



PSYCHOLOGICAL IMPACT OF CHILDHOOD TRAUMA ON ADOLESCENTS: A SCOPING REVIEW

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ABSTRACT

Violence experienced in childhood will lead to a period of crisis when a person is in adolescence. The crisis period that arises is unique to adolescence. Some adolescents become increasingly experiencing crises or problems when in childhood they experience an unpleasant event or even trauma. Traumatic experiences in childhood will have their own impact on adolescents. Objective: This study aims to get a clear picture of the psychological impact of childhood trauma on adolescents. Methods: Researchers use the scoping review method. The literature search was conducted using the search keywords "adolescents" AND "psychological" AND "childhood" AND "trauma". The databases used were Scencedirect, Scopus, and Pubmed. Inclusion criteria were articles reviewed from publications within the last 5 years (2019-2023), articles that were in English, quantitative and/or qualitative research with a study population of former adolescents who experienced childhood trauma, and the full article was accessible. Stepwise screening was conducted and documented according to the PRISMA flowchart. Results: Based on identification, there were 463 articles from search engines from scencedirect, scopus, and pubmed. The final results obtained were 6 articles that fit the criteria after going through the selection process. Childhood trauma has psychological effects that can arise such as the impact of mental distress at risk of suicide, the impact of suicide, psychosis (mental disorders), psychiatric disorders in offspring, borderline personality disorder and the impact on internet addiction. Researchers used the PEO (population, exposure, outcome) question format to find related research articles. Conclusion: Based on the analysis of the 6 literatures that have been reviewed, it can be concluded that the incidence of childhood trauma in adolescents will have a psychological impact.

Keywords: adolescents; childhood; trauma psychological impact

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INTRODUCTION

Psychological sensitivity in children is very strong, so harsh treatment of children will have fatal consequences on their psychological condition. In Indonesia alone, the number of cases of violence against children in 2023 was recorded at 25,869 cases. the prevalence of cases of violence against children based on gender for male victims who had experienced violence in childhood was 5,382 cases and for female victims who experienced violence in childhood was 22,738 cases (Anon, 2023). Violence experienced in childhood will cause a crisis period when a person is in adolescence. The crisis period that arises due to childhood trauma is a special characteristic of adolescence. Some adolescents become increasingly experiencing crises or problems when they experience an unpleasant or even traumatic event in their childhood. Traumatic experiences in childhood are risk factors for the development of post-traumatic symptoms later in life when individuals face subsequent traumatic stressors (Erlita et al., 2020). Events experienced by a child that are life-threatening in nature can shape behavior in adulthood. Sexual abuse, bullying, or violence from parents are some of the childhood traumas that will cause stress and trauma in children and can have an impact on children's future in adolescence (Erlita et al., 2020). The collection of traumas experienced by children

in childhood will become psychological wounds that continue to stick in children until adolescence (Huh et al., 2017). These wounds still exist in the subconscious so that they manifest in the form of negative behaviors and emotions, for example, feelings of being unloved by others, lack of confidence, anxiety, or wanting to dominate others (Kontos et al., 2021).

Childhood trauma can have serious effects on a person's mental health well into adolescence, including difficulty regulating emotions, difficulty focusing and concentrating, and difficulty connecting with others. For some adolescents, unaddressed childhood trauma can lead to PTSD (Post-Traumatic Stress Disorder) or post-traumatic stress disorder (Kim et al., 2017). The impact of difficulty focusing and concentrating is that children who are 6-12 years old and have continuously experienced traumatic stressful events have weaker cortisol responses in stressful situations than those who have not experienced traumatic experiences. The hormone cortisol is produced to prepare individuals for what is perceived as a threat (Jones Tarter and Ross, 2021). The impact of difficulties in establishing relationships with others is that adolescents who have had childhood trauma will tend to have difficulty establishing relationships with others. Difficulty having relationships is also characterized by the person's behavior showing neediness or manipulative traits, to aggressive and violent behavior (Suzuki et al., 2014). Childhood trauma is an experience that is considered unfavorable or bad for the children who experience it. The bad experiences they experience tend to be serious so it is possible to have an impact on adolescence and adulthood. Irwanto and Kumala mentioned that in children, behaviors formed due to traumatic experiences can be rooted and embedded in the development of their personality. Based on aspects of adolescent life due to childhood trauma, it will affect social friendships and academic relationships when in the school environment. One study even found the possibility of psychosis disorder due to the trauma. In childhood, growth and development are strongly influenced by many factors, so it is not impossible that when children experience trauma it can have an impact on further development in adolescence (Irwanto, 2020).

