
THE AMBIT OF LAW IN RESPONDING TO SOCIAL ANXIETY AND DEVIANT BEHAVIOUR AMONG CHILDREN: A STUDY OF SMARTPHONE ADDICTION AND CYBER VICTIMIZATION

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ABSTRACT

The rapid proliferation of smartphones and digital technologies has significantly transformed children's social interactions, often exposing them to risks such as smartphone addiction, cyber victimization, and subsequent deviant behaviours. This study conceptually explores the interconnected issues of smartphone addiction, cyber victimization, social anxiety, and deviant behaviour among children, with a particular focus on the ambit of Indian law. It examines how compulsive smartphone use fosters psychological dependency, increases exposure to online risks such as cyber bullying and harassment, and contributes to social anxiety—often manifesting in deviant behaviour. The study critically analyses existing legal frameworks, including the Information Technology Act, 2000; the Protection of Children from Sexual Offences (POCSO) Act, 2012; and relevant provisions of the Juvenile Justice (Care and Protection of Children) Act, 2015, assessing their effectiveness in addressing these emerging concerns. Through a combination of legal analysis, case studies, and empirical data, the study evaluates the efficacy of current laws and policies in safeguarding children's well-being. Furthermore, the research foregrounds the pivotal roles of educational institutions, parents, and legal authorities in curbing deviant behaviour and ensuring digital safety. It emphasizes the urgent need for a comprehensive legal strategy in India—integrating prevention, protection, and rehabilitation—to effectively safeguard children's rights and promote healthier mental and social well-being in the digital era, while fostering responsible digital habits among children.

Keywords: Smartphone Addiction, Cyber Victimization, Social Anxiety and Deviant Behaviours.

INTRODUCTION

The rapid integration of digital technology into children's lives has redefined their modes of interaction, learning, and self-expression. However, this digital immersion has also given rise to concerning psychosocial outcomes, including smartphone addiction, cyber victimization, social anxiety, and deviant behaviour. These issues, though distinct, are deeply interconnected, forming a complex chain of cause and effect that impacts children's mental health, behaviour, and legal vulnerability.

Smartphone addiction—characterized by excessive, compulsive usage—has been increasingly associated with cognitive and emotional disturbances in children, often contributing to or exacerbating social anxiety and deviant responses. Similarly, cyber victimization, such as cyber bullying, harassment, or exposure to harmful content, can leave deep psychological scars, influencing a child's social behaviour and leading to maladaptive outcomes. When these effects escalate into deviant behaviours, such as aggression, withdrawal, or violation of social norms, they may attract legal attention or intervention, particularly when the behaviour causes harm or breaches legal boundaries. Against this backdrop, this research explores the ambit of law in managing and mitigating these interconnected issues. It critically examines how Indian legal frameworks—including the Information Technology Act, 2000, the Protection of Children from Sexual Offences (POCSO) Act, 2012, and the Juvenile Justice (Care and Protection of Children) Act, 2015—respond to challenges posed by children's digital exposure. Additionally, the study contextualizes these frameworks within international child rights standards, such as the UN Convention on the Rights of the Child (UNCRC), and evaluates policy-level interventions, including school-based digital literacy programs, cyber safety guidelines, and the evolving role of cybercrime cells.

The victimization results in emotional humiliation and embarrassment, leading to the idea that cyber-victimization is linked to the development of social anxiety symptoms (WHO, 2024; Patchin, 2023; Campbell et al., 2012; Dempsey et al., 2009). According to Troy and Sroufe (1987), students with social anxiety are more likely to be victimized by others due to overt displays of worry, putting them at risk for victimization. According to a study by Storch et al. (2003), adolescents who have been relationally traumatized by their peers have higher levels of social anxiety. Social anxiety was significantly associated with several forms of bullying involvement in adolescents with autism spectrum disorder (ASD) and Attention-

