

Trauma and Related Psychological Outcomes of Adult Survivors of Online Sexual Abuse and Exploitation of Children (OSAEC) in the Philippines



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ABSTRACT. Online Sexual Abuse and Exploitation of Children (OSAEC) is a global phenomenon of technology-facilitated sexual violence harming children across borders. The Philippines became the global epicenter of live-streamed OSAEC, with pioneer evidence highlighting negative mental health effects on child survivors. The present study investigated the enduring impact of OSAEC victimization among 47 adult survivors who were exploited around age 12. Assessments were conducted using Post-traumatic Checklist (PCL-5) and Trauma Symptoms Inventory-2 (TSI-2), which showed normal trauma levels overall but elevated suicidal behaviors and tension-reduction behaviors. Significant disparities in trauma symptoms across gender, living arrangements, and relationship with the perpetrator were found. Age during victimization is significantly correlated to the manifestation of specific trauma symptoms. Meanwhile, trauma and related psychological disturbances among survivors become more prominent with an increase in age. The findings affirm that childhood OSAEC victimization has adverse effects on survivors' mental well-

being, indicating the need for tailored-fit therapeutic interventions to facilitate their recovery.

1.0. Introduction

Technology has advanced rapidly over the past decades and has brought tremendous changes today, including borderless connectivity through the internet. The internet has become integral to how people function, regard themselves, and maintain social connections (Firth et al., 2020; Joshi et al., 2022; Schmidt et al., 2023). However, these technological developments came with increased opportunities and risk for sexual violence preying on children worldwide and violating their fundamental rights (Bailey et al., 2021; Custers, 2022; Makinde et al., 2021), one of which is Online Sexual Abuse and Exploitation of Children (OSAEC).

OSAEC is a form of exploitation and child sexual abuse happening in information and technology mediums, such as internet sites, gaming platforms, mobile applications, and dating sites, among others. It includes the production, possession, and distribution of sexual abuse materials featuring children and the gradual grooming of target victims purposely for live streaming of sexual abuse or exploitation (WeProtect Global Alliance, 2015). OSAEC encompasses a

variety of harmful activities directed at children, facilitated through digital platforms identified by End Child Prostitution, Child Pornography and Trafficking (ECPAT et al., 2022). OSAEC forms include (1) the creation, distribution, and possession of Child Sexual Abuse or Exploitation Material (CSAEM/CSAM), (2) Online grooming where offenders build trust with children or their caregivers to exploit them sexually, often using manipulative tactics such as flattery, coercion, or blackmail, and (3) Live-streaming of child sexual abuse involving children in sexual performances facilitated through the immediacy of technology platforms. Moreover, phenomena like the sharing of self-generated sexual content among peers, sexual extortion, sexual harassment, and involuntary exposure to sexual content contribute to the widespread occurrence of online sexual abuse and exploitation, causing harm to children in digital environments (ECPAT et al., 2022).

The global prevalence of OSAEC is staggering, with a 2020 report documenting over 21.7 million cases of online child sexual enticement reported to law enforcement (Johns et al., 2024). More recently, the Global Threat Assessment report by WeProtect Global Alliance (2023) revealed a substantial increase in online child sexual exploitation, noting that 1 in 3

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internet users globally is a child, and many face risks of abuse. The report indicates a rise in self-generated explicit content among minors, with 79% of surveyed law enforcement agencies observing an increase in cases involving self-generated material. Furthermore, over 67% of children report being asked to share sexual images online. Meanwhile, The “Disrupting Harm” study by the coalition of End Child Prostitution, Child Pornography and Trafficking (ECPAT et al., 2022) reports significant prevalence rates of OSAEC across several Asian countries. In Malaysia, 4% of children reported being asked to share sexual images, while in Cambodia, 11% reported receiving unwanted sexual content. In Indonesia, 8% of children reported being groomed for sexual purposes online.

The Philippines emerged to be the global epicenter of the supply side of the live-streamed sexual abuse trade (Australian Transaction Reports and Analysis Centre [AUSTRAC], 2019; ECPAT International, 2017; International Justice Mission [IJM], 2020; United Nations Children’s Fund [UNICEF], 2016). End Child Prostitution, Child Pornography and Trafficking (ECPAT et al., 2022) recently uncovered that 20% of Filipino young internet users had experienced online sexual abuse in 2021. The experiences include being sexually extorted, bribed with financial benefits to engage in sexual activities, or producing and sharing intimate images without their consent. Statistically, this translates to an estimate of 2 million Filipino children who may have suffered from online sexual abuse and exploitation in 2021. Various factors interacted to cause the rise in the number of OSAEC cases in the country, which include the interplay of high poverty levels, lack of jobs, internal and external migration, good English proficiency, affordable and widespread internet access, cultural norms that uphold prioritizing family over one’s well-being, and highly established international money transfer system (ECPAT International, 2017; Kuhlmann & Auren, 2015; IJM, 2020).

Child sexual abuse generally results in higher rates of mental health issues (Hailes et al., 2019; Halpern et al., 2018). Sexual abuse experiences in childhood disrupt the typical paths of development crucial for healthy growth and development. This increases the risk of encountering challenges in interpersonal relationships, cognitive functioning, behavioral issues, and mood disorders (Clayton et al., 2018). Meanwhile, trauma events that happen in childhood can have delayed effects, where symptoms may not appear until later stages of development. This delayed onset of trauma symptoms is associated with the way trauma impacts brain structures involved in stress response, such as the prefrontal cortex, amygdala, and hippocampus. Early traumatic

experiences, especially chronic or severe forms, can alter the neural circuits responsible for emotional regulation, resulting in heightened sensitivity to stress and anxiety. These neurobiological effects may initially be latent, with symptoms often emerging or intensifying later in adolescence or adulthood as these brain regions mature and the individual’s stress response system is further shaped by life experiences (American Psychological Association [APA], 2020; McLaughlin et al., 2019; Teicher & Samson, 2016).

Distinct in OSAEC, the technological component involved creates a different abuse and exploitation dynamics. The permanency and broad reach of the published sexual abuse images, as well as the perceived ‘participation of the victim, have a compounding effect on the difficulty in disclosure among victims. It also perpetuates feelings of guilt, shame, mistrust, and fear (Hanson, 2017; Hamilton-Giachritsis & Sleath, 2017; Joleby et al., 2020). The sexual abuse images, when shared online and stored for the foreseeable future, facilitate ongoing secondary victimization layered on top of the initial abuse, and survivors must endure life with the fear of pictures from the abuse resurfacing (Assini-Meytin et al., 2022; Downing et al., 2021).

