We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists



186,000

200M



Our authors are among the

TOP 1% most cited scientists





WEB OF SCIENCE

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us? Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected. For more information visit www.intechopen.com



Chapter

Emotional Intelligence for Coping with the Consequences of Childhood Trauma

Bruna Amélia Moreira Sarafim-Silva and Daniel Galera Bernabé

Abstract

Childhood trauma has been a serious public health problem and its long-term repercussions are widely studied. Childhood trauma can deregulate the stressrelated biological pathways, incapacitating the individual to process these experiences and, consequently, producing a lasting impact in later stages of life. Exposure to adverse childhood experiences has been associated with poorer quality of life and a higher risk for harmful behaviors and illness. The emotional consequences of childhood trauma are inevitable, and the development of strategies for their coping and manage become decisive and urgent. In this chapter we will cover the most current perspectives on childhood trauma, its impact on later life stages and the resulting emotional process. Finally, it will be discussed how emotional intelligence can be a useful resource for coping with stressful situations resulting from traumatic experiences in childhood.

Keywords: Emotional intelligence, Childhood trauma, Emotions, Stress, Psychological effects

1. Introduction: the childhood trauma and its implication in the physical and mental health

Stress is generally defined as an emotional experience in response to a stressor event [1, 2]. Chronic stress can produce physiological, cognitive, and behavioral dysfunctions [1, 2]. A stressful event or stressor is both a physical stimulus as imaginary that can threaten homeostasis [2]. When a stressful event occurs early in life (also called early life stress or childhood trauma), it has powerful consequences gain greater importance, seen the vast physiological and psychological repercussions, which can perpetuate throughout the individual's life [1–5]. Childhood trauma is configured in behaviors that pose a risk to the child's physical or emotional wellbeing [1–3]. The main childhood trauma subtypes are physical, sexual and emotional abuse; physical and emotional neglect; witnessing violence against a family member; living with drug users or alcoholics and low socioeconomic status [5, 6].

Abuse is characterized by hostile attitudes towards children with the potential to cause physical and emotional damage [5, 6]. Neglect occurs due to the inability to supply basic needs such as clothing, food and health, besides the failure to offer emotional support to children [1–3]. Moreover, the exploration physical and emotional,

with the possibility of resulting in damage to health, development or dignity of child, are also potentially stressful events [7]. Child adversity can include discrete events or circumstances that are beyond the control of children and are perceived as negative by them [8]. A large study evaluated the most common types of adverse childhood experiences (ACEs) in the United States [9]. Child abuse (emotional, physical or sexual), child neglect (emotional or physical) and domestic dysfunction (domestic violence, abuse of substances, parental absence or criminal activity) were the main events reported [9]. Other forms of child abuse include sudden and frequent house changes, death of a loved one, childhood illness life-threatening, serious accidents, prostitution, natural disasters, kidnapping, and terrorism [10].

Traumatic events experienced in childhood are extremely common. More than one third of the general population experience at least one event traumatic in childhood [11]. According to the World Health Organization (WHO) more than a quarter of adults worldwide reported having suffered physical abuse in childhood [7]. Twenty per cent of women and 5–10% of men reported having been sexually abused in the childhood [7]. The worldwide prevalence of child abuse and neglect ranges from 10–29% respectively and are strongly associated with a range of adverse results in adulthood [12]. In high-income countries, physical abuse ranges from 4–16%, and approximately 10% of children aged up to 15 years are neglected or suffer emotional abuse. Over 80% of these mistreatments are committed by parents or responsible [13]. In less developed countries like Brazil, 10% of children suffer some type of violence (representing 15 million of children). In addition, the majority of victims of rape are children, most of them girls between 5 and 10 years old [14].