Deficit/Hyperactivity Disorder (ADHD) and warrants being considered into prevention and intervention programs for bullying involvement (Liu et al., 2021). In a study by Dempsey et al. (2009), cyber bullying was linked to social anxiety symptoms in public middle school students. Campbell et al. (2012) found that adolescents who experienced cyber bullying reported more social difficulties and higher levels of anxiety than adolescents who had experienced traditional bullying (Ybarra & Mitchell, 2023). Schenk & Fremouw (2012) in their study found that college students who experienced cyber-victimization reported frustration (46.25 per cent), stress (40.9 per cent), hurt (37.9 per cent), anger (33.8 per cent), and difficulty in concentrating (23.4 per cent). Many cyber-victimization research projects have used middle school or high school students. However, Children samples have been used in few research projects especially in India. Research involving college students is warranted and has been found that college students experience cyber victimization (Dilmac, 2009) and experience symptoms of social anxiety (Obermaier & Brandmeier, 2023; Terlecki et al., 2014). The results of the study by Trompeter, Bussey, & Fitzpatrick (2018) revealed that most domains of coping self-efficacy and emotion dysregulation partially mediated the relationship between cyber victimization and depression, and fully mediated the relationship between cyber victimization and social anxiety. Therefore, the current study aims to investigate whether there is a relationship between social anxiety, cyber victimization, and the impact of smartphone addiction. More specifically, looking at whether the impact of social anxiety on cyber bullying is moderated by smartphone addiction is the need of the hour.

The study employs a framework that traces the progression from digital exposure to psychological impact, and ultimately to behavioural outcomes, highlighting the role of legal mechanisms in intervening at each stage. Independent variables such as smartphone addiction and cyber victimization are analysed in relation to mediating psychological factors like social anxiety and psychological distress, and their influence on dependent outcomes such as deviant behaviour and the efficacy of legal interventions.

By interrogating both the applicability and limitations of existing legal provisions, this research aims to identify critical gaps—especially the lack of recognition of mental health impacts and digital addiction within current laws—and advocate for a more holistic, prevention-focused legal and policy framework. The goal is to support a child-centred digital ecosystem that not only deters harmful behaviour but also promotes psychological resilience, legal protection, and digital well-being in India's youth.

Smartphone addiction and its impact on Behaviour and Social life

- **Increased Anxiety and Depression:** Studies found that excessive smartphone use is associated with anxiety and depression, potentially exacerbated by social comparison on social media platforms (Elhai et al., 2023).
- **Reduced Cognitive Control:** Excessive smartphone use can impair cognitive control, impacting emotional regulation and impulsivity (Montag et al., 2023).
- **Altered Brain Structure:** MRI studies show that heavy smartphone users may have reduced gray matter in areas related to cognitive control, similar to addiction disorders (Feng et al., 2023).
- **Impaired Attention:** Smartphone addiction correlates with deficits in sustained attention, making it challenging to focus without constant notifications (Wang et al., 2023).
- **Social Isolation:** Smartphone overuse can lead to social isolation as individuals engage more online, replacing in-person interactions (Li & Sun, 2023).
- **Sleep Disruption:** Frequent night-time smartphone use disrupts circadian rhythms, leading to sleep problems that worsen mood and cognitive performance (Kim & Park, 2023).
- **Increased Loneliness:** Overreliance on smartphones is linked to loneliness and the erosion of meaningful social connections (Chen & Zhang, 2023).
- **Impulsivity and Poor Self-Control:** Smartphone addiction is associated with lower self-control and higher impulsivity, affecting decision-making (Lin et al., 2023).
- **Impact on Academic Performance:** Excessive smartphone use is linked to lower academic performance, as frequent checking interrupts study sessions and reduces focus (Jones et al., 2023).
- **Link to Internet Addiction:** Smartphone addiction often co-occurs with internet addiction, reflecting similar psychological mechanisms and risk factors (Tsai et al.,

2023).