There are limited local studies on the effects of OSAEC victimization on the mental health and well-being of survivors. Initially reported mental health impacts focused on the immediate impact on child victims, which include post-traumatic stress, depression, anxiety, suicidal ideations and behaviors, low self-esteem, and behavioral disturbances (Scroger et al., 2024; UNICEF, 2016). It is, therefore, crucial to investigate the trauma-related psychological outcomes of OSAEC survivors as they manifest in adulthood, given the distinct and enduring nature of the victimization.

The present study focused on Online Sexual Abuse and Exploitation of Children (OSAEC), an emerging phenomenon in the Philippines. It aimed to comprehensively understand the lasting impact of OSAEC victimization by assessing the trauma symptoms and related psychological outcomes among adult OSAEC survivors using standard measures. It sought to compare the trauma domains across gender, relationship status, and type of perpetrator. Furthermore, it explored the developmental trajectory by exploring the relationship between the trauma outcomes with age during OSAEC victimization and their present age. This is to provide evidence on the pervasive impact of OSAEC victimization that may persist in adulthood to pave the way for recovery programs and services.

2.0. Methodology

Research design. This study utilized a quantitative

approach, particularly the cross-sectional design. The cross-sectional research design involves collecting data at one point in time, allowing researchers to assess relationships between variables, compare groups, and examine the distribution of certain characteristics in a population (Creswell, 2014). Data were collected from the participants at a single point in time, which is in their adulthood, allowing for the comparison of trauma levels across various demographic variables and the analysis of relationships between trauma level and age.

Participants. The participants were adult survivors of Online Sexual Abuse and Exploitation of Children whose ages were between 18-25 years old and had been victimized by OSAEC when they were minors. Given the emerging nature of the phenomenon under study, the 47 respondents were selected through purposive convenience sampling. The study was conducted in the National Capital Region, Region 3, and Region 4A of the Philippines, and it identified hotspots of OSAEC. The demographic profile showed a gender imbalance, with 74.47% female survivors suggesting potential targeting or seeking help disparities. Most survivors (76.60%) are single, with some having entered long-term commitments and parenthood at a young age. All survivors were institutionalized for protective custody after rescue. Perpetrators included community members (44.68%), relatives (21.28%), and immediate family (34.04%). When combined, local facilitators of OSAEC are known and related to the survivors at 55.32%. The survivors were victimized when they were around 12 years old and had been reintegrated back into the community for an average of 2.63 years.

Measures. The Post-traumatic Stress Disorder Checklist (PCL-5) is a widely used and most studied test in evaluating PTSD. PCL-5 underwent several revisions, and with the updates in the DSM-5, it was likewise revised to adopt the diagnostic criteria stipulated in the manual. The new PCL 5 contains 20 self-report measures to screen, provide provisional diagnosis, and monitor treatment progress (Weathers et al., 2013). The PCL-5 was translated into different languages, including Filipino. Meanwhile, the Trauma Symptom Inventory -2 consists of 136 self-report items that evaluate post-traumatic stress and other associated psychological disturbances caused by traumatic and stressful events. TSI-2 measures PTSD symptoms and digs deeper into psychological outcomes. The TSI-2 yields 12 clinical domains that are associated with trauma, which include Anxiety, Intrusive Experiences, Defensive Avoidance, Dissociation, Insecure Attachment, Impaired Self-Reference, Depression, Suicidality, Sexual Disturbance, Tension Reduction Behavior, Anger, and Somatic Preoccupation. Raw scores are converted into

t-scores with a mean of 50 and a standard deviation of 10 (Briere, 2011).

Data collection procedures. The initial database of target participants was obtained from government and non-government organizations working on anti-child trafficking initiatives. The participants who provided consent and expressed willingness to participate in the study were asked to fill out the demographic profile through the Robotfoto. After which, PCL-5 and TSI-2 were administered individually in person. The testing session lasted for about 60 minutes. The results were comprehensively discussed individually with the survivors, and referral pathways were activated for those with clinically significant scores. The data was then collated, cleaned, and statistically treated to yield results.

Data Analysis. The data collected were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics to compute the mean and standard deviation of the respondents' trauma scores and present their demographic profiles. Comparative analysis was utilized to analyze the trauma scores across demographic profiles using the independent samples t-test and the Games-Howell test. Pearson Product Moment Correlation was used to analyze the relationship between trauma domains and selected demographics.

Ethical considerations. The present study involved adults who experienced childhood sexual abuse and exploitation. Thus, it incorporated ethical, survivor-centered, and trauma-informed practices to prioritize participants' well-being throughout the research process. Ethical clearance was obtained from the institutional Ethics Review Board of the University of Santo Tomas Graduate School (GS2023-013). The recruitment process was dignified and transparent through coordination with government and non-government social service agencies to reach potential participants. The handling social workers facilitated communications and the initial introduction of the researcher to the survivors to facilitate rapport and ensure they felt safe. A high standard of benevolence was demonstrated by providing warmth, respect, and transparency during assessments to ensure participants' best interests remain central. Informed consent was obtained from each participant after thoroughly explaining the study's purpose, risks, and benefits so that they could comprehensively understand before making voluntary decisions regarding participation. Individual assistance and behavioral observations during testing were in place, noting significant reactions from exposure to items in the tests. Confidentiality was rigorously upheld through coded data and secure storage of records, with all materials destroyed post-study. The study also emphasized non-maleficence, employing a

distress protocol for any adverse reactions during the data gathering and having an on-call psychologist available. Survivors who obtained significant scores were provided with intervention by a clinician.

to utilize unhealthy coping to avoid or reduce distress.

