



Characteristics and Treatment of Cyberviolence Trauma in Children and Adolescents

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Cyberviolence is a new form of violence encompassing any online activity that results in harm to the psychological, emotional, financial, or physical well-being of an individual or group. These adverse activities often lead to serious offline and long-lasting negative impact, especially on children and adolescents whose development has not matured sufficiently. Therefore, it is more important for mental health professionals to be well informed about the rapidly evolving forms of cyberviolence and its risks and to respond appropriately. This article provides an overview of the concept and unique features of cyberviolence trauma in minors in South Korea while also examining ongoing efforts to explore and implement effective treatment programs. Cyberbullying and digital sexual abuse, the most common forms of cyberviolence experienced by minors in South Korea, are explored in detail. Additionally, this review proposes directions for future research and the efforts that clinicians should focus on.

Keywords: Cyberbullying; Child sexual abuse; Sexual violence; Cyber-victimization.

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INTRODUCTION

The risk of cyberviolence is increasing globally [1]. Especially in South Korea, where children and adolescents, whose developmental stage is still in progress, have relatively increased access to a large number of online devices, the incidence of minors falling victim to cyberviolence is rapidly escalating, prompting heightened societal concerns [2,3]. Furthermore, the period of childhood and adolescence is particularly vulnerable to violence, and violence occurring online can result in more severe psychological consequences for minors than offline violence [2,4,5]. This trend stems from the ambiguity between offline reality and the online world for children, wherein the cyber realm holds greater significance in their interpersonal relationships and daily lives than it does for adults. Therefore, mental health professionals must urgently address this issue.

Although a consensus on the definition of the term “cyberviolence” has not been reached yet, it is used variably across academic disciplines [1,4,6]. Depending on the field of study, terms such as cyberbullying, cyberaggression, online violence, and digital crime are used overseas [6], while cyberbul-

lying is mainly employed in South Korea [2]. However, the definitions provided by existing terminology fail to adequately encompass the wide range of emerging forms and features of online violence. The emergence of the “Born-Digital” generation, alongside societal changes, such as the widespread use of smart devices and the shift to online education due to the COVID-19 pandemic, has led to a decrease in the age of both victims and offenders of cyberviolence [1,4]. Moreover, the nature of cyberviolence is evolving in diverse ways. Therefore, the proper definition and use of the correct term that reflects these changes are crucial for research and implementation purposes. In 2020, a domestic nongovernmental organization, the Blue Tree Foundation (Youth Violence Prevention Foundation), attempted to define cyberviolence by reflecting on its characteristics [7]. Subsequently, in 2021, the National Information Society Agency classified the types of cyberviolence into eight categories: cyber verbal abuse, cyber defamation, cyber stalking, cyber sexual violence, personal information leakage, cyber ostracism, cyber fraud, and cyber coercion [8]. To explore the characteristics of cyberviolence in children and adolescents from a psychiatric perspective and the treatments that have been studied to date, this review divides the types of cyberviolence into two categories that are most commonly encountered in clinical practice: cyberbullying and digital sexual abuse.

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THE CHARACTERISTICS OF CYBERVIOLENCE

Cyberbullying

Cyberbullying exhibits the following three characteristics: 1) bullying involving the use of digital technologies; 2) it can occur on social media, messaging platforms, gaming platforms, and mobile phones; and 3) it involves repeated behavior intended to intimidate, provoke, anger, or shame those who are targeted [5,6]. The 2022 cyberviolence survey that assessed 9693 elementary, middle, and high school students in 412 schools in South Korea found that cyberbullying was widespread across all grade levels [9]. Verbal abuse and ostracism were the most common types of violence observed. Experiences of victimization and perpetration of cyberbullying were most prevalent in middle school years, while post-traumatic symptoms were most severe in elementary schools. Researchers have found that elementary school students are more vulnerable to cyberbullying because they are still immature as compared to the middle and high school students, who socialize more and are more influenced by the academics. A prior study conducted overseas also reported that children and adolescents are more susceptible to the impact of cyberbullying than are adults, and the severity of these effects tend to increase with younger age [10]. In particular, both national and international studies have shown that as age increases, the incidence of cyber ostracism decreases; however, there is a growing trend of malicious exploitation of images or videos with age [9,11,12]. In terms of gender differences, girls tended to perceive the severity of victimization more seriously than boys did. In addition, another important characteristic of cyberviolence in school is that educators and clinicians should be aware that many cyber violent activities are interconnected with online violence and occur not only online but also offline [5,9,11]. Moreover, according to a survey by the Korea National Information Society Agency [9], the most common reason for cyberbullying was retaliation against perceived similar behavior by the target. While this may reflect distorted perceptions by the perpetrators, it also suggests that the phenomenon of cyberbullying may involve reciprocal reactive behaviors, where the roles of victim and perpetrator are not distinctly separated but rather emerge through interactive responsive actions up to a point. These results indicate that cyberbullying has some characteristics distinct from offline school bullying. Findings regarding the contributing and protective factors associated with cyberbullying are summarized in Table 1 [1,6-11,13-16]. In particular, multiple studies across countries have consistently concluded that cyberbullying is associated with excessive smartphone usage [1,7-9,11].