Child abuse has been a global public health problem with long-term consequences for an individual, his family and society [10]. It is a global phenomenon that does not respect the limits of race, education, social class and religion [15]. Its occurrence can be both public and private, leading to the individual mistreated to serious physical, moral and emotional damages [15]. The psychological trauma experienced in childhood became the object of research in numerous fields of science, mainly in the psychology and psychiatry areas [15, 16]. Vast evidence indicates that childhood abuse exposure is strongly associated with a range of adverse outcomes in adulthood, contributing substantially to the global burden of numerous diseases and health risk behaviors [10]. For example, childhood trauma is predictive of obesity, inflammation, smoking, alcoholism, drug use, high-risk sexual behavior, among others [9, 13, 17]. Moreover, childhood trauma has also been associated to an increased risk of vascular disease, diabetes, and cancer [3, 9, 18–23]. Individuals who experienced more than four childhood trauma subtypes (for example, physical, emotional, sexual abuse and neglect) had 11.3 times more likely to abuse illegal intravenous substances, 7.4 to be alcoholics, 3.2 times to have sexual relations with 5 or more partners, 2.2 to be chronic smokers and 1.6 to be obese in adulthood [9]. Childhood trauma also predict addicted behavior in individuals with illnesses. For example, a study showed that cancer patients who reported experiencing emotional neglect in childhood had 2.32 times more likely to be alcoholics at the time of cancer diagnosis and 2.15 times more likely to have extensive tumors [3].

The occurrence of childhood trauma is also correlated with higher risk for anxiety and mood disorder, psychosis, personality disorder, and depression [24, 25]. Child maltreatment worsens the prognosis of several psychiatric disorders and is predictive for the worst psychopathological outcome, such as younger age of symptom onset, more episodes of mood swings and psychotic symptoms, history of suicide attempt and greater number of hospitalizations [16, 24]. Having a history of childhood sexual abuse has been linked with the development of post-traumatic stress disorder (PTSD) after attempts at sexual abuse or rape in adulthood [24]. In young people, physical

and sexual abuse are associated with crime and violence in relationships [25]. In addition, the young with a history of a higher occurrence of sexual abuse are more likely to commit rape [25]. An interesting study revealed that experiencing physical and emotional violence in childhood is a risk factor for reproducing abusive behaviors against children [26]. In addition to having a history of childhood trauma, other factors such as low education, low socioeconomic status, mental health problems and alcohol and drug abuse have been related to abusive behaviors [26]. These findings demonstrate that experiencing traumatic experiences in childhood predicts extremely negative outcomes throughout life.

2. Emotional processes resulting from childhood trauma

As previously mentioned, the occurrence of trauma in childhood activates stress-related pathways leading to a hyperactivation of the stressful response in adulthood. This mechanism mediates the various reflexes of trauma in childhood on physiological and behavioral dimensions. The outbreak of chronic stress induced by childhood trauma is directly related to the emotional processes derived from adverse experiences [9, 27]. A traumatic experience can cause anguish and suffering, leading the individual to a state of chronic emotional stress [27–29]. The emotional repercussions of trauma can be conscious or unconscious, since the individual perception will depend on the stimulus received from the environment since childhood [30, 31]. Beyond individual perception the occurrence and intensity of childhood trauma-derived emotional stress will depend on the exposure time and severity of traumatic experiences [11, 32]. Due the repercussions on the feelings and emotions, unbearable suffering is inevitable after exposure to severe trauma in childhood, such as physical, emotional, and sexual abuse [11, 32]. In addition, when the child is deprived of experiencing anguish and discomfort derived from natural adversities, such as denial of a toy, among others, there is a non-adaptation to stressful events [30]. Thus, it is possible that the child has greater difficulties in dealing with stressful situations in later stages of life [30, 31].

Sexual abuse in childhood can produce emotions and feelings of angry, deprotection, suffering, self-guilt and intense fear, which can extend for a lifetime [33, 34]. Victims of sexual abuse in childhood usually experience difficulties in interpersonal and loving relationships, such as relational and sexual intimacy problems, as well as having sex with several partners [33, 34]. In addition, in many cases, the victim feels intense guilt, believing that she or he is responsible for sexual abuse [34]. Physical abuse and neglect in childhood can exacerbate feelings of anger, aggressiveness, and emotional suffering later in adulthood [3, 35]. As a result of these emotional processes, it is common for victims of abuse to manifest violent behaviors, criminality, substance abuse and anxiety and depression symptoms [3, 35]. The emotional abuse and neglect experienced in childhood leads to feelings of rejection, guilt, inadequacy, and sadness, which can perpetuate for a long time [27, 35, 36]. It is also not uncommon for adults emotionally abused in childhood to display insecurity in solving problems and making decisions, as well as feeling easily offended or humiliated [35, 36].