This finding supports previous findings that survivors of childhood sexual abuse showed a greater likelihood of developing severe mental health issues, emphasizing the cumulative impact of child sexual

Table 1
PCL-5 and TSI-2 Profile

Trauma and Related Psychological Outcomes	Normal		Problematic		Clinically Elevated		Mean	SD
	f	%	f	%	f	%		
PCL-5	21	44.68	-	-	26	55.32	26.13	19.22
Self-Disturbance	34	72.34	7	14.89	6	12.77	51.77	10.64
Trauma	33	70.21	6	12.77	8	17.02	52.66	12.16
Externalization	32	68.09	5	10.64	10	21.28	54.64	13.31
Somatization	37	78.72	5	10.64	5	10.64	48.04	13.80
Anxious Arousal	35	74.47	3	6.38	9	19.15	50.68	11.54
Anxiety	35	74.47	7	14.89	5	10.64	50.70	10.27
Hyperarousal	36	76.60	4	8.51	7	14.89	50.49	11.90
Depression	37	78.72	5	10.64	5	10.64	50.55	9.72
Anger	39	82.98	5	10.64	3	6.38	50.85	9.65
Intrusive Experiences	32	68.09	4	8.51	11	23.40	53.77	12.33
Defensive Avoidance	37	78.72	1	2.13	9	19.15	51.94	11.17
Dissociation	30	63.83	6	12.77	11	23.40	55.09	13.47
Somatic Preoccupations	37	78.72	5	10.64	5	10.64	49.15	11.83
Somatic Pain	35	74.47	8	17.02	4	8.51	47.91	11.65
Somatic General	37	78.72	6	12.77	4	8.51	50.00	11.70
Sexual Disturbance	39	82.98	6	12.77	2	4.26	49.04	9.86
Sexual Concerns	39	82.98	4	8.51	4	8.51	48.89	9.66
Dysfunctional Sexual Behavior	40	85.11	6	12.77	1	2.13	49.66	8.68
Suicidality	28	59.57	4	8.51	15	31.91	59.45	18.34
Suicidal Ideation	34	72.34	2	4.26	11	23.40	56.09	14.33
Suicidal Behavior	30	63.83	1	2.13	16	34.04	62.34	20.58
Insecure Attachment	34	72.34	8	17.02	5	10.64	50.36	10.77
Relational Avoidance	38	80.85	6	12.77	3	6.38	49.00	9.74
Rejection Sensitivity	33	70.21	6	12.77	8	17.02	51.85	11.23
Impaired Self Reference	29	61.70	9	19.15	9	19.15	55.87	11.61
Reduced Self Awareness	35	74.47	5	10.64	7	14.89	53.74	10.12
Other Directness	32	68.09	7	14.89	8	17.02	55.38	11.50
Tension Reduction Behavior	26	55.32	4	8.51	17	36.17	60.02	12.53

N=47

3.0. Results and Discussion

PCL-5 and TSI-2 profile

The Psychological Trauma Checklist measures the overall trauma level of respondents. Table 1 shows that the total mean is 26.13, which falls within the normal level. The frequency distribution also shows that 44.68% of the adult OSAEC survivors are within the normal range of trauma. However, it is essential to highlight that 55.32% obtained scores beyond the clinical cut-off, suggesting an elevated level of trauma. This indicates that, on average, the survivors are not manifesting significant trauma. The survivors likewise obtained problematic levels of suicidal behavior and tension reduction behavior. These provide evidence of the persistent impact of OSAEC victimization on some survivors, specifically on mood disturbances and the tendency for the survivors

abuse (Padmapriya & Alagesan, 2024). The study of Vispute et al. (2024) found that 77% of sexual abuse survivors had psychiatric morbidity, with a higher tendency of major depressive disorder in those assaulted multiple times, indicating a dose-response relationship between the severity of sexual abuse experiences and mental health conditions.

Similarly, pioneer studies on OSAEC victims found that they posted higher post-traumatic stress compared to non-victims. Furthermore, they found that suicidal thoughts were common among technology-facilitated sexual violence survivors. After the sexual abuse, 3 of 21 young people (one in seven) attempted suicide with recurrent self-harm (Hamilton-Giachritsis & Sleath, 2017). Locally, Tarroja et al. (2020) also found that the internalizing behaviors reported are incessant crying and self-harm. Some victims become highly distressed by

the experience, consequently manifesting depression and suicidal tendencies. However, some victims did not show irregular behavior as though OSAEC had no impact on them. Several victims are unaware that their rights have been violated, contributing to lowered distress levels. These findings highlight that multiple contextual factors vary in the experience of OSAEC victimization, such as the victim's age at the time of abuse, their relationship with the perpetrator, the grooming tactics used, length and severity of the sexual activities engaged in, and their experiences during rescue. Thereby, trauma reactions differ among survivors.

PCL-5 and TSI-2 across gender

The differences in the trauma manifestation among genders in Table 2 show that males have a higher mean in Suicidal Behavior. In contrast, females have higher means in PCL-5, Self-Disturbance, Trauma, Externalization, Somatization, Anxious Arousal, Anxiety, Hyperarousal, Depression, Anger, Intrusive Experience, Defensive Avoidance, Dissociation, Somatic Preoccupations, Somatic Pain, Somatic General, Sexual Disturbance, Sexual Concerns, Dysfunctional Sexual Behavior, Suicidality, Suicidal Ideation, Insecure Attachment, Relational Avoidance, Rejection Sensitivity, Impaired Self Reference, Reduced Self Awareness, Other Directedness, and Tension Reduction Behavior. Further variance analysis using independent samples t-test showed significant gender differences in the manifestation of overall trauma measured by PCL-5 at $p=.001$. The related psychological outcomes among males and females measured by TSI-2 likewise showed significant differences with all domains at $p=.001$, signifying gender disparity in the manifestation of related psychological outcomes, with females generally experiencing more disturbances than males.

Female OSAEC survivors showed higher susceptibility to post-traumatic stress disorder (PTSD) and other psychological outcomes, with statistics indicating a notable gender disparity. It has been established by previous research that approximately 10% to 12% of women are prone to developing PTSD in contrast to

5% to 6% of men (Kessler et al., 2017; Yazawa et al., 2022). Apart from prevalence and predisposition to developing PTSD, several studies have found that there are gender differences in how sexual exploitation and abuse impact individuals (Miller et al., 2016).

Both males and females can experience PTSD after sexual violence, but the specific symptoms may differ. Females may commonly report symptoms such as re-experiencing the traumatic event, avoidance of reminders, negative changes in mood and cognition, and increased arousal. Males may also exhibit these symptoms, but the prevalence and nature of specific symptoms might vary (Rechenberg & Schomerus, 2023). In the same manner, both genders may experience shame and stigma after sexual violence, but the societal and cultural context can influence how these feelings are expressed. Males might face unique challenges due to societal expectations regarding masculinity and vulnerability.

