

Emotional and Physical Pain Responses in Children Who Suffer Verbal Abuse

Yingxin Xu

*Department of Psychology, Yonsei University, Seoul, Korea
xuyingxin918@163.com*

Abstract: In recent years, legislation on child protection has become relatively complete, providing better protection for children in cases of physical violence and supporting relevant treatment methods, analyzed from a more comprehensive perspective. At present, a relatively complete rescue system has been formed to help children cope with the harm caused by violence. However, the research on children's verbal abuse is carried out more from the theoretical aspect, and there are fewer studies on the practical aspect, and the related field is still in the preliminary exploration stage, which needs time to develop gradually. This is why it is important to distinguish the definition of verbal abuse and to organize and summarize the effects and the long-term effects of verbal abuse in childhood. In this literature review, an extensive search strategy was employed across databases including PsycINFO, Hollis, and Google Scholar to identify relevant studies on the emotional and physical impacts of verbal abuse on children, extending into adulthood. The search focused on peer-reviewed articles published between 2000 and 2024. To finalize the selection, titles and abstracts were first screened for relevance, followed by full-text reviews, and thematic analysis was employed to synthesize the findings. Verbal abuse has extensive consequences, intertwining psychological distress, physical symptoms, and disrupted neurobiological processes that impact a child's long-term development. Recognizing these clinical signs is crucial for preventing recurrence and providing more accurate and comprehensive interventions.

Keywords: verbal abuse, children, psychology affect, physical affect, biological affect

1. Introduction

Children are a vulnerable group in the family and in society, and verbal violence is the first thing that can harm children, most of whom have a relatively weak sense of self-protection, and it can easily cause far-reaching and long-lasting psychological damage to them. In addition, Abuse is an ongoing concern for children, Adverse Childhood Experiences Especially Verbal Abuse have a high incidence. Early life stress (included verbal abuse) was associated with psychiatric disorders and for some authors, it is closely related to psychopathology [1]. The prevalence of childhood emotional abuse was higher (36.1 %) than physical (22 %) abuse [2]. Recent studies have shown that among adults from the United Kingdom and Wales the prevalence of childhood verbal abuse was 21 % compared to 15.9 % reporting childhood physical abuse [3].

1.1. Definition of verbal abuse

Verbal abuse is an invisible form of conflict. Various definitions have been collected, with the central idea being that verbal abuse is the infliction of mental anguish through yelling, screaming, threatening, humiliating, infantilizing, or provoking intentional fear. research found it is stated that verbal abuse involves the perpetrator using inappropriate or uncivil language to exert linguistic dominance over others, thereby depriving them of their linguistic rights to some extent, constituting harmful behavior toward others [4]. Besides, also have research prove that violence is categorized into two forms: hard violence, which is characterized by overt physical actions, and soft violence, which includes verbal abuse [5]. Another research also analyzes that verbal abuse is a dehumanizing form of violence enacted through language. In the public domain, verbal abuse is more complex due to the involvement of multiple factors, including racial and ideological elements [6].

1.2. Purpose of the present study

According to Maslow's Hierarchy of Needs, Maslow categorized human needs into five levels: at the base are physiological needs, followed by safety needs, then the need for love and belonging, esteem needs, and finally, self-actualization needs. In the pursuit of these needs, individuals generally address the lower-level needs before higher-level needs emerge. In cases of verbal abuse, the victim is typically the one suffering psychological harm. Therefore, based on Maslow's theory, the victim's current needs are likely situated at the first or second level. This makes it crucial to distinguish verbal abuse and provide appropriate support to the victim. The purpose of this paper is to clarify the symptoms associated with integrated verbal violence in three (psychological, biological, physical) ways.

2. Method

For the purposes of this study, childhood verbal abuse is defined as the actual form of abuse under investigation. The study focuses on the emotional and physical responses of children to verbal abuse by adults and extends its scope to examine the long-term impacts on mental and physical health into adulthood. This paper is a literature review, and an extensive search strategy was employed using databases such as PsycINFO, Hollis, and Google Scholar to identify relevant studies on verbal abuse and childhood. Keywords included "verbal abuse," "child," "psychological impact," "physical impact," and "biological impact," with alternative terms like "children," "childhood," "emotional impact," and "cortical reaction" also considered. The search was limited to peer-reviewed articles published between 2000 and 2024 to ensure the inclusion of the most recent research. Studies were selected based on their relevance to the research question, with inclusion criteria focusing on empirical research involving children and adolescents, and those published in English. To explore cultural differences, studies from Asian contexts, including China and Korea, were also included. Exclusion criteria encompassed studies on adult populations, non-empirical research, and studies not directly addressing the impact of verbal abuse. Titles and abstracts were screened for relevance, and thematic analysis was employed to synthesize the findings, followed by full-text reviews to finalize the selection.