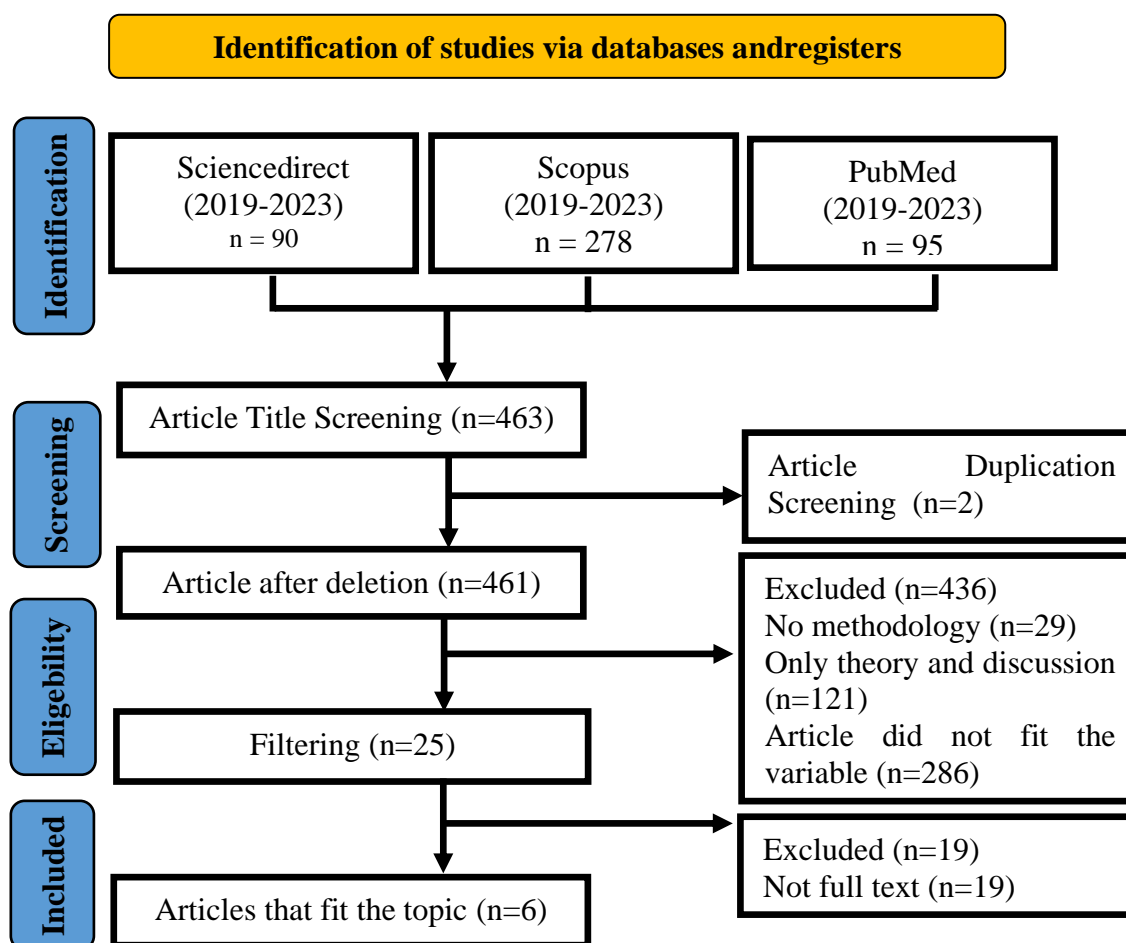
Many review articles have been conducted on adolescents who have experienced childhood trauma to determine the psychological impact caused by the trauma experienced. Research on the psychological impact was conducted on adolescents who experienced childhood trauma, but more specifically looked at the impact of anxiety, inability to control themselves, negative emotions, problems in relating to family, and sleep disturbances. Erlita's research (2020) shows that trauma that occurred in childhood has an impact on adolescence. Bad or painful experiences experienced by children will leave a mark in the long term so that the subjects need psychological assistance to be able to deal with these problems (Erlita et al., 2020). There have been many research articles on the psychological impact of childhood trauma, but there is no explanation that discusses the impact of mental distress on suicide risk, the impact of suicide, the impact of psychosis (mental disorders), the impact of psychiatric disorders on offspring, the impact of borderline personality disorder and the impact on internet addiction. This study aims to get a clear picture of the psychological impact of childhood trauma on adolescents. So the researcher conducted a scoping review related to the psychological impact of childhood trauma on adolescents.