The impact of cyberbullying victimization on children and adolescents' mental health varies by type of violence but commonly results in increased levels of depression, anxiety, suicidal ideation, self-harm, and physical symptoms [17]. According to a serial survey conducted in South Korea [8,9], victims consistently perceived a lack of specific treatment or intervention programs to address the harm they had experienced, with some resorting to seeking help from their peers.

Digital sexual violence

Digital sexual violence (DSV) refers to gender-based violence that occurs through digital devices and information communication technologies. It encompasses acts such as non-consensual capturing, distribution (of threat of distribution), storage, and display of another persons' body, as well as actions in cyber space that violate the sexual autonomy and dignity of others [4,7]. The definition of this term has also been recently established, with the author analyzing the content of actual DSV cases to categorize the types of violence, as presented in Table 2 [4].

Children and adolescents as victims of DSV present a heightened risk of more severe consequences than other forms of violence or offline sexual abuse [4,6]. This risk is compounded by the general vulnerability of minors to the aftermath of violence, particularly in the case of interpersonal violence such as sexual abuse. Additionally, there is a vulnerability to the detection and protection of technology-based

Table 1. The contributing and protective factors associated with cyberbullying

Contributing factors	Protective factors
Higher level of aggression	Good self-regulation
Prior experiences of being abused (e.g., domestic violence)	Good quality attachment with caregiver
Negative parenting attitude	Higher level of social support
Smart phone overuse/usage time	Online safety education

Table 2. Criteria for digital sexual violence

Criteria for content of digital sexual violence
1) Relationship between the perpetrator and the victim formed on an online platform
2) Harassment or lewd behavior on the online platform
3) Persuading, coercing, or threatening the victim to take images or video of themselves
4) Secretly filming the victim's images or videos
5) Coercive filming of images or videos
6) Dissemination (or threats of dissemination) of images or videos taken against the victim's will
7) Other instances where online platforms are used in the process of sexual violence victimization

crimes, including those perpetrated via digital platforms, owing to the rapid evolution of digital technologies and the lag in the adaptation of protective measures by adults responsible for child welfare and the legal system [4,6,12].

Another difference between DSV and offline sexual violence is that the overall and voluntary reporting rates for DSV victims are lower than for offline sexual violence victims; however, the reporting rate of DSV victimization among males is even higher than that of offline sexual violence [18]. In addition, compared to non-DSV cases, DSV tends to involve a higher proportion of individuals from sexual minorities and multicultural families who come from environments or cultures unfamiliar to most clinicians [19]. Therefore, careful attention from clinicians is necessary in the treatment of these patients. Furthermore, in the case of DSV, perpetrators tend to be of lower age compared to those of non-DSV cases [4,6]. Therefore, from a societal perspective, DSV should be addressed more seriously. Moreover, children and adolescents in the process of cognitive development often perceive individuals as close or special acquaintances based solely on unilaterally acquired online information, even when they may not have accurate knowledge of the person's factual information (e.g., false information intentionally provided by the perpetrator) [4,6]. Consequently, there is a risk of confusion in the interpretation of "acquaintance" as perceived by children versus its general societal or legal connotations, which could pose challenges in addressing and managing such risks. Moreover, sexual violence often occurs in addition to experiences of other interpersonal violence (such as child abuse and school violence); therefore, clinicians should carefully evaluate whether patients have had prior experiences of trauma in addition to the current incident for which they seek treatment. In particular, DSV is known to pose a higher risk, especially in interpersonal relationships, where individuals may experience isolation or cognitive or emotional challenges (e.g., social difficulties associated with cognitive impairment, attention-deficit hyperactivity disorder); thus, it is important to evaluate this aspect as well [20,21]. Lastly, given that online activities hold as much, if not more, significance for younger generations as their offline lives, victims of DSV in this demographic may perceive avoidance of triggering factors as entirely unattainable and may subsequently experience multiple negative interpersonal relationships both online and offline, following such traumas. Considering these aspects, experiences of DSV among children and adolescents are associated with a range of mental health issues such as increased levels of dissociation, suicide risk, self-blame, shame, and difficulties in emotional regulation.

