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Review article

STOCKHOLM SYNDROME: A DIMENSION OF TRAUMA

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Abstract: Stockholm syndrome is a complex psychological phenomenon in which some trauma survivors develop strong emotional bonds with their abusers. Despite the absence of clear diagnostic criteria and its exclusion from official psychiatric classification systems, the term has gained widespread recognition in both the media and scientific literature. This phenomenon typically occurs in situations involving significant power imbalances—such as child sexual abuse, intimate partner violence, human trafficking, and hostage situations—where the victim may develop positive feelings toward the abuser in response to extreme stress. Initially observed during a 1973 bank robbery in Stockholm, the syndrome has since been identified in various contexts.

Given its similarities to other psychiatric entities, such as post-traumatic stress disorder (PTSD) and identification with the aggressor, Stockholm syndrome remains a crucial area of research in understanding the psychological impact of extreme stress.

This paper explores Stockholm syndrome from psychological, psychiatric, and neurobiological perspectives, highlighting its implications for mental health, criminology, and forensic science. Further investigation into this phenomenon is essential for improving trauma treatment approaches, legal frameworks, and therapeutic strategies, ultimately enhancing our understanding of victim-perpetrator dynamics in high-stress situations.

Keywords: trauma, Stockholm syndrome, stress.

INTRODUCTION

Stockholm syndrome refers to a hypothetical phenomenon in which trauma survivors develop strong emotional attachments to their abusers (1, 2). Due to the absence of clear diagnostic criteria and similarities with other psychiatric conditions, it is not included in any official psychiatric classification systems. Nonetheless, the term has been widely popularized in the media and has been the subject of numerous scientific studies.

The essence of this concept lies in the fact that, in certain situations where the victim is expected to exhibit a “fight or flight” response, positive feelings toward the abuser may instead develop. This attachment can significantly influence the victim’s behavior.

Current research suggests that this phenomenon can emerge in any situation involving clear power imbalances, such as in cases of child sexual abuse, intimate partner violence, human trafficking, and hostage situations (1).

The syndrome was first described in 1973, following a bank robbery in Stockholm, where hostages developed positive feelings toward their captors. Since then, mental health professionals have observed that similar situations may lead to the development of this syndrome (1). Within current psychiatric classifications, there are notable similarities between Stockholm syndrome and established entities such as post-traumatic stress disorder (PTSD), identification with the aggressor, and others.

This paper aims to explain this phenomenon through well-established psychological, psychiatric, and neurobiological perspectives. Further research is crucial for understanding the complex psychological responses to extreme stress experienced in situations perceived as highly threatening and abusive.

This phenomenon also has significant implications for mental health, criminology, and forensic science. Understanding it can contribute to improved approaches to traumatized individuals, enhanced therapeutic frameworks, and more informed legal considerations—ultimately offering a better understanding of the dynamics between victim and abuser.

The goal of this paper is to provide a deeper understanding of this phenomenon and highlight its implications in the fields of trauma psychology and forensic psychiatry.

DEFINITION AND DIAGNOSTIC STATUS

Stockholm syndrome (SS) is a psychological phenomenon observed in some trauma survivors. It involves the development of a powerful emotional connection toward the abuser or controller (1, 2). Still considered a controversial topic, there is considerable ethical ambiguity surrounding this term. Numerous scientific papers explain that the phenomenon typically occurs in individuals who have survived traumatic situations marked by an extreme power imbalance (2, 3).

Although explored by many authors, one of the most significant reviews on this topic remains the one conducted by Graham, Rawlings, and Rimini. They highlighted that the central symptom of SS is the development of positive feelings in the victim toward the aggressor or abuser, which intensifies as the relationship progresses. Graham identified four important factors in the development of such emotional connections: perceived threat to survival, perceived kindness, perceived isolation, and perceived inability to escape (1).