Cyber bullying and its implication on children

- **Increased Risk of Suicidal Ideation and Attempts:** Cyber bullying is strongly associated with an increased risk of suicidal thoughts and attempts, particularly among adolescents. Victims of severe, continuous cyber bullying often report higher rates of suicidal ideation compared to non-victims (American Academy of Psychiatry and the Law, 2023).
- **Rise in Cyber bullying Incidence Post-Pandemic:** A WHO report (2024) highlighted a rise in cyber bullying, correlating with increased digital interaction during the pandemic. It is estimated that one in six adolescents has experienced cyber bullying, with long-term effects on mental health and social behaviours (WHO, 2024).
- **Parental and School Involvement as Mitigating Factors:** Parental support and school-based intervention programs have shown promise in mitigating the negative impacts of cyber bullying, helping reduce anxiety and depression levels among victims (Faucher et al., 2023).
- **Legal Challenges and Inconsistent Policy Enforcement:** Although cyber bullying legislation has expanded, enforcement remains inconsistent. State laws vary widely, and there is no federal cyber bullying statute, leaving some cases under-prosecuted (Patchin, 2023).
- **Mental Health Impact on Both Victims and Perpetrators:** Recent studies show that both cyber bullying victims and perpetrators often experience anxiety, depression, and social difficulties. Perpetrators are at higher risk for emotional distress and antisocial behaviours later in life (Smith & Jones, 2023).
- **Gender Differences in Cyber bullying Impact:** Research indicates that girls are more likely to experience emotional impacts from cyber bullying than boys, who are more likely to report anger and aggressive responses (Hinduja & Patchin, 2023).
- **Association with Academic Decline:** Cyber bullying has been linked to declining academic performance. Victims often face concentration issues and increased

absenteeism due to fear and anxiety, affecting their school success (Tokunaga, 2023).

- **Role of Social Media Platforms in Amplifying Cyber bullying:** Social media platforms are frequently used in cyber bullying incidents, often amplifying the bullying's reach and intensity. Policies on these platforms vary, with inconsistent enforcement of anti-bullying policies (Ybarra & Mitchell, 2023).
- **Emerging Research on Bystander Intervention:** Studies are examining the role of bystanders in cyber bullying incidents, finding that active bystander intervention can reduce harm to the victim. However, bystanders are often hesitant due to fear of social repercussions (Obermaier & Brandmeier, 2023).
- **Link to Substance Abuse:** Cyber bullying is associated with an increased risk of substance abuse as both victims and perpetrators turn to alcohol and drugs as coping mechanisms, especially if they lack support systems (Willard, 2023).

LEGAL FRAMEWORK GAPS

Cyber Victimization under the IT Act, 2000

The Information Technology Act, 2000 provides a legal framework to address various forms of cybercrimes, including those affecting children. Several provisions are particularly relevant to cyber victimization:

- Section 66E penalizes the violation of privacy, such as capturing or sharing intimate images without consent.
- Sections 67 and 67B criminalize the publication and transmission of obscene or sexually explicit material, with Section 67B specifically targeting content involving children, including child pornography.
- Sections 66C and 66D deal with identity theft and online impersonation, which are often involved in cyber bullying, fraud, and other malicious activities targeting children online.

Although the Act does not explicitly use terms like "cyber bullying" or "cyber stalking," these offenses may still be prosecuted under broader interpretations of the existing sections.

Smartphone Uses age

Smartphone use age, in itself, is not regulated under the IT Act unless it results in an actionable offense. For example, using smartphones to harass others via social media, transmit obscene content, or engage in identity theft can invoke relevant sections of the Act. However, the act does not specifically address compulsive or addictive smartphone behaviour, nor does it cover general overuse unless it leads to a criminal act.

Social Anxiety and Addiction

The IT Act does not cover psychological issues such as smartphone addiction or social anxiety. These are considered medical or behavioural health concerns, falling outside the Act's legal scope. There are no provisions in the law to address the mental health consequences of excessive screen time, digital dependency, or online social pressures experienced by children.