The process of emotional dysregulation promoted by childhood trauma is mediated by neural systems and the inability to adapt to stressful events. Chronic exposure to traumatic events in childhood may impair the ability of the hypothalamic–pituitary–adrenal (HPA) axis in responding to stress in adulthood [37]. The limbic prefrontal system that encompasses the prefrontal cortex, amygdala and hippocampus, has a critical role for the individual's mental health [38]. The interaction among these regions is essential in the regulation of emotions and stress [38]. Experiencing trauma in the childhood changes the volume of the hippocampus subfield, which depends on the severity of the traumatic event [38, 39]. For example, children exposed to severe trauma have a lower volume of left CA3 compared to children who experience lower occurrence of trauma [39]. These findings suggest that changes in the hippocampus induced by the childhood trauma may mediate deficits in emotional, cognitive and behavioral processes in later stages [39].

Emotional memory also has an underlying critical role in regulating the physiological and behavioral consequences of childhood trauma. For example, systemic levels of interleukin 1beta (IL-1 β), a pro-inflammatory cytokine that acts on the hypothalamus, rise after intense traumatic experiences [40]. The emotion of anger is one of the main components associated with the increase in IL-1 β levels when the adult remembers stressful events experienced in childhood [16]. Changes in the brain regions responsible for emotions modulate and directly affect the emotional response derived from childhood traumatic events [37–39]. Managing emotional processes can minimize the effects of childhood trauma, promoting adaptation or empowering the individual to face conflict situations. Emotional intelligence is an extremely useful resource for development skills to deal with emotions and stress resulting from childhood trauma.

3. Emotional intelligence as a strategy to deal with emotional stress resulting from childhood trauma

As previously described, childhood trauma has significant impact on the human emotional and physical health, predisposing harmful behaviors and illness. Experiencing traumatic events during childhood can incapacitate the individual to process unpleasant experiences and, consequently, can make a lasting negative impact in later life. The way in which the individuals interprets the traumatic experiences and how they manage their emotions depends on emotional support and the individual coping strategies. Evidence have shown that individuals who were mistreated during childhood had less empathy for the others' distress compared to people without a history of trauma [40, 41]. The adaptive response to stress derived from traumatic experiences may be in the capacity to understand and manage stressful situations. This adaptation mechanism is called emotional intelligence [42, 43].

Emotional intelligence is one of the main skills to manage emotions and enable conflict coping, as well as making mental and emotional contents become conscious [42, 43]. Developing this ability can promote impulse control, self-confidence, self-motivation and self-compassion against of impacting and stressful situations [42, 43]. However, how can the individual develop this ability to control and manage emotions against of conflicting events? One of the individual resources is the development of emotional intelligence. Deeply understand the emotions produced through stimulus received from the environment since childhood, implies using emotional intelligence to access the pleasant experiences (positive memories) and those nasty (emotional traumas).

In our experience, we consider the emotional intelligence to be the main strategy to develop emotional competence to deal with the effects of stressful events that occurred in childhood. The individual can develop emotional intelligence, training themselves to deal and resolve conflicts arising from childhood trauma. Self-knowledge can be achieved during adolescence, adulthood and old age. Its effectiveness will depend on the individual's willingness to get in touch with their emotional pain, beliefs and concepts that many times are the main components for the dullness and unconsciousness of emotional content derived from traumatic events.

Strategies for knowing and resolving emotional conflicts can be developed through specific instruments that assess occurrence and intensity of traumatic events experienced in childhood or adulthood. These instruments are based on selfresponsive questionnaires or interviews focusing on stressful experiences [42, 43]. In addition, the clinical approach, such as psychotherapy, is a well-known evaluation method and used to treat the psychological consequences of trauma [44, 45]. Awareness and externalization of emotions and feelings derived from traumatic events can generate relief and consequently manage and control the response to stressful situations. This therapeutic approach allows the individual to identify and acknowledge unconscious content and its emotional impact, connecting life history (stimulus received from the environment) and sentimental manifestation. Thus, psychotherapy is an important instrument for developing emotional intelligence, promoting clarity and perception of psychological mechanisms resulting from traumatic experiences.

