviour regardless of further intensification.

Table 6: Summary Table of One-way ANOVA Including Psychopathic Personality Level as I.V. and Internet Addiction as D.V.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4963.503	2	2481.751	11.011**	.000
Within Groups	21411.773	95	225.387		
Total	26375.276	97			

The statistically significant F-ratio implies that the level of psychopathic personality traits have strong influence on internet addiction.

Table 7: Correlation Between Psychopathic Personality Traits and Internet Addiction

Pearson Correlation Matrix						
	AFFECTIVE_ RESPONSIVENESS	COGNITIVE_ RESPONSIVENESS	INTERPERSONAL_ MANIPULATION	EGOCENTRICITY	PPTS_ TOTAL	INT__ADD __SCORE
AFFECTIVE_ RESPONSIVENESS	1.000					
COGNITIVE_ RESPONSIVENESS	0.558	1.000				
INTERPERSONAL_ MANIPULATION	0.503	0.396	1.000			
EGOCENTRICITY	0.540	0.448	0.493	1.000		
PPTS_TOTAL	0.844	0.721	0.762	0.793	1.000	
INT__ADD__SCORE	0.309**	0.281**	0.436**	0.404**	0.444**	1.000

Table 7 indicates a moderate positive correlation between the two variables, r = .444, p < .001. This correlation is statistically significant, suggesting that higher levels of psychopathic personality traits are moderately associated with higher levels of internet addiction. With a sample size of 98, this finding reflects a reliable relationship, though not a strong one. It implies that individuals who exhibit more psychopathic traits tend to report higher tendencies toward internet addiction. The relationships among four dimensions of psychopathic personality traits — Affective Responsiveness, Cognitive Responsiveness, Interpersonal Manipulation, and Egocentricity — and their association with internet addiction show that all the four psychopathic components are significantly positively correlated with internet addiction, suggesting that increases in these traits are associated with higher levels of internet addiction. Among these dimensions, Interpersonal Manipulation shows the strongest correlation with internet addiction (r = .436, p < .001), indicating that individuals who are prone to exploit or deceive others may also be more susceptible to maladaptive patterns of online engagement. This is consistent with previous findings by Buckels, Trapnell, and Paulhus (2014) who has investigated the relationship between dark personality traits and online trolling behaviour. Individuals high in psychopathy and

sadism have been found to experience greater enjoyment of causing distress to others online, highlighting that psychopathic traits are associated with antisocial online engagement.

Egocentricity also shows a moderate yet highly significant correlation with internet addiction ($r = .404$, $p < .001$), suggesting that self-centered individuals, who often prioritize their own needs and desires over those of others, may be more inclined to develop problematic internet use patterns. This aligns with the theoretical framework put forth by Hussain and Griffiths (2018) that psychopathy is positively correlated with problematic gaming behaviours due to sensation-seeking tendencies among young adults. The emotional and cognitive empathy deficits represented by Affective Responsiveness ($r = .309$, $p < .01$) and Cognitive Responsiveness ($r = .281$, $p < .01$) are also significantly related to internet addiction, although their associations are comparatively weaker. These findings suggest that individuals who struggle to emotionally engage with or cognitively understand others may also seek solace or stimulation through the internet. The individuals with reduced emotional sensitivity may engage more frequently in compulsive online behaviour (Zhang et al. (2021).

Table 8: Summary Table of Regression Analysis Including Psychopathic Personality Traits as IVs and Internet Addiction Behaviour as DV.

Dependent Variable	INT__ADD__SCORE
N	98
Multiple R	0.531
Squared Multiple R	0.282
Adjusted Squared Multiple R	0.243
Standard Error of Estimate	14.342

Regression Coefficients B = (X'X)-1X'Y						
Effect	Coefficient	Standard Error	Std. Coefficient	Tolerance	T	p-Value
CONSTANT	16.593	5.122	0.000	.	3.239	0.002
PPTS_SCORE	-1.088	0.465	-1.093	0.036	-2.337	0.022
AFFECTIVE RESPONSIVENESS	1.091	0.580	0.377	0.194	1.882	0.063
COGNITIVE RESPONSIVENESS	1.296	0.624	0.333	0.303	2.076	0.041
INTERPERSONAL MANIPULATION	2.165	0.615	0.641	0.235	3.522**	0.001
EGOCENTRICITY	1.671	0.540	0.598	0.209	3.096**	0.003

The model accounted for approximately 24.3% of the variance in internet addiction scores ($R^2 = .282$, Adjusted $R^2 = .243$), suggesting that differences in psychopathic trait levels explain a meaningful portion of the variability in internet addiction. Participants with higher levels of psychopathic traits reported significantly different levels of internet addiction compared to those with lower trait levels. These findings suggest that higher psychopathic tendencies, particularly manipulative behaviour and self-centeredness, are associated with increased internet addiction. Emotional and cognitive components also contribute, but to a lesser degree.

The central finding of the study—a significant positive correlation between PPTS SCORE and INT-ADD SCORE provides direct empirical support for the hypothesis that individuals with elevated psychopathic traits are more likely to engage in problematic internet use. This confirms the findings of Ko et al. (2006) who have reported that personality traits such as impulsivity, hostility, and low self-esteem significantly predict internet addiction. Their results suggest that adolescents with poor emotional regulation may use the internet as a coping mechanism.

Additionally, regression and ANOVA analysis of the present study reveals that psychopathic traits significantly explain nearly 24% of the variance in internet addiction scores. This is not only statistically significant but also psychologically meaningful, suggesting that personality-based vulnerability plays a larger role than previously assumed in the internet usage behaviour of adolescents and youth. This corroborates with the findings of Hussain and Griffiths (2018) who has examined the relationship between dark personality traits and online gaming addiction among young adults.

Collectively, these findings support the broader hypothesis that psychopathic personality traits, particularly those involving manipulation and egocentrism, serve as reliable predictors of internet addiction in adolescents and young adults. While emotional and cognitive empathy deficits contribute to the risk, they may function more as foundational vulnerabilities that amplify the effects of interpersonal and behavioural traits.

Thus the overall findings of the current study suggest that psychopathic personality traits are significant predictors of internet addiction. The results offer strong empirical support for all the hypotheses, particularly the predictive and correlative roles of psychopathy in internet addiction. The findings align closely with emerging global evidence on how personality shapes internet engagement.

CONCLUSION

This study set out to investigate the relationship between internet addiction and psychopathic personality traits among adolescents and young adults, with a particular focus on how these variables interact and manifest as behavioural indicators. The findings revealed a significant and nuanced interplay between psychopathic dispositions, especially interpersonal manipulation, egocentricity, and empathy deficits, and problematic internet use. The findings underscore that internet addiction is not merely a function of exposure, accessibility, or external factors, but is substantially influenced by stable personality traits, particularly those associated with psychopathy. Psychopathic personality is a significant psychological vulnerability for internet addiction, especially in emotionally formative years like adolescence.

It should be mentioned that not all forms of internet use are inherently harmful, the compulsive, emotionally avoidant, or antisocial expressions of internet usage warrant targeted psychological intervention. This understanding highlights the importance of assessment, early identification, and personality-based intervention strategies when addressing problematic internet use in adolescents and youth populations.

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