Table 2
PCL-5 and TSI-2 Across Gender

Trauma Domain	Male	Female	Sig (p)
	M	M	
PCL-5	18.83	28.63	0.001
Self-Disturbance	48.92	52.74	0.001
Trauma	49.08	53.89	0.001
Externalization	52.42	55.40	0.001
Somatization	42.17	50.06	0.001
Anxious Arousal	48.58	51.40	0.001
Anxiety	48.67	51.40	0.001
Hyperarousal	49.00	51.00	0.001
Depression	48.08	51.40	0.001
Anger	48.17	51.77	0.001
Intrusive Experience	50.00	55.06	0.001
Defensive Avoidance	46.00	53.97	0.001
Dissociation	52.58	55.94	0.001
Somatic Preoccupations	45.75	50.31	0.001
Somatic Pain	45.75	48.66	0.001
Somatic General	44.75	51.80	0.001
Sexual Disturbance	47.25	49.66	0.001
Sexual Concerns	47.00	49.54	0.001
Dysfunctional Sexual Behavior	48.25	50.14	0.001
Suicidality	58.25	59.86	0.001
Suicidal Ideation	54.08	56.77	0.001
Suicidal Behavior	63.08	62.09	0.001
Insecure Attachment	46.67	51.63	0.001
Relational Avoidance	46.00	50.03	0.001
Rejection Sensitivity	48.17	53.11	0.001
Impaired Self Reference	55.25	56.09	0.001
Reduced Self Awareness	50.75	54.77	0.001
Other Directedness	53.08	56.17	0.001
Tension Reduction Behavior	58.25	60.63	0.001

N=47

PCL-5 and TSI-2 across living arrangement

Table 3 shows the means of trauma manifestation across living arrangements and relationship status. Those who are not in committed relationships and not engaged in childcare have lesser trauma manifestations. Single adult OSAEC survivors did not register any clinically elevated symptoms. In contrast, the survivors living with a partner and with a child obtained means in the problematic level of suicidality (65.45), suicidal behaviors (72.27), and tension reduction behavior (62.18). Variance test using independent samples t-test provided evidence on the significant differences in trauma and related psychological outcomes between single survivors and those living with partner and child at $p=.024$ in PCL-5 and $p=.001$ in all domains of TSI-2.

The findings imply that the survivors who are living with a partner and engaged in childcare are presumably dealing with more daily stress as they are navigating spousal relationships, childcare, and parenting. At a young age, the overwhelming responsibilities of building a family may activate pre-existing vulnerabilities, resulting in emotional difficulties. This is consistent with previous studies revealing that the rigors of daily stress can significantly disrupt functioning and amplify psychological symptoms in individuals who have experienced childhood trauma. Research indicates that adverse childhood experiences (ACEs) heighten the harmful effects of daily stressors, leading to increased negative effects and chronic health issues over time (Kong et al., 2021; Rogerson et al., 2024).

PCL-5 and TSI-2 across relationship with perpetrator

Table 4 displays the mean trauma level of the survivors when grouped according to the type of perpetrator. It can be observed that those who were

perpetrated by community predators manifested higher trauma disturbances in most domains. Specifically, those perpetrated by community predators obtained problematic levels of suicidal

Table 3
PCL-5 and TSI-2 Across Living arrangement

Trauma Domain	Single	Living with a Partner, with a child	Sig (p)
PCL-5	23.72	34.00	0.024
Self-Disturbance	51.14	53.82	0.001
Trauma	51.17	57.55	0.001
Externalization	53.03	59.91	0.001
Somatization	45.83	55.27	0.001
Anxious Arousal	49.08	55.91	0.001
Anxiety	49.61	54.27	0.001
Hyperarousal	48.81	56.00	0.001
Depression	49.86	52.82	0.001
Anger	49.61	54.91	0.001
Intrusive Experience	52.39	58.27	0.001
Defensive Avoidance	51.00	55.00	0.001
Dissociation	53.61	59.91	0.001
Somatic Preoccupations	47.28	55.27	0.001
Somatic Pain	46.00	54.18	0.001
Somatic General	48.36	55.36	0.001
Sexual Disturbance	47.89	52.82	0.001
Sexual Concerns	47.67	52.91	0.001
Dysfunctional Sexual Behavior	49.03	51.73	0.001
Suicidality	57.61	65.45	0.001
Suicidal Ideation	55.03	59.55	0.001
Suicidal Behavior	59.31	72.27	0.001
Insecure Attachment	50.14	51.09	0.001
Relational Avoidance	48.86	49.45	0.001
Rejection Sensitivity	51.75	52.18	0.001
Impaired Self Reference	55.39	57.45	0.001
Reduced Self Awareness	53.67	54.00	0.001
Other Directedness	54.14	59.45	0.001
Tension Reduction Behavior	59.36	62.18	0.001

N=47

behavior (69.24), suicidal ideation (60.29), suicidality (65.29), and tension reduction behavior (63.43). Those whose perpetrators are family members (immediate and relative) registered means within the normal range in all domains of PCL-5 and TSI-2. Further analysis of multiple comparisons using Games-Howell showed significant differences across the different groups in all domains of disturbances. This means that survivors who were perpetrated by either immediate family members, relatives, or non-family predators in the community have different manifestations of trauma and related psychological disturbances, with those facilitated by community predators having more severe manifestations.

OSAEC has been established as a family-based crime, and most local facilitators are individuals related to the child (IJM, 2020; UNICEF, 2016). However, community-based predators are likewise

lurking in neighborhoods, preying on innocent children. In either of these operations, capitalizing on the relationship with the child while gradually normalizing sexual activities is done.

Consistently, the relationship with the sexual predator was found to influence the perception of trauma significantly. Abuse from a significant other often leads to confusion rather than immediate trauma, affecting how the child processes the experience and their subsequent emotional responses (Roopesh, 2022). Meanwhile, the nature of the relationship, including the abuser's traits and the dynamics of the interaction, plays an important part in determining the psychological impact on the victim. Traits such

as emotional disconnection and predatory behavior in abusers exacerbate the trauma experienced by victims (Humeny et al., 2022).