An interesting case we studied was of a woman who, through self-knowledge performed in psychotherapy, developed emotional intelligence to process and manage the consequences of a traumatic event experienced in childhood. At 12 years, Ana (fictitious name) was sexually abused by a stranger. This extremely traumatic event produced enormous emotional pain and, consequently, the experience was erased in her brain after a few months. Only at 21 years of age, after Ana had seen on the news the abuser being arrested for pedophilia, the memory of the traumatic event came to mind, triggering feelings of insecurity, fear, suffering and anger. According to the patient, these same emotional processes had been manifested in childhood after sexual abuse. Due to the exacerbation of these stressful emotions, Ana showed symptoms of depression and suicidal ideation. During the self-knowledge process developed by Ana, the perceptions of the repercussions of childhood trauma in the physiological, emotional, and social spheres became conscious for the first time. Along with these perceptions, the consciousness of the traumatic event and associated emotional process, enabled the management and coping with feelings arising. Thus, the symptoms of depression triggered after the memory of the trauma were minimized. This and other cases described in the literature [41–43, 46, 47] demonstrate that emotional intelligence regulates psychological content, promoting emotional clarity against of stressful situations [46, 47]. Therefore, emotional intelligence can be a protective resource for chronic stress and other emotional symptoms resulting from traumatic events experienced in childhood.

4. Conclusion

The occurrence of childhood trauma is extremely common in humans and occurs worldwide. The long-term consequences of childhood trauma have been a major health problem, in view of the enormous public spending on diseases and risky behaviors, which were previously mentioned. Moreover, develop strategies of self-knowledge to make conscious the emotional results of childhood trauma is decisive for controlling stress and its physical and behavioral effects. Emotional intelligence can be one of the main mechanisms in adulthood for identifying, managing, and adapting to conflict situations arising from traumatic childhood experiences.

Conflict of interest

The authors declare no conflict of interest.

Intechopen

IntechOpen

Author details

Bruna Amélia Moreira Sarafim-Silva and Daniel Galera Bernabé^{*} Psychosomatic and Education Research Center, Oral Oncology Center, School of Dentistry, São Paulo State University (UNESP), Araçatuba, SP, Brazil

*Address all correspondence to: daniel.bernabe@unesp.br

IntechOpen

© 2021 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

References

[1] Kuhlman KR, Robles TF, Bower JE, Carroll JE. Screening for childhood adversity: what and when of identifying individuals at risk for lifespan health disparities. *J Behav Med.* 2018;41(4):516-527. doi: 10.1007/s10865-018-9921-z. Epub 2018 Mar 30. PMID: 29603040; PMCID: PMC6031456.

[2] Llabre MM, Schneiderman N, Gallo LC, Arguelles W, Daviglus ML, Gonzalez F 2nd, Isasi CR, Perreira KM, Penedo FJ. Childhood Trauma and Adult Risk Factors and Disease in Hispanics/ Latinos in the US: Results from the Hispanic Community Health Study/ Study of Latinos (HCHS/SOL) Sociocultural Ancillary Study. Psychosom Med. 2017 Feb/Mar;79(2): 172-180. doi: 10.1097/PSY.000000 000000394. PMID: 27606797; PMCID: PMC5285322.

[3] Sarafim-Silva BAM, Duarte GD, Sundefeld MLMM, Biasoli ÉR, Miyahara GI, Bernabé DG. Childhood trauma is predictive for clinical staging, alcohol consumption, and emotional symptoms in patients with head and neck cancer. Cancer. 2018;124(18):3684-3692. doi: 10.1002/cncr.31597. Epub 2018 Aug 6. PMID: 30079469.

[4] Waehrer GM, Miller TR, Silverio Marques SC, Oh DL, Burke Harris N. Disease burden of adverse childhood experiences across 14 states. *PLoS One*. 2020;15(1):e0226134. doi: 10.1371/ journal.pone.0226134. PMID: 31990910; PMCID: PMC6986706.

[5] Mitchell AM, Porter K, Christian LM. Examination of the role of obesity in the association between childhood trauma and inflammation during pregnancy. *Health Psychol*. 2018;37(2):114-124. doi: 10.1037/hea0000559. Epub 2017 Oct 2. PMID: 28967771; PMCID: PMC5794605.