METHOD

Researchers use the scoping review method to conduct a systematic review in identifying available evidence on a predetermined topic to find key factors of a concept (Munn et al., 2018). Scoping review is used to identify in-depth literature from various sources that are related to the research topic. The stages in preparing a scoping review refer to Arksey &

O'Malley (2005) which have been modified by Levac, Colquhoun and O'Brien including identifying research questions clearly and objectively, identifying relevant articles, selecting related literature from articles and extracting data; organizing, summarizing, and analyzing; reporting data results (Arksey and O'Malley, 2005). The research question was "What are the psychological effects of childhood trauma on adolescents?" The article used in this scoping review is the psychological impact of childhood trauma on adolescents. The literature used is in English. Participants in the reviewed articles were adolescents who experienced childhood trauma. Articles were selected based on inclusion and exclusion criteria. Inclusion criteria in this research article search included: free fulltext, open access, publication in the last 5 years (2019-2023), English language, literature with a population of adolescents who have experienced childhood trauma, quantitative and/or qualitative literature. Exclusion criteria were research articles that were not the result of a review.

Searching for related literature, this article uses data based on sciencedirect, scopus and pubmed with a research time of January 01, 2019 to December 31, 2023. In the literature search using boolean operators "OR/AND". The keywords used in the search are "adolescents" AND "psychological" AND "childhood" AND "trauma". In conducting this scoping review, the literature was searched independently through trusted databases. Articles that have been obtained are analyzed, differences, and duplication. Figure 1 describes the process of searching and selecting articles as literature using Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) (Moher et al., 2009).



Picture 1. Data extraction from selected literature

Articles that have been obtained are extracted in the form of a matrix in Microsoft Word. The domains used in data extraction include the name of the researcher, year, article title, design, respondents or participants, and the findings can be seen in table 1. The data selection process was carried out through several stages, starting from selecting articles that were in accordance with the research objectives, namely knowing the psychological impact of childhood trauma on adolescents through article titles and abstracts obtained from various search engines such as sciencedirect, scopus, and pubmed. The appropriate articles were then analyzed in more depth by reading the entire content of the article including the year of publication, location and year of research, research design, population characteristics. The collected literature was then analyzed according to the inclusion and exclusion criteria determined by the researcher and then mapping articles based on characteristics.

RESULT

A total of 463 articles were obtained as literature from sciencedirect (90 articles), scopus (278 articles), and pubmed (95 articles). There were 2 same articles in the data base to be excluded and 461 articles remained. Of the 461 articles, 436 articles were excluded because 29 had no methodology, 121 only theory and discussion and 286 articles were not related to the topic. The results of filtering articles obtained 25 and excluded related explanations and complete articles obtained 6 related articles. The 6 articles that were analyzed were all quantitative articles. Among the 6 articles to be analyzed, all of them discuss the psychological impact of childhood trauma on adolescents and on parents. The population in the articles analyzed consisted of adolescents, students and parents who experienced childhood trauma. All of the articles analyzed found several impacts that can arise in adolescents who have experienced childhood trauma. This article generally looks at what psychological impacts can arise in adolescents who have experienced childhood trauma. The results of the review of 6 articles obtained results where the psychological impact of childhood trauma on adolescents is mental distress at risk of suicide, the impact of suicide, psychosis (mental disorders), psychiatric disorders in offspring, borderline personality disorder and the impact on internet addiction.

Table 1.
Summary of selected content analysis.

Title	Author	Years	Objective	Methodes	Population and Sampling	Results
<i>The effect of childhood trauma on suicide risk: the chain mediating effects resilience and mental distress</i>	Kaimin Yao, Peiyi Chen, Hui Zhou, Jiajia Ruan, Dan Chen, Xueling Yang and You Zhou	2023	To examine the impact of childhood trauma on the risk of suicide among adolescents.	Kuantitatif	742 young adults who were at the graduate school stage from various provinces and cities in China.	The current results show that graduate students' childhood trauma not only directly impacts suicide risk, but also indirectly impacts it through the mediation of resilience and mental distress. Such mediation is achieved through the following three pathways: independent mediation effect of resilience, independent mediation effect of mental distress, chain mediation effect of resilience and mental distress.