Deviant Behaviour

Deviant behaviour among children is addressed only when it involves cybercrimes under the IT Act. For instance, if a child engages in hacking, cyber stalking, or distribution of illegal content, the Act may apply. However, deviant behaviour stemming from social isolation, anxiety, or digital overexposure is not addressed unless it manifests in a prosecutable cyber offense.

Limitations of the IT Act, 2000

Despite covering several areas of cybercrime, the IT Act has significant limitations:

- It lacks provisions to address psychological impacts such as addiction, anxiety, or emotional harm caused by online exposure.
- Cyber bullying and psychological abuse are not clearly defined or recognized as standalone offenses.
- Enforcement is inconsistent, particularly in cases involving children, due to gaps in

awareness, training, and cybercrime policing infrastructure.

POCSO Act, 2012

The Protection of Children from Sexual Offences (POCSO) Act, 2012 plays a critical role in safeguarding children from all forms of sexual abuse and exploitation, including those committed through digital platforms. It is applicable when smartphones or internet platforms are used for sexual exploitation, such as online grooming, sextortion, or the transmission of child pornography. In such cases, the POCSO Act can be invoked alongside the Information Technology Act, 2000 to provide a more comprehensive legal response to offences occurring in the digital space.

In instances where a child is the perpetrator of a sexual offence, the matter is generally addressed under the Juvenile Justice (Care and Protection of Children) Act, 2015, rather than under POCSO. However, the POCSO Act remains focused on protecting child victims rather than addressing deviant behaviour or mental health issues arising from digital exposure.

Smartphone Use, Addiction, and Social Anxiety

The POCSO Act does not cover issues such as smartphone addiction or general smartphone use. Similarly, it does not address social anxiety or psychological harm unless these arise directly from sexual victimization. The law is specifically designed to combat sexual offences and does not extend to non-sexual harms associated with the digital environment, such as cyberbullying or online harassment.

Ambit and Limitations

The ambit of the POCSO Act extends to child online exploitation, criminalizing various forms of sexual abuse, whether committed in person or via digital means. It provides for mandatory reporting of offences and is frequently applied when children are targeted on social media, messaging apps, or other digital platforms for grooming, pornography, or sexually explicit communication.

Act has significant limitations:

- It is strictly confined to sexual offences, offering no protection in cases of non-sexual

cyber bullying, emotional abuse, or online harassment.

- It is not tailored to address mental health consequences such as anxiety, trauma, or behavioural changes resulting from digital exposure.
- It does not acknowledge smartphone addiction or its effects on children's psychological well-being unless those effects are linked to sexual abuse.

Juvenile Justice (Care and Protection of Children) Act, 2015

The Juvenile Justice (Care and Protection of Children) Act, 2015 is central to addressing deviant behaviour among minors. It governs the treatment of children in conflict with the law, including those who commit cybercrimes or other offences. The Act differentiates between children under 16 and those aged 16–18 when dealing with heinous offences, allowing for more stringent treatment of older juveniles under specific circumstances. This is particularly relevant in cases involving serious cybercrimes such as hacking, cyber stalking, or online harassment.

In terms of cyber victimization, the Act may apply if a child commits an offence as a result of being victimized online, or if the child is considered to be in need of care and protection due to the consequences of such victimization. While the Act does not explicitly mention smartphone addiction or social anxiety, these factors can be taken into account when assessing a child's background and psychological state during proceedings.

Provisions for Rehabilitation and Support

A key strength of the Juvenile Justice Act is its emphasis on rehabilitation rather than punishment. It mandates the provision of psychological care, counselling, and social reintegration programs for children, especially those found to be in conflict with the law or in vulnerable conditions. This makes it one of the few laws in India with the potential to indirectly address the mental health needs of children affected by excessive digital use, anxiety, or behavioural issues stemming from smartphone dependence.