[6] Tell D, Mathews HL, Burr RL, Witek Janusek L. During stress, heart rate

variability moderates the impact of childhood adversity in women with breast cancer. Stress. 2018;21(2):179-187. doi: 10.1080/10253890.2018.1424132. Epub 2018 Feb 1. PMID: 29385886.

[7] World Health Organization. Violence and Injury Prevention. [Internet]. 2018. Available from: http://www.who.int/ violence_injury_prevention/violence/ child/en/. [Accessed: 2020-07-10].

[8] Shonkoff JP, Garner AS; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. Pediatrics. 2012 Jan;129(1):e232-e246. doi: 10.1542/ peds.2011-2663. Epub 2011 Dec 26. PMID: 22201156.

[9] Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss MP, Marks JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. Am J Prev Med. 1998 May;14(4):245-258. doi: 10.1016/s0749-3797(98)00017-8. PMID: 9635069.

[10] Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. JAMA. 2001 Dec 26;286(24):3089-3096. doi: 10.1001/ jama.286.24.3089. PMID: 11754674.

[11] Copeland WE, Keeler G, Angold A, Costello EJ. Traumatic events and posttraumatic stress in childhood. Arch Gen Psychiatry. 2007 May;64(5):577-584. doi: 10.1001/archpsyc.64.5.577.
PMID: 17485609. [12] Sethi, D., Bellis, M., Hughs, K.,
Gilbert, R., Mitis, F., Galea, G.
European report on preventing child maltreatment. Copenhagen, Denmark.
World Health Organization 2013. p. 18.
ISBN: 978 92 890 0028 4

[13] Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. Lancet. 2009 Jan 3;373(9657):68-81. doi: 10.1016/ S0140-6736(08)61706-7.

[14] National Household Sample Survey. Brazilian Institute of Geography and Statistics. [Internet]. 2018. Available from: https://agenciadenoticias.ibge.gov. br/. Accessed: 2020-07-10].

[15] Juruena MF. Early-life stress and HPA axis trigger recurrent adulthood depression. Epilepsy Behav. 2014 Sep;38:148-159. doi: 10.1016/j. yebeh.2013.10.020.

[16] Gill JM, Saligan L, Woods S, Page G.
PTSD is associated with an excess of inflammatory immune activities.
Perspect Psychiatr Care. 2009
Oct;45(4):262-277. doi: 10.1111/j.1744-6163.2009.00229.x. PMID: 19780999.

[17] Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T. The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. PLoS Med. 2012;9(11):e1001349. doi: 10.1371/journal.pmed.1001349.

[18] Sapolsky R, Rivier C, Yamamoto G, Plotsky P, Vale W. Interleukin-1 stimulates the secretion of hypothalamic corticotropin-releasing factor. Science.
1987 Oct 23;238(4826):522-524. doi: 10.1126/science.2821621. PMID: 2821621.

[19] Salmon P, Hill J, Krespi R, Clark L, Fisher J, Holcombe C. The role of child abuse and age in vulnerability to emotional problems after surgery for breast cancer. Eur J Cancer. 2006 Oct;42(15):2517-2523. doi: 10.1016/j. ejca.2006.05.024.

[20] Goldsmith RE, Jandorf L,
Valdimarsdottir H, Amend KL,
Stoudt BG, Rini C, Hershman D,
Neugut A, Reilly JJ, Tartter PI,
Feldman SM, Ambrosone CB,
Bovbjerg DH. Traumatic stress
symptoms and breast cancer: the role of
childhood abuse. Child Abuse Negl.
2010 Jun;34(6):465-470. doi: 10.1016/j.
chiabu.2009.10.007.

[21] Witek Janusek L, Tell D,
Albuquerque K, Mathews HL.
Childhood adversity increases
vulnerability for behavioral symptoms
and immune dysregulation in women
with breast cancer. Brain Behav Immun.
2013 Mar;30 Suppl(Suppl):S149-62. doi:
10.1016/j.bbi.2012.05.014. Epub 2012
Jun 1. PMID: 22659062; PMCID:
PMC3492527.