One component of the victim-perpetrator relationship is the grooming involved, which is specifically critical in OSAEC. Álvarez-Guerrero et al. (2024) explained that grooming in online child sexual exploitation involves perpetrators manipulating victims through deceptive communication, building trust, and desensitizing them to sexual content. It is possible that the grooming and emotional connection that OSAEC survivors had with their family and relatives must have buffered the manifestation of trauma. The perception of OSAEC as not a form

Table 4A
PCL-5 and TSI-2 Across Relationship with Perpetrator

Trauma Domain	Multiple Comparisons		Mean Difference	Sig (p)
Self-Disturbance	community perpetrator	immediate family	3.76	0.001
	community perpetrator	relative	4.25	0.001
	immediate family	relative	0.49	0.001
Trauma	community perpetrator	immediate family	5.64	0.001
	community perpetrator	relative	5.56	0.001
	relative	immediate family	0.08	0.087
Externalization	community perpetrator	immediate family	7.26	0.001
	community perpetrator	relative	6.87	0.001
	relative	immediate family	0.39	0.001
Somatization	community perpetrator	immediate family	12.24	0.001
	community perpetrator	relative	9.54	0.001
	relative	immediate family	2.7	0.001
Anxious Arousal	community perpetrator	immediate family	6.29	0.001
	community perpetrator	relative	6.89	0.001
	immediate family	relative	0.6	0.001
Anxiety	community perpetrator	immediate family	5.81	0.001
	community perpetrator	relative	5.31	0.001
	relative	immediate family	0.5	0.001
Hyperarousal	community perpetrator	immediate family	5.53	0.001
	community perpetrator	relative	7.2	0.001
	immediate family	relative	1.68	0.001
Depression	community perpetrator	immediate family	5.22	0.001
	community perpetrator	relative	4.49	0.001
	relative	immediate family	0.74	0.001
Anger	community perpetrator	immediate family	4.7	0.001
	community perpetrator	relative	7.05	0.001
	immediate family	relative	2.35	0.001
Intrusive Experiences	community perpetrator	immediate family	6.99	0.001
	community perpetrator	relative	6.03	0.001
	relative	immediate family	0.96	0.001
Defensive Avoidance	community perpetrator	immediate family	4.3	0.001
	community perpetrator	relative	3.94	0.001
	relative	immediate family	0.36	0.001
Dissociation	community perpetrator	immediate family	6.25	0.001
	community perpetrator	relative	8.4	0.001
	immediate family	relative	2.15	0.001
Somatic Preoccupations	community perpetrator	immediate family	8.77	0.001
	community perpetrator	relative	9.44	0.001
	immediate family	relative	0.68	0.001
Somatic General	community perpetrator	immediate family	11.42	0.001
	community perpetrator	relative	10.15	0.001
	relative	immediate family	1.28	0.001
	community perpetrator	relative	7.03	0.001
	immediate family	relative	1.41	0.001

N=47

of abuse is more likely when it is the survivors' own parents or relatives who groomed them. The findings indicate that OSAEC victimization is a less threatening experience with a facilitator whom the survivor has a relationship with than community predators who are non-family members.

stress symptoms increase with age among survivors who were victimized in OSAEC. The strength of the relationship was moderate. Further results of the Pearson correlation suggest that all domains of TSI-2 significantly correlate with the present age of the survivors, signifying an increase in the related psychological outcomes. However, the strength of the

Table 4B
PCL-5 and TSI-2 Across Relationship with Perpetrator

Trauma Domain	Multiple Comparisons		Mean Difference	Sig (p)
Somatic Pain	community perpetrator	relative	10.15	0.001
	relative	immediate family	1.28	0.001
	community perpetrator	immediate family	5.55	0.001
	community perpetrator	relative	6.74	0.001
Sexual Concerns	immediate family	relative	1.19	0.001
	community perpetrator	immediate family	4.57	0.001
	community perpetrator	relative	0.57	0.001
	relative	immediate family	4	0.001
Sexual Disturbance	community perpetrator	immediate family	6.85	0.001
	community perpetrator	relative	3.4	0.001
	relative	immediate family	3.45	0.001
	community perpetrator	immediate family	7.58	0.001
Dysfunctional Sexual Behavior	community perpetrator	relative	5.13	0.001
	community perpetrator	immediate family	2.45	0.001
	relative	immediate family	13.86	0.001
	community perpetrator	relative	10.24	0.001
Suicidal Behavior	community perpetrator	immediate family	3.63	0.001
	community perpetrator	relative	7.6	0.001
	relative	immediate family	7.59	0.001
	relative	immediate family	0.01	0.001
Suicidal Ideation	community perpetrator	immediate family	10.97	0.001
	community perpetrator	relative	9.89	0.001
	relative	immediate family	1.09	0.001
	community perpetrator	immediate family	1.46	0.001
Suicidality	community perpetrator	relative	3.12	0.001
	community perpetrator	immediate family	1.66	0.001
	relative	relative	2.23	0.001
	immediate family	relative	2.36	0.001
Insecure Attachment	immediate family	community perpetrator	0.13	0.001
	community perpetrator	immediate family	2.98	0.001
	community perpetrator	relative	3.77	0.001
	immediate family	relative	0.79	0.001
Relational Avoidance	community perpetrator	immediate family	1.84	0.001
	community perpetrator	relative	4.82	0.001
	immediate family	relative	2.99	0.001
	community perpetrator	immediate family	2.42	0.001
Rejection Sensitivity	community perpetrator	relative	2.25	0.001
	community perpetrator	immediate family	0.18	0.001
	relative	immediate family	4.58	0.001
	community perpetrator	relative	6.53	0.001
Impaired Self Reference	community perpetrator	relative	1.95	0.001
	community perpetrator	immediate family	5.62	0.001
	immediate family	relative	7.03	0.001
	community perpetrator	relative	1.41	0.001
Reduced Self Awareness	community perpetrator	relative	1.41	0.001
	community perpetrator	immediate family	1.41	0.001
	relative	relative	1.41	0.001
	immediate family	relative	1.41	0.001
Other Directedness	community perpetrator	relative	1.41	0.001
	community perpetrator	immediate family	1.41	0.001
	immediate family	relative	1.41	0.001
	community perpetrator	relative	1.41	0.001
Tension Reduction Behavior	community perpetrator	relative	1.41	0.001
	community perpetrator	immediate family	1.41	0.001
	immediate family	relative	1.41	0.001
	community perpetrator	relative	1.41	0.001

N=47

Relationship between trauma scales, present age, and age during OSAEC victimization

Table 5 shows that PCL-5 is positively related to the survivors' present age at 0.01 level of significance, suggesting the presence and severity of post-traumatic

relationships ranges from low to very low. The results imply that survivors of OSAEC typically exhibit more signs of trauma as they get older. This progression could be caused by a myriad of factors, including cumulative stress, extended trauma exposure, or

delayed development of specific symptoms.

The age of the survivors during the OSAEC victimization was likewise analyzed in terms of its relationship with subsequent trauma and related psychological outcomes. PCL-5 was positively related to age during OSAEC victimization at 0.01 level of significance, suggesting trauma and related psychological outcomes increased with age during OSAEC victimization. The strength of the relationship was moderate. This indicates that younger children victimized by OSAEC may have a lesser propensity to develop PTSD, while older child victims are more at risk of developing trauma symptoms.