3. Results

Most of the studies included in this research are longitudinal in nature, focusing extensively on the prevalence and the negative consequences of verbal abuse. The research encompasses multiple perpetrators, including teachers, parents, and caregivers, who are implicated in the abuse. The age range of the study samples varies across different studies, with the selected participants ranging from

6 to 18 years in the case of children, and from 18 to 65 years for adult subjects. A noteworthy observation is that some of the collected papers, particularly those examining the physical effects of verbal abuse, have identified significant findings. Although these studies do not establish a direct causal relationship, the robust data trends provide strong support for the clarity of the research outcomes.

3.1. Psychological affect

Research suggest that mental health issues are becoming increasingly prominent, with 792 million people suffering from mental health problems in 2017, accounting for 10.7% of the total population [7]. Mental health issues are particularly severe among children and adolescents, with approximately 20% of children and adolescents worldwide experiencing some form of mental health problem [8]. Suicide has become the second leading cause of death among individuals aged 15 to 29, and verbal abuse is one of the significant factors contributing to mental health issues [9]. Verbal abuse takes many forms, including school-based verbal abuse, domestic verbal abuse, and online verbal abuse, all of which are pervasive in people's daily lives, work, and studies. Verbal abuse can severely harm both physical and mental health, affecting the victim's personality, mental state, and psychological well-being. For example, children who live in a critical environment for an extended period are prone to developing a timid and low self-esteem personality, leading to anxiety and depressive symptoms. Among those who have experienced verbal abuse, the proportion of individuals suffering from mild (41.55%), moderate (15.88%), moderately severe (7.43%), or severe depression (2.87%) is significantly higher than those without depression (32.26%) [10]. The harm of verbal abuse to mental health lies in its positive impact on depression and its negative impact on well-being and life satisfaction. The mental state of the victims, in turn, influences the occurrence of verbal abuse [11]. Besides, also have evidence found that verbal abuse can lead to depressive symptoms in children. In terms of well-being and life satisfaction, the research found that verbal abuse significantly impacts well-being, while confirmed that verbal abuse negatively affects life satisfaction.

3.2. Biological affect

Verbal abuse, such as socially threatening words and swear words, is processed differently in the brain compared to other emotional words, especially in the early stages. Studies using event-related potentials, or ERPs, show that verbal abuse triggers a stronger response in the brain's left occipital region, specifically in the P1 time window, compared to positive and negative words. This suggests that the brain has a rapid, conditioned reaction to verbal abuse, likely because it is tied to important, evolutionarily relevant cues [12].

Secondly, Parental verbal abuse has been shown to have a significant impact on brain development. Specifically, research indicates that Parental verbal abuse is associated with an increase in gray matter volume (GMV) within the left superior temporal gyrus (STG), a brain region crucial for language and speech processing. Notably, individuals exposed to Parental verbal abuse exhibited a 14.1% increase in GMV in this region, with the magnitude of this increase closely correlating with the severity of verbal abuse experienced [13]. This finding suggests that heightened exposure to verbal abuse is associated with more pronounced changes in this language-related brain area, which may potentially affect language processing and comprehension abilities. In conclusion, although further research is necessary to establish a definitive cause-and-effect relationship, it is evident that parental verbal abuse can significantly influence the development of brain regions involved in language, thereby potentially altering the manner in which affected individuals process and understand language [14].

3.3. Physical affect: chest pain

The link between childhood emotional or verbal abuse and unexplained chest pain is evident, with significantly higher rates of abuse in those with chest pain compared to a control group [15]. Physical abuse also showed a similar pattern, with 16.7% versus 2.2%. Importantly, even after controlling for conditions, emotional or verbal abuse remained a significant predictor of unexplained chest pain, with an odds ratio of 5.66. However, when depression was factored in, this association was no longer significant, indicating that psychological distress, particularly depression, may moderate the relationship between childhood abuse and unexplained chest pain.

4. Discussion

To better understand the consequences associated with verbal abuse in children, we conducted a systematic review of the literature, which revealed several key findings. First, in exploring the definition of verbal abuse, the most commonly reported behaviors include "expressing tone through shouting and screaming." This definition appears consistently across all discussed terms and perpetrators. Other prevalent behaviors encompass criticism, verbal insults, and threatening language. In contrast, current definitions of emotional abuse often focus more on the impact and consequences for the victim—such as the loss of a sense of being loved—rather than the actions of the perpetrator. While limited definitions do not exclude certain abusive behaviors that may involve non-verbal methods (such as silence or withdrawal), the primary emphasis has been on the child's response to such verbal abuse.