Title	Author	Years	Objective	Methodes	Population and Sampling	Results
<i>Mediators</i>	Charlott e Lemaigr e, Emily P. Taylor	2019	To investigat e the relationsh ip between childhoo d abuse and neglect with suicide and the possible mediatin g role of affect dysregula tion and social inhibition .	Kuantitatif	86 adult men were recruited from the Men's Suicide, Harm, Awareness, Recovery and Empathy Project (SHARE), a community project based in socio-economically deprived areas of Scotland.	Mediation analysis showed that emotion dysregulation and interpersonal difficulties significantly mediated the relationship between childhood trauma and suicide with a moderate effect size. This study shows the results that childhood abuse and neglect result in emotion regulation dysfunction, leading to suicide in the context of an impoverished social environment. Providing psychological interventions aimed at improving social and emotional functioning may help protect men most at risk of suicide. protect men who are most at risk of suicide
<i>Childhood Trauma as a Risk Factor for High Risk Behaviors in Adolescents with Borderline Personality Disorder</i>	Oksana Zashchi rinskaia , Elena Isagulo va	2023	The purpose of the study was to determin e the influence of consequ nces of various psychotra umatic situations in childhoo d on the emergenc e of high- risk behaviors in adolescen ts with BPD. To this end, we first assessed and compared the	Kuantitatif	248 adolescents referred to a psychiatric clinical center. Based on the assessment, 120 Individuals aged 12-18 years were selected based on purposive sampling and included in the study group. Among them, 60 adolescents were diagnosed with BPD by a child psychiatrist and 60 adolescents had mild psychiatric conditions and others had no history of risky behavior.	This study reveals the relationship between childhood trauma and high-risk behaviors among adolescents with BPD. Significant correlations were found between various forms of childhood psychological trauma and forms of high-risk behavior in adolescents with BPD. These findings reinforce the role of childhood trauma in the formation of BPD symptoms. Emotional abuse has the strongest impact on the manifestation of high-risk forms of behavior such as suicide risk and suicidal behavior.

Title	Author	Years	Objective	Methodes	Population and Sampling	Results
			history of childhood trauma in adolescents with and without BPD. Then, we reported the prevalence of four key risky behaviors in BPD. Finally, we investigated the relationship between childhood trauma and these risk behaviors.			
<i>Childhood Trauma</i>	Rachel Rahel Pearstone, Jessica P H. Mathalona, Sophia Vinogradov	2019	To extend previous research by focusing on narrowly defined traumatic events and the age of the event to assess the impact of the timing and severity of trauma on symptoms and disorders associated with Clinical	<i>Study cohort longitudinal</i>	The study participants were 103 individuals diagnosed with CHR syndrome aged 12-30 years who were assessed as part of the of a longitudinal cohort study at the Assessment Program, Research and Treatment Program, an of early psychosis research at the University of California San Francisco (UCSF) Department of Psychiatry. Participants were referred by community providers, school counselors, family	Research suggests exposure to childhood trauma is a risk factor for psychosis. A recent meta-analysis demonstrated this effect in cross-sectional, case-control and prospective cohort studies, calculating that people with schizophrenia were 2.72 times more likely than healthy people to have experienced adverse childhood events.

Title	Author	Years	Objective	Methodes	Population and Sampling	Results
			High Risk syndrome		members or self-referred by viewing information about the the program on the Internet.	
<i>The relationship between Internet addiction and childhood trauma in adolescents: The mediating role of social support</i>	Xuanlian Sheng, Meng Yang, Menglin Ge, Ling Zhang, Cui Huang, Shu Cui, Qiuyu Yuan, Mengting Ye, Ruoche n Zhou, Panpan Cao, Ran Peng, Kai Zhang, and Xiaoqin Zhou	2022	to investigate the pathogenesis of internet addiction in adolescents. Furthermore, to explore the potential mediating role of social support in childhood trauma and internet addiction. This study provides theoretical support for future interventions targeting Internet addiction in adolescents.	<i>Cross-sectional deskriptif</i>	844 adolescents equally divided between males and females participated in the study. 428 males men and 416 girls. Their average age was 12.96 years.	Childhood trauma significantly affects the incidence of internet addiction in adolescents. Social support has a significant mediating effect on childhood trauma and internet addiction and attenuates their negative effects, the study collected 924 questionnaires, of which 9 were invalid for IAT, 37 were invalid for CTQ-SF, and 33 were invalid for SSRS.
<i>A traumatic life experience in childhood increases the risk of psychiatric disorder in the offspring</i>	Raphaël ARDIT TI, Yann LE STRAT	2020	To examine traumatic life experiences in childhood and the risk of psychiatric disorders	<i>Survei Epidemiologi Nasional</i>	NSARC-III represents the civilian, non-institutionalized adult population in the United States (aged 18 years and older). All NSARC-III participants were provided with a written	The five psychiatric disorders studied - alcohol use disorder, substance use disorder, mood disorder, antisocial personality disorder and anxiety disorder - were more prevalent in offspring when at least one parent reported traumatic life events in childhood. Moreover, the magnitude of this risk factor approached