The delay in the manifestation of trauma among victims of childhood sexual abuse can be attributed to several interrelated factors. One significant aspect is memory suppression, where individuals unconsciously block out traumatic memories, leading to a later emergence of symptoms when these memories resurface due to triggers or stressors (Sacchet et al., 2017). Additionally, victims often develop coping mechanisms such as dissociation and avoidance, which can mask trauma symptoms until these strategies become ineffective (Marvin, 2017). Together, these factors create a complex landscape that delays the recognition and processing of trauma in survivors.

Interestingly, there were significant negative associations of TSI-2 domains with the age of the respondents during OSAEC, which include defensive avoidance, dissociation, reduced self-awareness, depression, suicidal ideation, self-disturbance, tension reduction behavior, anger, rejection sensitivity, insecure attachment, and relational avoidance. This implies a higher manifestation of these trauma symptoms in survivors who were younger when the abuse happened. Furthermore, the correlations analysis found a positive relationship between hyperarousal impaired

self-reference, anxious arousal, suicidality, trauma, intrusive experiences, somatization, somatic preoccupations, other-directedness, somatic pain, sexual concerns, suicidal behavior, dysfunctional sexual behavior, sexual disturbance, and age during OSAEC of the respondents at 1% level of significance. The positive relationship implies that these symptoms manifest with increased age during victimization.

The manifestation of specific trauma and related psychological symptoms may vary as it occurs in different periods during their childhood. Younger age during victimization seems to be related to lower trauma and related psychological outcomes, while older age during victimization poses higher later life disturbances. Younger children have more limited cognitive abilities to process that what is being done to them is a form of exploitation and abuse; thus, it may not be perceived as traumatic. The findings of this study negate previous investigations that concluded that when abuse occurs at a young age, they are more prone to have difficulties, such as PTSD, internalizing and externalizing problems, and peer victimization (Hébert et al., 2016).

Table 5
Relationship between trauma scales, present age, and age during OSAEC victimization

Trauma	Present Age	Age during OSAEC
PCL 5 Score	.413**	.175**
Self-Disturbance	.211**	-.066**
Trauma	.243**	.036**
Externalization	.265**	-0.001 ^{ns}
Somatization	.313**	.051**
Anxious Arousal	.375**	.032**
Anxiety	.303**	-0.003 ^{ns}
Hyperarousal	.366**	.014**
Depression	.223**	-.046**
Anger	.226**	-.76**
Intrusive Experiences	.190**	.039**
Defensive Avoidance	.150**	-.007**
Dissociation	.221**	-.018**
Somatic Preoccupations	.358**	.070**
Somatic Pain	.389**	.125**
Somatic General	.280**	0.001 ^{ns}
Sexual Disturbance	.304**	.180**
Sexual Concerns	.264**	.147**
Dysfunctional Sexual Behavior	.288**	.173**
Suicidality	.294**	.033**
Suicidal Ideation	.249**	-.057**
Suicidal Behavior	.362**	.164**
Insecure Attachment	.114**	-.137**
Relational Avoidance	.036**	-.145**
Rejection Sensitivity	.172**	-.122**
Impaired Self Reference	.260**	.028**
Reduced Self Awareness	.119**	-.039**
Other Directedness	.347**	.115**
Tension Reduction Behavior	.154**	-.066**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.0. Conclusion

The findings uncovered in this study suggest that adult survivors of OSAEC may not exhibit overt symptoms of trauma as measured by the PCL-5. However, they do experience significant mood disturbances, particularly in the form of suicidal behaviors and tension reduction behaviors. Moreover, the observed gender, civil status, and relationship with perpetrator differences imply that certain demographic groups within the survivor population, specifically females perpetrated by a non-family member living with a partner and with children, appear to be at higher risk. The correlation between trauma and related psychological outcomes with age suggests that these disturbances may evolve over the lifespan of survivors. Understanding how age influences psychological well-being can help tailor interventions to address the changing needs of survivors at different stages of life.

5.0. Limitations of the Findings

This study is a pioneer investigation of the outcomes of adult survivors of the live-streamed OSAEC, an emerging child trafficking in the cyberspace. The OSAEC survivors, now adults, are limited; thus, the number of respondents is relatively small, given that the phenomenon has budded in recent years. Meanwhile, the type of OSAEC victimization included in this study is confined to the image-based and live-streamed trade, two of the worst forms of sexual trafficking online. This limits the generalizability of the findings to other forms of OSAEC, such as sextortion or self-generated sexual materials. The methods of the study likewise relied on self-reports in standard assessments, capturing their present disturbances and functioning. Thereby, there are limitations on the ability to infer causal relations of childhood OSAEC victimization to their present disturbances, given the myriads of other factors affecting their present functioning, which were not factored out in the data. Nevertheless, these preliminary findings provide a glimpse into the outcomes of adult survivors of OSAEC.

6.0. Practical Value of the Paper

The present study uncovered the complex and enduring nature of the trauma and related psychological outcomes among adult survivors of OSAEC. Profiling of these mental health outcomes of adult OSAEC survivors is of paramount importance for practitioners in the case management of the survivors. The findings strongly imply the need for continuous conduct of assessment, monitoring, and follow-up beyond childhood, given the lasting nature of OSAEC victimization through government and non-government social services.

Mental health professionals working with survivors of OSAEC can be guided by the findings of the study in designing comprehensive and targeted trauma treatment to facilitate recovery. Specifically, the results highlight the need for trauma interventions that consider demographic factors such as gender, developmental age, and nature of sexualized activities during the victimization. Meanwhile, the digital aspect of the abuse, particularly the widespread and permanency that perpetuates hounding fear and threat, must likewise be addressed in therapy. Beyond trauma, the mood disturbances and unhealthy coping behaviors found in the study must likewise be processed. Embedding emotional regulation, mindfulness skills, and resiliency skills into the therapy program will help them gain adaptive skills for recovery.

Given the adverse outcomes of OSAEC victimization found in this study, policies can be lobbied on coordinated and strategic national and local prevention advocacy initiatives. Involving local communities, churches, schools, media, and business sectors in educating children and parents on the nature and harms of OSAEC is needed to dispel the “no touch, no harm” and other stigma around OSAEC victimization.