This bond often manifests as positive feelings toward the perpetrator, despite the victim's suffering. Over time, victims may also exhibit negative emotions toward those attempting to help or free them—such as family, friends, or authorities—sometimes even perceiving these efforts as harmful. Additionally, the victim may begin to rationalize or justify the abuser's actions, supporting the reasoning behind the abuse. This dynamic is often reinforced when the abuser shows affection or positive regard toward the victim, further strengthening the connection. In some cases, the victim may engage in behaviors that support or protect the abuser, even at the expense of their own well-being. This complex psychological response is often seen as a coping mechanism to manage extreme stress and fear during periods of captivity or manipulation (3).

Despite its recognition in media and popular culture, Stockholm syndrome is not included as a diagnosis in any official classification of mental disorders (DSM or ICD). Standardized diagnostic criteria have not yet been described, and there is significant ambiguity in the use of the term. Furthermore, behaviors associated with it may be better understood as coping mechanisms in response to extreme stress rather than as a distinct syndrome. All of these factors contribute to Stockholm syndrome's exclusion from psychiatric classification systems.

PSYCHOLOGICAL AND NEUROBIOLOGICAL MECHANISMS

In order to understand the complexity of this condition, it is essential to be familiar with the concepts of trauma and dissociation, and the roles they play in shaping the victim's perception of reality and the world. Research indicates that trauma can lead to dissociative responses, which may contribute to the development of Stockholm syndrome.

During traumatic situations, victims often experience a flood of negative emotions such as fear, helplessness, and intense dread for their own lives. As a response to such extreme stress, victims can paradoxically develop an attachment to the abuser as a coping mechanism. Dissociation is a well-known defense mechanism used, in this case, to "detach from reality" and escape the pain, fear, or humiliation the victim is experiencing. Through dissociation, the victim might downplay or rationalize the abuser's actions, leading to feelings of sympathy or attachment that would seem counterintuitive in a less traumatic context (3).

Another important defense mechanism relevant to this topic was first described in 1937: identification with the aggressor. This occurs when the victim adopts the abuser's values, beliefs, or behaviors—often as a coping strategy to manage trauma or regain a sense of control. This psychological process can lead the victim to internalize the abuser's perspective, sometimes justifying or excusing their actions (4).

By aligning with the abuser, the victim reduces emotional and psychological conflict, diminishes the perceived threat, and reconciles the abuse with survival needs. This defense mechanism allows the victim to navigate the trauma while minimizing further harm.

OXYTOCIN AND CORTISOL

Research has emphasized the critical roles of the hypothalamic–pituitary–adrenal (HPA) axis, oxytocin, and cortisol in managing the body's response to stress. Dysregulation of these systems can lead to changes in the production and release of both cortisol and oxytocin, which in turn may alter the body's reaction to stress and increase vulnerability to the harmful effects of stressors.

Evidence suggests that the release of oxytocin in the brain helps regulate cortisol levels, supporting a rapid return of the body to its pre-stress state and moderating the HPA axis response to psychological stress. However, chronic stress may disrupt the function of these systems, reducing the synthesis and release of oxytocin. This disruption can impair the HPA axis's negative feedback mechanism, potentially leading to elevated cortisol levels (hypercortisolemia) (5, 6).

Oxytocin plays a crucial role in adult human bonding by promoting social behaviors such as pair bonding, recognition, and social interaction. It also supports physical attachment processes, such as wound healing,

as well as psychological and social bonding, which may enhance resilience to future traumatic events.

While oxytocin is essential for fostering attachment, cortisol—another key hormone—is released in response to stress. Cortisol prepares the body for immediate action by heightening alertness and influencing decision-making, but if elevated for prolonged periods, it can lead to both mental and physical exhaustion (7, 8).

Given the complex interaction between these hormones, it becomes clear how a paradoxical situation can arise in which a victim becomes emotionally attached to their abuser despite ongoing harm. This dynamic illustrates how the interplay between oxytocin and cortisol may shape emotional responses and attachment behaviors, even in the context of trauma.