TREATMENT IN CASES OF CYBERVIOLENCE

The experience of cyberviolence constitutes a challenge to both existence and human dignity, making its recovery the primary goal of therapeutic interventions. After sharing the goal of restoring dignity, both the patient and therapist can attempt to address and confront traumatic memories through exposure or other interventional methods. At this juncture, it is crucial to facilitate the patient's experience of a healthy relationship through a therapeutic relationship. Online cyberviolence may entail more active interactions between victims and perpetrators than offline violence. In other words, individuals who have experienced cyberviolence may engage in a continuous process of reflecting on or re-evaluating the implications of such actions through mediums such as videos or materials. This process can lead victims to blame themselves excessively or distort their ethical boundaries, thereby increasing the risk of future trauma. Therefore, therapeutic interventions based on self-compassion training are warranted [22]. Considering the diminished accessibility of offline therapies, online therapeutic programs should be explored. However, given the nature of the ongoing cyberviolence incidents and the cultivation of social support resources, therapeutic plans should consider linking face-to-face therapy to strengthen solidarity among survivors.

The pretreatment assessment stage is crucial when treating victims of cyberviolence. Assessing the severity of post-traumatic symptoms, which can manifest in various ways, and evaluating the areas of risk, such as suicide and self-harm, is essential. In this regard, many studies recommend the use of questionnaires during in-depth interviews considering children's symptoms and cognitive difficulties. For individuals who struggle with such levels of linguistic expression or symptoms, consideration is given to providing options such as simple "yes" or "no" cards or alternative non-verbal forms of responses such as gestures or movements, according to the patient's preference. The foundation of the intervention includes conducting psychological evaluations similar to those administered to children and adolescents who are victims of offline violence and assessing not only vulnerabilities but also the patient's interpersonal relationships and strengths to enhance supportive resources.

Before initiating treatment for victims of cyberviolence, particularly in cases of sexual violence where post-traumatic symptoms tend to be more severe and complex, it is imperative to thoroughly examine their potential involvement in the creation or dissemination of related images or videos, as well as to assess whether they harbor an excessive sense of responsibility, all while ensuring sensitivity to avoid induc-

ing intimidation. Additionally, it is necessary to explore the experiences of other forms of offline violence, including those that occur during childhood.

For the treatment of cyberviolence, while established or validated treatments specifically developed for it have not yet been confirmed, evidence-based treatments established for general trauma-related disorders in children and adolescents include preventive early intervention, the child and family traumatic stress intervention, trauma-focused cognitive behavioral therapy (TFCBT), cognitive therapy for posttraumatic stress disorder (PTSD) in children and adolescents, prolonged exposure therapy for adolescents with PTSD, narrative exposure therapy for children and adolescents (KIDNET), STAIR narrative therapy for adolescents, eye movement desensitization and reprocessing therapy (EMDR), Attachment, Self-regulation, and Competency (ACR), child-parent psychotherapy (CPP), parent-child interaction therapy (PCIT), and traumatic systems therapy for children and adolescents [23]. Furthermore, although the number of supporting studies and the magnitude of effect sizes for pharmacological interventions are smaller than those for the aforementioned treatments, medication may be considered under these circum-

stances. Indeed, notwithstanding the lack of sufficient evidence, therapeutic approaches, such as dialectical behavioral therapy (DBT), somatic experiencing, and emotion freedom techniques, are clinically utilized for trauma symptoms in children and adolescents. However, data on their application in the treatment of cyberviolence are limited [24].

Nevertheless, there are step-by-step programs available for use by patients and therapists/counselors together as a prelude to face-to-face mental health services targeting adult victims of DSV in their late teens and beyond [25]. The program developed by the Advocacy Center for Online Sexual Abuse Victims (ACOSAV) proposed the following linkage system for patients, as depicted in Fig. 1 [25]. Specifically, this program categorizes cases into single-event trauma, cases accompanied by offline sexual assault, and cases compounded by other forms of trauma, with referrals for in-person treatment for complex PTSD, suicide, severe self-harming behavior, and other vulnerabilities (Fig. 1). In addition, the Sunflower Center of Southern Gyeonggi for Women and Children Victims of Violence introduced a similar form of recovery program for both child victims and their caregivers (https://www.ggsunflower.or.kr/html/?pmode=boardlist&MMC_