7.0. Directions for Future Research

Future research focusing on designing and validating a tailored-fit trauma intervention for OSAEC survivors is imperative. Furthermore, a longitudinal study design that measures survivors’ psychological outcomes over time is recommended to provide an understanding of the symptom’s manifestation across developmental stages. Diving deeper into the other forms of OSAEC, such as self-generated sexual abuse materials and sextortion, will likewise provide insight into the full picture of OSAEC victimization. Meanwhile, investigating post-traumatic growth among OSAEC survivors would provide a picture of whether their experiences fostered resiliency and growth.

8.0. Declaration of Conflict of Interest

The authors declare that the research has no financial or commercial relationships that could be construed as conflict of interest.

REFERENCES

- Álvarez-Guerrero, G., Fry, D., Lu, M., & Gaitis, K. K. (2024). Online child sexual exploitation and abuse of children and adolescents with disabilities: A systematic review. *Disabilities*, 4(2), 264–276. <https://doi.org/10.3390/disabilities4020017>

- American Psychological Association (APA). (2020). Experiencing childhood trauma makes body and brain age faster. <https://www.apa.org/news/press/releases/2020/08/experiencing-childhood-trauma>
- Assini-Meytin, L. C., Thorne, E. J., Sanikommu, M., Green, K. M., & Letourneau, E. J. (2022). Impact of child sexual abuse on socioeconomic attainment in adulthood. *Journal of Adolescent Health, 71*, 594–600. <https://doi.org/10.1016/j.jadohealth.2022.05.013>
- Australian Transaction Reports and Analysis Centre (AUSTRAC). (2019). *Combating the sexual exploitation of children for financial gain activity indicators report*. https://www.austrac.gov.au/sites/default/files/201911/Fintel%20Alliance%20Financial%20Indicators%20Report_Combating%20the%20sexual%20exploitation%20of%20children.pdf
- Bailey, J., Flynn, A., & Henry, N. (2021). Pandemics and systemic discrimination: Technology-facilitated violence and abuse in an era of COVID-19 and antiracist protest. *The Emerald International Handbook of Technology-Facilitated Violence and Abuse* (pp. 787–797). Emerald Publishing Limited. <https://hdl.handle.net/10779/rmit.27415407.v1>
- Briere, J. (2011). *Trauma Symptom Inventory-2 (TSI-2)*. Psychological Assessment Resources. <https://www.parinc.com/products/TSI-2>
- Clayton, E., Jones, C., Brown, J., & Taylor, J. (2018). The aetiology of child sexual abuse: A critical review of the empirical evidence. *Child Abuse Review, 27*(2), 181–197. <https://doi.org/10.1002/car.2517>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Custers, B. (2022). New digital rights: Imagining additional fundamental rights for the digital era. *Computer Law & Security Review, 44*, 105636. <https://doi.org/10.1016/j.clsr.2021.105636>
- Downing, N. R., Akinlotan, M., & Thornhill, C. W. (2021). The impact of childhood sexual abuse and adverse childhood experiences on adult health-related quality of life. *Child Abuse & Neglect, 120*, 105181. <https://doi.org/10.1016/j.chiabu.2021.105181>
- End Child Prostitution, Child Pornography and Trafficking (ECPAT) International. (2017). *Online child sexual exploitation: An analysis of emerging and selected issues*. http://ecpat.de/wp-content/uploads/2018/08/Journal_No12-ebook.pdf
- End Child Prostitution, Child Pornography and Trafficking (ECPAT), International Criminal Police Organization (INTERPOL), & United Nations Children's Fund (UNICEF). (2022). *Disrupting Harm in the Philippines: Evidence on online child sexual exploitation and abuse*. https://www.end-violence.org/sites/default/files/2022/04/DH_Philippines_ONLINE_FINAL.pdf
- Firth, J. A., Torous, J., & Firth, J. (2020). Exploring the impact of internet use on memory and attention processes. *International Journal of Environmental Research and Public Health, 17*(24), 9481. <https://doi.org/10.3390/ijerph17249481>
- Hailes, H. P., Yu, R., Danese, A., & Fazel, S. (2019). Long-term outcomes of childhood sexual abuse: An umbrella review. *The Lancet Psychiatry, 6*, 830–839. [https://doi.org/10.1016/S2215-0366\(19\)30286-X](https://doi.org/10.1016/S2215-0366(19)30286-X)
- Halpern, S. C., Schuch, F. B., Scherer, J. N., Sordi, A. O., Pachado, M., Dalbosco, C., ... (2018). Child maltreatment and illicit substance abuse: A systematic review and meta-analysis of longitudinal studies. *Child Abuse Review, 27*, 344–360. <https://doi.org/10.1002/car.2534>
- Hamilton-Giachritsis, C. E., & Sleath, E. (2017). Effects of interpersonal crime on victims. In G. Davies & A. R. Beech (Eds.), *Forensic Psychology* (3rd ed.). Chichester: John Wiley and Sons.
- Hanson, E. (2017). The impact of online sexual abuse on children and young people: Impact, protection and prevention. In *Online Risk to Children: Impact, Protection and Prevention* (1st ed., pp. 97–122). <https://doi.org/10.1002/9781118977545.ch6>
- Hébert, M., Langevin, R., & Daigneault, I. (2016). The association between peer victimization, PTSD, and dissociation in child victims of sexual abuse. *Journal of Affective Disorders, 193*, 227–232. <https://doi.org/10.1016/j.jad.2015.12.080>
- Humeny, C., Forth, A., & Logan, J. (2022). Psychopathic traits predict the severity of post-traumatic stress in survivors of intimate partner abuse. *Personality and Individual Differences, 193*, 111611. <https://doi.org/10.1016/j.paid.2022.111611>
- International Justice Mission (IJM). (2020). *Online sexual exploitation of children in the Philippines: Analysis and recommendations for governments, industry and civil society*. https://ijmstoragelive.blob.core.windows.net/ijmna/documents/studies/Final-Public-Full-Report-5_20_2020.pdf
- Johns, B. A. Z., Casola, A. R., Rea, O., Skolnik, N., & Fidler, S. K. (2024). Safe-guarding