In response to the observed effects, the impact on brain regions is particularly evident in the neural pathways associated with language processing. Emotional pain generally engages brain regions involved in emotion processing, such as the anterior cingulate cortex (ACC), insula, and amygdala. Additionally, emotional pain interacts with another neural pathway responsible for physical pain processing, which primarily involves the primary somatosensory cortex (S1), secondary somatosensory cortex (S2), dorsal anterior cingulate cortex (dACC), and insula [16].

Besides that, after controlling for gender, verbal abuse predicts the occurrence of post-traumatic stress with adults who have been verbally abused as children and those who have not.

4.1. Measure

Verbal violence occurs as a result of both the abuser and the abused, of which we will discuss the scenarios in which verbal abuse is most likely to occur. In order to realize the effective elimination of domestic verbal violence, it is necessary to improve and enhance both the abuser and the abused, i.e., the children and the parents.

To the Victim-children aspect:

1. Awareness-raising. As the environment of a family changes from simple to complex, and the cultural quality of parents or grandparents varies, it is especially important for the abused to raise their own awareness. Increased understanding and awareness of life and the adult world can effectively prevent parents or other parents from using violent language during family verbal communication due to inappropriate language, as well as preventing themselves from being harmed by verbal violence.

2. Demonstrate an attitude. When family language violence occurs, the victim of violence should not hold back, should show their attitude, with practical action to stop the further development of violence in a timely and effective manner. At the same time, should also take the initiative to actively tell the abuser, his behavior has caused psychological harm to himself, has a bad influence. Regardless of the identity of the abuser, he or she should be bold enough to raise the issue and show his or her attitude.

To the Perpetrators - Parents aspect:

1. Analyze the problem

Parents' attitude and behavior are especially important when their children tell them honestly about their bad experiences and immature ideas about certain things.

For bad encounters, such as the child in a test, the results fell, as a parent cannot hear the results fell, immediately become the abuser, should learn to specific problems, specific treatment, patience to understand the child's grades fell, what fell, is the objective or subjective reasons, in the process, they have no responsibility. After understanding and analyzing the cause of the matter, through the appropriate language, inform the child how to progress and improve. Against the immaturity of the child's ideas, parents must have a full understanding of the inner child's imagination is very rich, of course, the consideration will not be too comprehensive, as a parent, as a listener, sure to affirm, to help the child to improve the improvement of the child cannot be due to personal preferences and emotions to deal with the problem, it is easy to turn into an abuser.

2. Rejection of reverse education

Most parents believe that they scold the child is for the child's good, is responsible for the child's performance, and even recognize that the child is still small, scolded or beaten will not be remembered. Some parents think that by saying the opposite, using negative examples, they can make their children wake up and be positive, so “bad boy”, “stupid”, “you will never have a future in your life” and other bad words are thrown without thinking. The bad words are then thrown at the child without thinking about it. The vast majority of children are innocent and good nature, violent language will pierce their tender hearts, hurt their initial human dignity and self-confidence, and even leave them with a whole-life shadow.

3. Positive encouragement and affirmation

Children in the whole process of growth, the most want, like to hear is the parents praise themselves, praise themselves, their own affirmation, which is their self-confidence and enterprising slowly cultivate and mature the necessary conditions. Parents and children for verbal communication, we must be merciful, especially when the child's performance is not good, but also to be good at discovering the child's flash points, encourage him to continue to move forward, with their own words and deeds, especially their own words and attitudes, to help the child to build up confidence, inspire the child's motivation.

4.2. Limitations and future directions of the study

On this issue, there are certain cultural differences between Eastern and Western research, for example, part of the research in China mainly distinguishes between linguistic violence and the definition of criticism. It is deeply influenced by tradition, and there is no adapted theory at present. verbal abuse is sometimes difficult to separate from criticism. In some Asian cultures, there are some sayings, such as “a strict teacher produces a good pupil(严师出高徒)” and “a loyal word is better than a bad one(忠言逆耳利于行)”, which imply that education and criticism are necessary, and in the process of its development, this cultural background has blurred the boundaries between verbal violence and criticism.

When discussing the complexities of the human brain, current technological limitations prevent us from fully uncovering its mysteries. However, based on known responses observed during tests on adult somatic symptoms and objective changes in brain regions, we must also consider the role of defense mechanism organization. Defense mechanism organization is shaped during childhood and adolescence as a means to cope with both internal and external anxiety. This concept is relevant to coping styles, which are derived from psychoanalytic theory, suggesting that these unconscious psychic processes regulate the subjective experiences of painful thoughts, emotions, and affects [17].

5. Conclusion

Verbal abuse, though often dismissed as less harmful than physical abuse, can have profound and multifaceted effects on a child's well-being. The impact extends beyond immediate emotional harm, permeating psychological, physical, and biological domains, thereby affecting various aspects of a child's development.