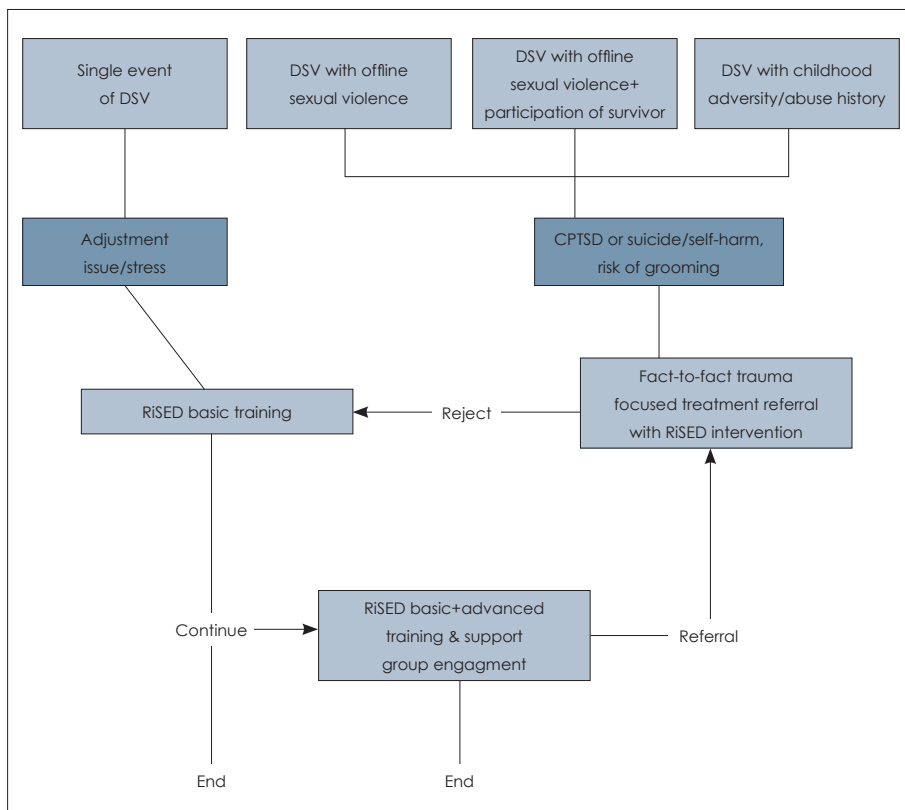


Fig. 1. Overview of decision pathways for RiSED program utilization based on types and psychological patterns of DSV. This figure was adapted with permission from the Advocacy Center for Online Sexual Abuse Victims (https://d4u.stop.or.kr/healing_program). CPTSD, complex posttraumatic stress disorder; DSV, digital sexual abuse; RiSED, Resistance and Restoration in Solidarity to Empowerment and Dignity.

pid=35). However, this program serves as informational material for cases of DSV, offering psychological education rather than treatment, which is suitable for use in the pre-treatment phase. Recent international research has examined the potential of trauma-focused virtual interventions for survivors of domestic and sexual violence [26]. While this study suggests the potential of remote interventions, it also highlights the lack of evidence and research in this area, particularly for children and adolescents. Therefore, their use for therapeutic purposes is challenging. Despite the considerable obstacles and low accessibility for cyberviolence victims, especially in the cases of DSV, to engage in treatment, it seems essential to adopt an open-minded perspective towards further research into therapeutic approaches.

Currently, in South Korea, there are institutions available for children and adolescent DSV victims, such as the Sunflower Center for Children, the Smile Center for victims of crime, the ACOSAV, and the Korean Cyber Sexual Violence Response Center. Victims of cyberviolence other than sexual assault can utilize psychological support services provided by the Office of Education, or receive individualized support from affiliated organizations, excluding private institutions. However, these services are limited to providing high-quality therapy with both stability and professionalism. In cases where cyberviolence meets the criteria for criminal prosecution, and individuals utilize the judicial system, they can access the Smile Center, which operates under the auspices of the Ministry of Justice (<https://resmile.or.kr>). Nevertheless, there is a lack of research evidence regarding the effectiveness of therapeutic techniques, such as TFCBT, cognitive therapy for children and adolescents with PTSD, and EMDR, specifically for the treatment of cyberviolence in minors.

CONCLUSION

Given its inherent complexity, cyberviolence may pose even greater challenges for minors than for adult victims in accessing appropriate treatment facilities and clinicians. In particular, if parents or other significant adults in the child's environment (e.g., teachers) lack an understanding of cyberviolence, there is a heightened risk that the symptoms of the child or adolescent victims may be underestimated and go untreated. Hence, there is a need to cultivate social awareness in this domain and advocate for proactive interventions to mitigate such risks. In conclusion, it is important to improve clinicians' understanding of and response to the complex characteristics of cyberviolence while promoting the development and implementation of evidence-based treatment programs to effectively address cyberviolence in the future.

Availability of Data and Material

Data sharing not applicable to this article as no datasets were generated or analyzed during the study.

Conflicts of Interest

The author has no potential conflicts of interest to disclose.

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