Title	Author	Years	Objective	Methodes	Population and Sampling	Results
			in offspring.		explanation of the nature of the survey. Interviews were conducted from April 2012 to June 2013 and included 36,309 participants.	the magnitude of parental history of psychiatric disorders. The five psychiatric disorders studied, namely alcohol use disorder, substance use disorder, mood disorder, antisocial personality disorder, and anxiety disorder, were more prevalent in offspring, when at least one of the parents reported traumatic life events in their childhood. Moreover, the magnitude of this risk factor approximates the magnitude of the history of psychiatric disorders in the parents.

Based on the summary of the table above, it is known that there are several impacts that can arise in adolescents who experience childhood trauma. There are 6 main impacts that have an important role in the psychology of adolescents who experience childhood trauma, namely the impact of mental distress at risk of suicide, the impact of suicide, psychosis (mental disorders), psychiatric disorders in offspring, borderline personality disorder and the impact on internet addiction.

DISCUSSION

Based on the six literature sources that have been determined, some important points about the psychological impact of childhood trauma on adolescents are as follows:

Mental distress and suicide risk are impacts caused by childhood trauma events, research (Yao et al., 2023) found that mental distress has an important role between childhood trauma and suicide risk. The more childhood trauma they experienced, the higher the level of mental distress they experienced, which in turn increased their risk of suicide. Several Neuroimaging studies support the current findings: several key brain regions associated with mental distress are dampened in traumatized individuals such as the prefrontal cortex, anterior cingulate cortex, amygdala, and hippocampus (Dannlowski et al., 2012). Moreover, childhood trauma can also lead to dysregulation of the Hypothalamic-Pituitary-Adrenal axis (HPA axis) and serotonin and dopamine imbalances that can cause more mental distress, and ultimately increase the risk of suicide (De Bellis and Zisk, 2014).

McLaughlin's research highlights that childhood trauma can increase a person's perception of negative or stressful events, especially in those suffering from mental disorders, thus making them more vulnerable to emotional symptoms (McLaughlin et al., 2010). In addition, childhood trauma can also lead to difficulties in emotion regulation and increased emotional reactivity to negative stimuli (Pechtel and Pizzagalli, 2011). Other studies have shown that individuals who have experienced childhood trauma are more likely to perceive these events as challenging to overcome or uncontrollable, resulting in higher emotional responses (Palmer Williams and Harrington, 2020). In summary, individuals with traumatic experiences show higher sensitivity to stress, increased emotional arousal and reactivity, and poorer ability to regulate and cope with negative emotions. This increased vulnerability to mental distress ultimately contributes to an increased risk of suicide.

The next psychological impact is suicide, Research results (Lemaigre and Taylor 2019) show that childhood abuse and neglect result in emotion regulation dysfunction, leading to suicide in the context of poor social environments. Providing psychological interventions aimed at improving social and emotional functioning may help protect men who are most at risk of suicide. Childhood abuse increased the risk of suicide attempts among adults by three to five times in a large cohort collected as part of the retrospective adverse childhood events (ACES) study (Dube et al., 2001). Some researchers suggest psychological abuse is associated with suicidal thoughts or attempts (Bahk et al., 2017). People who suffer interpersonal trauma in childhood are two to five times more likely to exhibit high-risk behaviors or suicidal ideation than the general population (O'Connor et al., 2018).