[22] Bower JE, Crosswell AD, Slavich GM. Childhood Adversity and Cumulative Life Stress: Risk Factors for Cancer-Related Fatigue. Clin Psychol Sci. 2014 Jan;2(1):108-15. doi: 10.1177/2167702613496243. PMID: 24377083; PMCID: PMC3873097.

[23] Crosswell AD, Bower JE, Ganz PA.
Childhood adversity and inflammation in breast cancer survivors. Psychosom Med. 2014 Apr;76(3):208-14. doi: 10.1097/PSY.000000000000041.
PMID: 24632893; PMCID: PMC4357419.

[24] Carr CP, Martins CM, Stingel AM, Lemgruber VB, Juruena MF. The role of early life stress in adult psychiatric disorders: a systematic review according to childhood trauma subtypes. J Nerv Ment Dis. 2013 Dec;201(12):1007-1020. doi:10.1097/NMD.00000000000049. PMID: 24284634.

[25] van der Put CE, Lanctôt N, de Ruiter C, van Vugt E. Child maltreatment among boy and girl

probationers: does type of maltreatment make a difference in offending behavior and psychosocial problems? Child Abuse Negl. 2015 Aug;46:142-151. doi: 10.1016/j.chiabu.2015.05.012.

[26] Butchart A, Phinney Harvey A, Kahane T, Mian M, Furniss T. World Health Organization. Preventing child maltreatment: a guide to taking action and generating evidence / World Health Organization and International Society for Prevention of Child Abuse and Neglect. World Health Organization. [Internet]. 2006 Available from: https:// apps.who.int/iris/handle/10665/43499. [Accessed: 2020-10-25].

[27] Teicher MH, Samson JA. Annual Research Review: Enduring neurobiological effects of childhood abuse and neglect. J Child Psychol Psychiatry. 2016 Mar;57(3):241-66. doi: 10.1111/jcpp.12507. Epub 2016 Feb 1. PMID: 26831814; PMCID: PMC4760853.

[28] Chigiji H, Fry D, Mwadiwa TE, Elizalde A, Izumi N, Baago-Rasmussen L, Maternowska MC. Risk factors and health consequences of physical and emotional violence against children in Zimbabwe: a nationally representative survey. BMJ Glob Health. 2018 Jun 26;3(3):e000533. doi: 10.1136/ bmjgh-2017-000533. PMID: 29989051; PMCID: PMC6035512.

[29] Hodgdon HB, Suvak M, Zinoviev DY, Liebman RE, Briggs EC, Spinazzola J. Network analysis of exposure to trauma and childhood adversities in a clinical sample of youth. Psychol Assess. 2019 Nov;31(11):1294-1306. doi: 10.1037/pas0000748.

[30] Terr LC. Treating childhood trauma.Child Adolesc Psychiatr Clin N Am.2013 Jan;22(1):51-66. doi: 10.1016/j.chc.2012.08.003. PMID: 23164127.

[31] Gamache Martin C, Van Ryzin MJ, Dishion TJ. Profiles of childhood trauma: Betrayal, frequency, and psychological distress in late adolescence. Psychol Trauma. 2016 Mar;8(2):206-213. doi: 10.1037/ tra0000095. Epub 2016 Jan 18. PMID: 26783760; PMCID: PMC4767667.

[32] Roberts ME, Fuemmeler BF, McClernon FJ, Beckham JC. Association between trauma exposure and smoking in a population-based sample of young adults. J Adolesc Health. 2008 Mar;42(3):266-74. doi: 10.1016/j. jadohealth.2007.08.029. PMID: 18295135; PMCID: PMC2675188.

[33] Kellogg ND, Koek W, Nienow SM. Factors that prevent, prompt, and delay disclosures in female victims of child sexual abuse. Child Abuse Negl. 2020 Mar;101:104360. doi: 10.1016/j. chiabu.2020.104360.

[34] Hailes HP, Yu R, Danese A, Fazel S. Long-term outcomes of childhood sexual abuse: an umbrella review. Lancet Psychiatry. 2019 Oct;6(10):830-839. doi: 10.1016/S2215-0366(19)30286-X.