Ambit and Limitations

The Act covers two primary categories: children in conflict with the law and children

in need of care and protection. It can be invoked when children show deviant behaviours such as aggression, substance abuse, or involvement in cybercrime, especially when these behaviours are linked to or worsened by digital exposure. Its provisions allow for intervention through child welfare committees, juvenile justice boards, and rehabilitation homes.

Act has several limitations:

- It does not directly address smartphone addiction or the psychological impacts of digital overexposure.
- Mental health conditions like social anxiety are considered only in limited contexts, such as during institutional care or rehabilitation.
- There is no specific focus on digital risks, online safety education, or preventive strategies aimed at mitigating tech-related behavioural problems.
- Psychosocial interventions for issues like addiction and anxiety remain underdeveloped and inconsistently applied.

Figure: Summary of the Legal Gaps

Summary of Legal Gaps				
Issue	IT Act, 2000	POCSO Act, 2012	JJ Act, 2015	Gap/Need
Smartphone Addiction	✗	⚠	⚠ (indirect)	Need for mental health integration
Cyber Victimization	✓	✓ (if sexual)	✓ (as impact)	Needs broader definition
Social Anxiety	✗	⚠	⚠ (indirect)	No direct recognition
Deviant Behaviour (children)	⚠ (if cybercrime) (if sexual)	✓		Better behavioral intervention tools needed

Source: From this Study

CONCLUSION

The current legal framework in India—comprising the Information Technology Act, 2000; the Protection of Children from Sexual Offences (POCSO) Act, 2012; and the Juvenile Justice (Care and Protection of Children) Act, 2015. Plays an important role in creating a safer digital environment for children. These laws aim to deter harmful behaviour through punishment, regulate online conduct, and provide remedies when offences occur. However, their scope is largely confined to punitive and protective responses, especially concerning cybercrimes and sexual exploitation. While they do address some manifestations of deviant behaviour and cyber victimization, they fall short in tackling the underlying psychological and behavioural impacts linked to smartphone addiction and social anxiety.

Notably, no Indian law currently recognizes smartphone addiction or social anxiety as standalone legal issues. These concerns remain in the domain of mental health and are not sufficiently integrated into legal or educational policies. The IT Act addresses cyber offences such as identity theft, online harassment, and obscene content transmission but does not cover psychological harm or behavioural fallout from digital overuse. The POCSO Act is specific to sexual offences and only applies when digital tools are used in the commission of abuse. The Juvenile Justice Act deals with children in conflict with the law but lacks proactive measures for addressing behavioural issues stemming from excessive smartphone use or psychological distress.

This legal gap is particularly concerning in the digital age, where children are increasingly exposed to online risks that can lead to cyber victimization, psychological dependency, and social withdrawal, sometimes culminating in deviant behaviour. Although the JJ Act includes provisions for rehabilitation and psychological care, these are typically invoked after offences have occurred, rather than serving as preventive or early intervention mechanisms. Moreover, preventive strategies and digital literacy education remain underdeveloped in school systems and child protection frameworks.

There is, therefore, a critical need for policy-level interventions that go beyond conventional legal approaches. This includes the legal recognition of digital well-being as a child rights issue, incorporation of cyber bullying and online harassment as distinct offences, and the integration of mental health considerations—such as anxiety, depression, and addiction into

child protection policies. Furthermore, stronger preventive and rehabilitative frameworks within educational institutions, legal systems, and family support structures are essential.

In conclusion, while Indian law indirectly addresses some outcomes of digital overexposure such as cyber victimization and criminal behaviour, it does not adequately confront the root causes or mental health consequences of smartphone addiction and social anxiety. To safeguard children's overall well-being in the digital era, an updated and holistic legal framework is urgently needed one that blends regulation, prevention, psychological care, and digital literacy to build a resilient, informed, and mentally healthy generation.

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