PARALLELS WITH SIMILAR PSYCHIATRIC ENTITIES

TRAUMA BONDING

According to the American Psychological Association (APA), trauma refers to any distressing experience that evokes intense emotions such as fear, helplessness, dissociation, or confusion—strong enough to cause long-term negative impacts on an individual's attitudes, behaviors, and overall functioning. Traumatic events may result from human actions (e.g., assault, warfare, industrial accidents) or natural occurrences (e.g., earthquakes), and they frequently challenge an individual's perception of the world as fair, secure, and predictable. According to the same source, the term *bonding* describes the connection between two or more people, characterized by trust and mutual support (9).

Trauma bonding, as the term itself suggests, refers to a deep emotional connection between an abused individual and their abuser, often developed due to an ongoing cycle of abuse (10). This concept was first introduced by Dutton and Painter in 1993, who described it as the formation of "powerful emotional attachments" within abusive relationships (11). According to their theory, trauma bonding is developed, maintained, and reinforced by two key factors: power imbalances and intermittent cycles of good and bad treatment.

Dutton and Painter emphasized the critical role of the power imbalance, which underscores the victim's dependency and sense of powerlessness in contrast to the perpetrator's control and dominance. This dynamic is intensified by a vicious cycle in which periods of kindness or normalcy alternate with episodes of abuse, further distorting the victim's reasoning and diminishing their ability to leave the relationship. The resulting attachment to the abuser becomes a powerful psychological force (11).

Many authors have noted that the predisposition for trauma bonding may be rooted in early childhood, particularly in adverse childhood experiences. Such early experiences can distort one's understanding of love and attachment, normalizing emotional or physical abuse in later relationships (11, 12).

The strength of traumatic bonding depends on several factors, including the duration of the abusive relationship, the intensity of emotional attachment to the perpetrator, lack of social support, financial or housing insecurity, concerns over child custody, low self-esteem, fear of harm, and a sense of helplessness (11). Trauma bonding can occur across various contexts—such as human trafficking, domestic violence, and hostage situations—and affects individuals of all demographics, including all ages, genders, sexual orientations, socioeconomic statuses, races, and religions.

While trauma bonding and Stockholm syndrome share the core feature of developing emotional attachments to abusers, they differ in context and manifestation. Stockholm syndrome typically occurs in hostage or kidnapping scenarios, where victims develop emotional attachments to captors due to fear and dependency. In contrast, trauma bonding is more commonly associated with prolonged cycles of abuse in relationships, where intermittent kindness strengthens the emotional tie.

Despite these contextual differences, both trauma bonding and Stockholm syndrome involve psychological mechanisms that can trap victims in abusive environments and influence their ability or willingness to escape. It is important to note, however, that trauma bonding—like Stockholm syndrome—is not officially recognized in diagnostic classifications such as the DSM-5. Its conceptualization remains primarily used in clinical and research contexts to describe the psychological dynamics of abusive relationships.

According to the APA Dictionary of Psychology (American Psychological Association, 2015) trauma is defined as a disturbing experience from an event caused by a serious physical injury, human behavior, or nature that generates intense, long-term feelings of fear, helplessness, dissociation, and confusion; maladaptively effectuating a person's affective and cognitive behaviors.

IDENTIFICATION WITH THE AGGRESSOR

The concept, initially introduced by Ferenczi in 1936 and later redefined by Anna Freud, describes a process in which victims of abuse merge with and internalize the experiences of their perpetrators. Ferenczi's theory of identification with the aggressor