Psychologically, it can result in chronic anxiety, depression, and a lasting sense of diminished self-worth, which can deeply affect a child's emotional development. Physically, the stress and emotional turmoil caused by verbal abuse often manifest in psychosomatic symptoms, such as headaches, stomachaches, and unexplained chest pain, reflecting the body's response to ongoing psychological distress. On a biological level, the prolonged stress associated with verbal abuse can disrupt neurobiological processes, potentially impairing brain development and altering stress regulation mechanisms.

Overall, the consequences of verbal abuse are far-reaching, with psychological distress, physical symptoms, and disrupted neurobiological processes all intertwining to shape a child's long-term health and development. When these clinical signs are recognized, the first is to better warn people and prevent the recurrence of such behaviors, and the second is to better identify and give more accurate and comprehensive interventions in the clinic.

References

- [1] Carr, C. P., Martins, C. M. S., Stingel, A. M., Lemgruber, V. B., & Jurueña, M. F. (2013). The role of early life stress in adult psychiatric disorders: a systematic review according to childhood trauma subtypes. *The Journal of nervous and mental disease*, 201(12), 1007-1020.
- [2] World Health Organization. (2014, December). 8. Child maltreatment indicators Angelakis, I., Gillespie, E. L., & Panagioti, M. (2019). Childhood maltreatment and adult suicidality: A comprehensive systematic review with meta-analysis. *Psychological Medicine*, 49(07), 1057–1078.
- [3] Dube, S. R., Li, E. T., Fiorini, G., Lin, C., Singh, N., Khamisa, K., ... & Fonagy, P. (2023). Childhood verbal abuse as a child maltreatment subtype: A systematic review of the current evidence. *Child Abuse & Neglect*, 144, 106394.
- [4] Bamgboşe, A. (2000). *Language and exclusion: The consequences of language policies in Africa* (Vol. 12). LIT Verlag Münster.
- [5] Taylor, D. C., & Hamdy, H. (2013). Adult learning theories: implications for learning and teaching in medical education: AMEE Guide No. 83. *Medical teacher*, 35(11), e1561-e1572.
- [6] LaCocque, A., & Ricoeur, P. (1998). *Thinking biblically: Exegetical and hermeneutical studies*. University of Chicago Press.
- [7] Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychological medicine*, 43(5), 897-910.
- [8] Johnson, J. G., Cohen, P., Smailes, E. M., Skodol, A. E., Brown, J., & Oldham, J. M. (2001). Childhood verbal abuse and risk for personality disorders during adolescence and early adulthood. *Comprehensive psychiatry*, 42(1), 16-23.
- [9] Sachs-Ericsson, N., Cromer, K., Hernandez, A., & Kendall-Tackett, K. (2009). A review of childhood abuse, health, and pain-related problems: the role of psychiatric disorders and current life stress. *Journal of Trauma & Dissociation*, 10(2), 170-188.
- [10] Acierno, R., Hernandez, M. A., Amstadter, A. B., Resnick, H. S., Steve, K., Muzzy, W., & Kilpatrick, D. G. (2010). Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the United States: The National Elder Mistreatment Study. *American journal of public health*, 100(2), 292-297.
- [11] Ricoeur, P. (1998). Violence and language. *Journal of French and Francophone Philosophy*, 10(2), 32-41.
- [12] Naughton, A. M., Maguire, S. A., Mann, M. K., Lumb, R. C., Tempest, V., Gracias, S., & Kemp, A. M. (2013). Emotional, behavioral, and developmental features indicative of neglect or emotional abuse in preschool children.
- [13] Tomoda, A., Sheu, Y. S., Rabi, K., Suzuki, H., Navalta, C. P., Polcari, A., & Teicher, M. H. (2011). Exposure to parental verbal abuse is associated with increased gray matter volume in superior temporal gyrus. *Neuroimage*, 54, S280-S286.
- [14] Vuilleumier P, Richardson MP, Armony JL, Driver J, Dolan RJ. Distant influences of amygdala lesion on visual cortical activation during emotional face processing. *Nat Neurosci* 2004; 7:1271–1280.

- [15] Eslick, G. D., Koloski, N. A., & Talley, N. J. (2011). Sexual, physical, verbal/emotional abuse and unexplained chest pain. *Child abuse & neglect*, 35(8), 601-605.
- [16] Wabnitz, P., Martens, U., & Neuner, F. (2012). Cortical reactions to verbal abuse: event-related brain potentials reflecting the processing of socially threatening words. *Neuroreport*, 23(13), 774-779.
- [17] Finzi-Dottan, R., & Karu, T. (2006). From emotional abuse in childhood to psychopathology in adulthood: A path mediated by immature defense mechanisms and self-esteem. *The Journal of nervous and mental disease*, 194(8), 616-621