The occurrence of childhood trauma in adolescents will also have an impact on borderline personality disorder. Research (Zashchirinskaia and Isagulova, 2023) revealed a significant relationship between various forms of childhood psychological trauma and forms of high-risk behavior in adolescents with personality disorders. These findings reinforce the role of childhood trauma in the formation of personality disorder symptoms. In addition, various studies have shown that borderline personality disorder correlates with childhood maltreatment. The number of patients who experience threshold personality disorder is 30% and 90% of patients (Itzhaky et al., 2020). Child maltreatment often results in severe, short-term or long-term childhood trauma. Early trauma is known to act as a trigger for the development of several elements of threshold personality disorder, such as affective instability, emotion dysregulation, and high-risk behaviors (high-risk behaviors refer to behaviors that have negative health effects, such as eating disorders, suicidal behavior, unsafe sex, and substance abuse) (Reising et al., 2019). These traumatic experiences mainly come in the form of physical, emotional, verbal, and sexual abuse; physical and emotional neglect by parents; and severe exposure to victimization by peers (Frewen Zhu and Lanius, 2019).

The next impact is that adolescents will experience mental disorders (psychosis), the results of research conducted by Loewy et al. (2019) shows that the event of childhood trauma (childhood trauma) will have an impact on children's psychology. Previous research shows that people with schizophrenia are twice as likely as healthy people to experience adverse childhood events (Varese et al., 2012). However, most clinical cohort studies rely on retrospective reports obtained after the onset of psychotic disorders. By assessing trauma history prior to the development of full psychosis, reporting bias can be minimized and possible mechanisms linking childhood trauma and the onset of psychosis can be explored. Thus, the clinical high-risk syndrome population, which has a 16-35% risk of developing full psychosis over 2.5 years after initial diagnosis (Fusar-Poli P, 2012).

In addition, the findings of Kline et al (2016) reported that trauma and bullying increase the likelihood of experiencing perceptual abnormalities in individuals with clinical high risk syndrome. Childhood trauma has been associated with hallucinations in adults with or without primary psychotic disorders (Daalman K, 2012). Interpersonal stressors have been associated with the emergence of psychopathology, particularly depression (Vrshek-Schallhorn, et al., 2015). Another impact is internet addiction, according to Sheng et al. (2022) childhood trauma affects internet addiction directly or indirectly through social support. Social support mediates the role of childhood trauma on internet addiction. After experiencing childhood trauma, adolescents are prone to emotional distress. With reduced support, these teens have nowhere to talk to others and seek help. They turn to the Internet to seek comfort from strangers or indulge in games to experience emotional release. This also suggests that the first step in preventing Internet addiction is to avoid childhood trauma as much as possible, which

creates a vicious cycle that leads to addictive behavior. Thus, prevention of Internet addiction in adolescents can be managed hierarchically according to the situation (Kwak Kim and Yoon, 2018).

Similar to the results of previous studies, adverse childhood experiences, such as childhood trauma, can negatively impact the developing brain, reducing the ability to inhibit memory and control, further leading to internet addiction (Jhone et al., 2021). Childhood trauma usually refers to psychological and physical harm suffered during childhood, including emotional abuse, physical abuse, sexual abuse, emotional neglect, and abandonment (Zhang et al., 2020). Childhood trauma is a major predictor of lifelong mental disorders (Kessler, 2010). Researchers support the idea that internet addiction is related to different types of childhood trauma including childhood physical abuse, emotional neglect, and emotional abuse (Emirtekin et al., 2019). The last impact that can be caused by childhood trauma is that people who have experienced childhood trauma tend to have a risk of psychiatric disorders in their offspring, the results of research by Arditti and Strat (2020) show that traumatic life experiences in parents' childhood increase the risk of psychiatric disorders in their offspring. Similar to the results of previous studies, trauma may be associated with negative impacts not only on the victim, but also on the victim's offspring. This may have consequences for developing early detection programs in the offspring of men and women who have experienced negative life events, whether or not they suffer from mental disorders. In addition, these results are in line with the literature which suggests that psychological trauma in parents may be associated with high rates of various psychiatric disorders (Roberts et al., 2013).

CONCLUSION

Based on the results of the analysis of the 6 literatures that have been conducted, it can be concluded that childhood trauma in adolescents has many impacts such as mental distress at risk of suicide, the impact of suicide, psychosis (mental disorders), psychiatric disorders in offspring, borderline personality disorder and the impact on internet addiction.

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