- youth from online sexual exploitation in the digital era: A role for primary care. *American Journal of Lifestyle Medicine*. <https://doi.org/10.1177/15598276241268236>
- Joleby, M., Lunde, C., Landström, S., & Jonsson, L. S. (2020). "All of me is completely different": Experiences and consequences among victims of technology-assisted child sexual abuse. *Frontiers in Psychology*, *11*, 606218. <https://doi.org/10.3389/fpsyg.2020.606218>
- Joshi, R., Pavithra, N., & Singh, C. K. (2022). Internet an integral part of human life in 21st Century: A review. *Current Journal of Applied Science and Technology*, *41*, 12–18. <https://doi.org/10.9734/cjast/2022/v41i1363963>
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., Degenhardt, L., De Girolamo, G., Dinolova, R. V., Ferry, F., Florescu, S., Gureje, O., Haro, J. M., Huang, Y., Karam, E. G., Kawakami, N., Lee, S., Lepine, J., Levinson, D., . . . Koenen, K. C. (2017). Trauma and PTSD in the WHO World Mental Health Surveys. *European Journal of Psychotraumatology*, *8*(sup5). <https://doi.org/10.1080/20008198.2017.1353383>
- Kong, J., Liu, Y., Goldberg, J., & Almeida, D. M. (2021). Adverse childhood experiences amplify the longitudinal associations of adult daily stress and health. *Child Abuse & Neglect*, *122*, 105337. <https://doi.org/10.1016/j.chiabu.2021.105337>
- Kuhlmann, D. F., & Aurén, S. (2015). Nipa huts with high-speed internet: Commercial exploitation of children in the 21st century. *A qualitative investigation of webcam child prostitution in the Philippines*. <https://lup.lub.lu.se/student-papers/search/publication/5424968>
- Marvin, D. (2017). An analysis of positive coping mechanisms utilized to overcome trauma in post-genocidal Rwanda. *Independent Study Project (ISP) Collection*. https://digitalcollections.sit.edu/isp_collection/2576
- McLaughlin, K. A., Sheridan, M. A., & Lambert, H. K. (2019). Childhood adversity and neural development: A systematic review. *Annual Review of Clinical Psychology*, *16*, 277–302. <https://doi.org/10.1146/annurev-clinpsy-021815-093006>
- Makinde, O. A., Olamijuwon, E., Ichebgo, N. K., Onyemelukwe, C., & Ilesanmi, M. G. (2021). The nature of technology-facilitated violence and abuse among young adults in sub-Saharan Africa. In J. Bailey, A. Flynn, & N. Henry (Eds.), *The Emerald International Handbook of Technology-Facilitated Violence and Abuse* (pp. 83–101). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83982-848-520211005>
- Miller, J. L., Va Midde, K. N., & Mittenberg, W. (2016). Gender differences in the long-term impact of exposure to trauma: A review of event-related potential studies. *Biological Psychology*, *121*, 77–89.
- Padmapriya, P., & Alagesan, M. (2024). Silent sufferers: Long-term impact on physical and mental health of child sexual abuse survivors. *Salud Ciencia Y Tecnología – Serie De Conferencias*, *3*, 901. <https://doi.org/10.56294/sctconf2024901>
- Rechenberg, T., & Schomerus, G. (2023). The stronger and the weaker sex: Gender differences in the perception of individuals who experienced physical and sexual violence in childhood. *Child Abuse & Neglect*, *140*, 106131. <https://doi.org/10.1016/j.chiabu.2023.106131>
- Rogerson, O., O'Connor, R. C., & O'Connor, D. B. (2024). The effects of childhood trauma on stress-related vulnerability factors and indicators of suicide risk: An ecological momentary assessment study. *Journal of Affective Disorders*, *352*, 479–489. <https://doi.org/10.1016/j.jad.2024.02.029>
- Roopesh, B. N. (2022). Child sexual abuse in a trusted relationship: Trauma or confusion? In *Child safety, welfare and well-being: Issues and challenges* (pp. 91-102). Springer Singapore. https://doi.org/10.1007/978-81-322-2425-9_6
- Sacchet, M. D., Levy, B. J., Hamilton, J. P., Maksimovskiy, A., Hertel, P. T., Joormann, J., . . . & Gotlib, I. H. (2017). Cognitive and neural consequences of memory suppression in major depressive disorder. *Cognitive, Affective, & Behavioral Neuroscience*, *17*, 77-93. <https://doi.org/10.3758/s13415-016-0464-x>
- Schmidt, F., Varese, F., & Bucci, S. (2023). Understanding the prolonged impact of online sexual abuse occurring in childhood. *Frontiers in Psychology*, *14*, 1281996. <https://doi.org/10.3389/fpsyg.2023.1281996>
- Scroger, M., Draper, R. S., & McQuillan, B. (2024). Online sexual abuse and exploitation of children in the Philippines: An exploratory study of outcomes after reintegration into the community. *Child Abuse & Neglect*, *152*, 106805. <https://doi.org/10.1016/j.chiabu.2024.106805>
- Tarroja, M., Lapena, M. A., Ong, E., Resurreccion, R., & Roldan, M. D. (2020). National study on online sexual abuse and exploitation of children in the Philippines: Final report. <https://www.unicef.org/philippines/media/2711/file/UNIPH-2021-NationalStudyOSAEC-FullReport.pdf>
- Teicher, M. H., & Samson, J. A. (2016). Annual

- research review: Enduring neurobiological effects of childhood abuse and neglect. *Journal of Child Psychology and Psychiatry*, 57(3), 241–266. <https://doi.org/10.1111/jcpp.12507>
- United Nations Children’s Fund (UNICEF). (2016). Perils and possibilities: Growing up online. https://www.unicef.org/endviolence/endviolenceonline/files/UNICEF_Growing-up-online.pdf
- Vispute, Y., Sinha, D., Pawar, A., Mane, A., & Jaiswal, S. V. (2024). Mental health and sociodemographic correlates of child sexual abuse. *Indian Journal of Social Psychiatry*. https://doi.org/10.4103/ijsp.ijsp_154_23
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). PTSD Checklist for DSM-5 (PCL-5). National Center for PTSD.
- WeProtect Global Alliance. (2015). *WeProtect Global Alliance to End Child Sexual Exploitation Online*. https://ec.europa.eu/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/global-alliance-against-child-abuse_en
- WeProtect Global Alliance. (2023). Global threat assessment 2023. <https://www.weprotect.org/wp-content/uploads/Global-Threat-Assessment-2023-Press-Release.pdf>
- Yazawa, A., Aida, J., Kondo, K., & Kawachi, I. (2022). Gender differences in risk of post-traumatic stress symptoms after disaster among older people: Differential exposure or differential vulnerability? *Journal of Affective Disorders*, 297, 447–454. <https://doi.org/10.1016/j.jad.2021.10.094>

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