posits that the phenomenon is not simply the result of the aggressor's influence entering the victim's psyche and triggering reenactments of aggression. Rather, it involves a psychic split within the victim, whereby a part of the self becomes automatically imitative of the aggressor's behavior (13). This process is understood as an automatic, dissociative response intended to ensure survival in situations of persistent, inescapable harm—particularly when the victim is emotionally attached to and dependent on the abuser. Victims may not only comply with the perpetrator's demands but also become psychologically subordinated to the perpetrator's needs and desires. In an effort to minimize harm, they often develop heightened sensitivity to the perpetrator's emotions and behaviors, internalizing their perspective on the abuse. This can result in the victim rationalizing or denying the abuse, adopting the abuser's viewpoint, and potentially redirecting aggression either toward themselves or others (14). While identification with the aggressor and Stockholm syndrome share certain similarities, they also differ in significant ways. Identification with the aggressor involves adopting the perpetrator's traits or behaviors as a means of self-protection, whereas Stockholm syndrome is characterized by the development of positive feelings—such as empathy, affection, or even love—toward the abuser. The key difference lies in the nature of the attachment: in Stockholm syndrome, the victim minimizes or rationalizes the abuser's actions, believing they are not entirely harmful, whereas in identification with the aggressor, the victim mimics the abuser's behavior in an attempt to gain a sense of safety or control. Both responses serve as coping mechanisms, aiming to manage the traumatic experience and reduce psychological distress.

POST-TRAUMATIC STRESS DISORDER (PTSD)

Post-traumatic stress disorder is a persistent mental condition that significantly decreases the quality of life and deeply affects the survivor's perception and relationships. It develops after exposure to a traumatic event, which serves as the catalyst for its onset. Traumatic stress (real or perceived threats of harm, death, or sexual violence) is essential for the development of PTSD.

Key symptoms of PTSD include intrusive thoughts, emotional numbness, avoidance, hyperarousal, heightened sensitivity to stress, and significant cognitive and emotional disturbances (15). While both PTSD and Stockholm syndrome occur after a traumatic experience, they manifest with different symptoms. Some PTSD symptoms, such as flashbacks and hypervigilance, are also seen in individuals with Stockholm syndrome, but all other symptoms are missing.

PTSD develops after exposure to a traumatic event, which may or may not involve a power imbalance. Additionally, individuals with PTSD generally do not develop attachments to the aggressor. The main focus of PTSD is on distress and re-experiencing trauma, leading to avoidant behaviors, while Stockholm syndrome generally involves the development of positive feelings as a coping mechanism to feel safer.

DEPENDENT PERSONALITY DISORDER (DPD)

A shared component of these two conditions is a high degree of dependence on others. In Stockholm syndrome, the victim becomes dependent on the captor for emotional support or survival. Similarly, individuals with DPD may exhibit extreme dependency on others for decision-making, emotional support, and a fear of abandonment.

DPD, however, is not based on traumatic events; it is a long-term personality disorder. It is not characterized by forming emotional bonds with individuals perceived as abusers. Additionally, DPD represents a consistent pattern of behavior across various relationships (16, 17).

LEARNED HELPLESSNESS

This phenomenon was first introduced in 1967 by Seligman and Meyer and remains relevant in psychiatry and psychology today. It is described as a dysregulation of goal-directed behavior due to repeated failure to achieve a goal. Individuals in this state stop trying because their goals lose value, or they no longer believe that further effort will lead to success. They cease initiating actions or efforts, often believing that nothing will change the outcome (18).

While Stockholm syndrome involves a psychological attachment to the aggressor, with the resulting behavior aimed at reaching a specific goal, often to avoid further harm or secure a better outcome, learned helplessness focuses on a more general sense of powerlessness and resignation to an uncontrollable situation.

ETHICAL ASPECTS AND FORENSIC PSYCHIATRY

Understanding the psychological response to Stockholm syndrome is crucial for evaluating the harm experienced by victims and determining effective interventions. This phenomenon can be exploited by perpetrators to manipulate or control victims, particularly to avoid legal consequences. Forensic psychiatrists must consider the victim-perpetrator dynam-

ic, as it influences both the victim's behavior and the perpetrator's psychological state. Victims may appear uncooperative or even defend their abusers, complicating investigations and legal outcomes (19, 20). By integrating Stockholm syndrome into forensic assessments, professionals can better understand the complexities of abusive relationships and improve both legal and therapeutic interventions.