[35] Malinosky-Rummell R, Hansen DJ. Long-term consequences of childhood physical abuse. Psychol Bull. 1993 Jul;114(1):68-79. doi: 10.1037/0033-2909.114.1.68. PMID: 8346329.

[36] Christ C, de Waal MM, Dekker JJM, van Kuijk I, van Schaik DJF, Kikkert MJ, Goudriaan AE, Beekman ATF, Messman-Moore TL. Linking childhood emotional abuse and depressive symptoms: The role of emotion dysregulation and interpersonal problems. PLoS One. 2019 Feb 14;14(2):e0211882. doi: 10.1371/journal. pone.0211882. PMID: 30763360; PMCID: PMC6375578.

[37] Nemeroff CB, Heim CM, Thase ME, Klein DN, Rush AJ, Schatzberg AF, Ninan PT, McCullough JP Jr, Weiss PM, Dunner DL, Rothbaum BO, Kornstein S, Keitner G, Keller MB. Differential responses to psychotherapy versus pharmacotherapy in patients with chronic forms of major depression and childhood trauma. Proc Natl Acad Sci U S A. 2003 Nov 25;100(24):14293-6. doi: 10.1073/pnas.2336126100. Epub 2003 Nov 13. Erratum in: Proc Natl Acad Sci U S A. 2005 Nov 8;102(45):16530. PMID: 14615578; PMCID: PMC283585.

[38] Godsil BP, Kiss JP, Spedding M, Jay TM. The hippocampal-prefrontal pathway: the weak link in psychiatric disorders? Eur Neuropsychopharmacol. 2013 Oct;23(10):1165-1181. doi: 10.1016/j.euroneuro.2012.10.018.

[39] Malhi GS, Das P, Outhred T, Irwin L, Gessler D, Bwabi Z, Bryant R, Mannie Z. The effects of childhood trauma on adolescent hippocampal subfields. Aust N Z J Psychiatry. 2019 May;53(5):447-457. doi: 10.1177/ 0004867418824021.

[40] Bock BB, Bastos CR, Ardais AP, Grellert M, de Carvalho HW, Farias CP, Jansen K, Oses JP, da Silva RA, Portela LV, Kaster MP, Lara DR, Ghisleni G. Temperament traits moderate the relationship between Childhood Trauma and Interleukin 1β profile in young adults. Psycho neuroendocrinology. 2020 Jun;116:104671. doi: 10.1016/j. psyneuen.2020.104671.

[41] Levy J, Goldstein A, Feldman R. The neural development of empathy is sensitive to caregiving and early trauma. Nat Commun. 2019 Apr 23;10(1):1905. doi: 10.1038/s41467-019-09927-y. PMID: 31015471; PMCID: PMC6478745.

[42] Yılmaz M. Thinking Skill of
Emotional Intelligence Education
Programme. In: Fabio A D editor.
Emotional Intelligence - New
Perspectives and Applications. 1nd ed.
IntechOpen; 2012. p. 261-278. DOI:
10.5772/31716.

[43] Ferrer CMS. How to Influence the New Technologies in the Emotional Intelligence and Communication of Higher Education Student. In: Fabio A D editor. Emotional Intelligence - New Perspectives and Applications. 1nd ed. IntechOpen; 2012. p. 279-288. DOI: 10.5772/31784.

[44] May K. Collaborating With the Fortress Around Early Childhood Trauma: A Depth Psychotherapy Process. Perspect Psychiatr Care. 2018 Jan;54(1):39-45.

[45] Rubin DC, Boals A. People who expect to enter psychotherapy are prone to believing that they have forgotten memories of childhood trauma and abuse. Memory. 2010 Jul;18(5):556-562.

[46] Kaurin A, Schönfelder S, Wessa M. Self-compassion buffers the link between self-criticism and depression in trauma-exposed firefighters. J Couns Psychol. 2018 Jul;65(4):453-462. doi: 10.1037/cou0000275.

[47] Kwako LE, Szanton SJ, Saligan LN, Gill JM. Major depressive disorder in persons exposed to trauma: relationship between emotional intelligence and social support. J Am Psychiatr Nurses Assoc. 2011 May-Jun;17(3):237-245. doi: 10.1177/1078390311402498. PMID: 21653496.