Ethical concerns arise around the victim's autonomy, as trauma bonding can impair decision-making and diminish the capacity for free choice. This raises questions about whether victims' actions are truly voluntary or influenced by psychological manipulation. Therapeutic approaches should empower victims to regain control and recognize the effects of trauma without re-traumatizing them. Mental health professionals have an ethical duty to ensure that victims receive treatment addressing these effects and helping them break free from the cycle of control (21).

The term "Stockholm syndrome" also carries ethical implications. It can sometimes minimize the severity of the abuser's actions by shifting focus to the victim's psychological response rather than the abusive dynamics. This may distort public perception, hindering recognition of the abuse's true impact and preventing victims from receiving necessary support and protection. The term must be used carefully in clinical, legal, and public contexts, ensuring it reflects the victim's experience without overshadowing the abuser's behavior or undermining the victim's dignity and rights to justice and care.

CONCLUSION

Trauma is a widely studied phenomenon in both psychiatry and psychology. While definitions of trauma may vary across disciplines, the underlying mechanisms and coping strategies remain consistent. Individuals exhibit varying predispositions and responses to high-stress situations, and the coping mechanisms they employ are influenced by numerous factors. Currently, there is no established method for predicting how an individual will respond to trauma. One potential psychological response is Stockholm syndrome. Although not formally recognized as a psychiatric diagnosis, Stockholm syndrome is a crucial consideration for professionals working with victims of abusive relationships, hostage situations, human trafficking, and similar circumstances. Its recognition can aid in understanding the multifaceted nature of trauma and illuminate the pathological dynamics between the victim and the perpetrator, thereby improving interventions and support strategies.

Abbreviations

SS – Stockholm Syndrome
PTSD – Post-traumatic stress disorder
DSM – Diagnostic and Statistical Manual of Mental Disorders
ICD – International Classification of Diseases
HPA axis – Hypothalamic–pituitary–adrenal axis
APA – American Psychological Association
DPD – Dependent Personality Disorder

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Sažetak

STOKHOLMSKI SINDROM: DIMENZIJA TRAUME

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Stokholmski sindrom je kompleksan psihološki fenomen koji podrazumeva da se kod pojedinih individua izloženih traumatičnim događajima razvijaju pozitivna osećanja prema zlostavljaču. Iako još uvek nema jasnih dijagnostičkih kriterijuma i nije deo zvaničnih klasifikacionih sistema, termin Stokholmski sindrom je široko rasprostranjen kako u medijima tako i u naučnoj literaturi. Do razvoja ovog fenomena obično dolazi u situacijama gde postoji jasno narušena dinamika moći kao što su zlostavljanje dece, partnersko nasilje, trgovina ljudima i talačke situacije, gde žrtva može razviti pozitivna osećanja prema zlostavljaču kao odgovor na ekstremni stres. Prvi put je opisan nakon pljačke banke u Stokholmu 1973. godine, a od tada je identifikovan u različitim kontekstima. S obzirom na sličnosti sa drugim psihijatrijskim poremećajima, Stokholmski sindrom predstavlja jednu od ključnih tema za razumevanje psihičkih posledica ekstremnog stresa.

Ovaj rad prikazuje Stokholmski sindrom kroz psihološke, psihijatrijske i neurobiološke perspektive, is-

tičući njegove implikacije za mentalno zdravlje, kriminalistiku i forenzičku nauku. Dalja istraživanja ovog fenomena su od suštinskog značaja za poboljšanje pristupa lečenju trauma, pravnih okvira i terapijskih strategija, što će konačno doprineti boljem razumevanju dinamike žrtve i zlostavljača u u izrazito stresnim situacijama.

***Ključne reči**:* trauma, Stokholmski sindrom, stres.

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