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Understanding the Phenomenon of Suicide in the Shadow of Traumatic Life Experiences

Key words: suicide, trauma, negative self representations, psychological pain, right hemisphere, neurobiology

Abstract: During the last few years, there has been an increase in the number of international publications connecting traumatic life events with suicide. Even more and more studies have confirmed a statistically relevant relationship between actual or childhood trauma and self – destructive behavior. Adolescent suicide research has reported a strong correlation between abuse during childhood and suicidal tendencies during adolescence. — Surprisingly, it seems that general clinical and suicidological data have not succeeded in clarifying the interplay between trauma and suicide. — The authors intend to describe the trauma–related suicide process, which lead to the development of negative self representations and consequent painful feelings as well as the possible neurobiological correlation between the two phenomenon. It will be interesting also to discuss the place and role of unbearable psychological pain in the development of a "goal directed process," leading to suicide.

Razumevanje samomora v zrcalu travmatskih življenjskih dogodkov

Ključne besede: samomor, travma, negativne reprezentacije o selfu, duševna bolečina, desna hemisfera, nevrobiologija

Povzetek: V zadnjih letih se je povečalo število tistih mednarodnih publikacij, ki povezujejo travmatske življenjske dogodke s samomorom. Čedalje več raziskav povezuje statistično pomembno povezavo med samouničevalnim obnašanjem in aktualno travmo oz. travmo v času otroštva. Raziskave o mladostniškem samomoru poročajo o močni povezavi med zlorabo v času otroštva in samomorilnostjo v času adolescence. — Avtorja opišeta samomorilni process, ki vodi k razvoju negativnih predstav o sebi in posledičnih bolečih občutkih, kot tudi do morebitnih nevrobioloških povezav med pojavoma. — Razprava bo tekla tudi o vlogi in mestu neobvladljive duševne bolečine v razvoju ciljno usmerjenega procesa, ki vodi v samomor.

Introduction

In 1895, in co-authorship with Josef Breuer, Sigmund Freud published an article, entitled *Studies on Hysteria,* which presumed an etiological relationship between early sexual trauma and hysteria. Breuer J. Freud S. (2000) Only a few years later, in his presentation of the Dora case history, Freud revised the theory and declared that *"hysterical symptoms are the expression of their* (the patient's) *most secret and repressed wishes ..."* Freud S. (1977) Representatives of feminist psychology, such as Judith Herman Herman J. (1992), assert that the Freudian turn in analytical interpretation of hysteria crucially influenced the professional rejection of relevance of sexual trauma during the Twentieth Century.

The influence of Freudian interpretation on trauma and the influence of a broader socio-cultural context could also be detected in the development of psychology-based suicidology during the Sixties and Seventies, which overlooked the relationship between suicide and psychological trauma. But even if the negligent psychoanalytic approach to the question of psychological trauma represents an important element, it seems very simplistic to blame only one variable for the shortcomings of suicidology theory. It is the opinion of the authors that is it also the methodology used by the early suicidologists which contributed to the development of this theory.

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In 1957, Shneidman and Farberow (1957) introduced the method of retrograde psychological autopsy. They expected to disclose the facts and motives which lead to the suicide of a particular individual. Among other sources of information, Shneidman and Farberow exposed the scientific relevance of suicide notes. They expressed their enthusiasm that "*such notes, read in any quantity, strike the reader with the richness of the material for clues to the affect, conflicts, and motivations of the suicidal person.*

After two decades of suicide research, which led to a paradigm change in suicidology, Shneidman confessed in an article, entitled "*Suicide Notes Reconsidered"* (1973), that suicide notes do not contain any relevant information regarding the causes, leading to suicide. He declared, that suicide notes research *"have not produced those new insights and information which that amount of focus and effort would have [led] us legitimately to expect."*

According to Shneidman the reason for the failure of scientific suicide note research is *"that suicide notes, written at perhaps the most dramatic moment of person's life, are surprinsingly commonplace, banal, even sometimes poignantly pedestrian and dull."* At first glimpse it seems that the methodology used by Shneidman, Farberow and other researchers of their time was not appropriate to detect and confirm the correlation between traumatic life events and suicide.

Two decades later, the authors performed transculturally and linguistically-oriented suicide note studies (Oravecz 1999; 2001). After the evaluation of the collected data, it became obvious, that suicide notes do not contain any relevant information regarding traumatic life events in correlation with the suicide act.

Because the structure and content of suicide notes written in Slovene, Hungarian and English language show many similarities with the farewell letters of Slovene patriots, executed during the Second World War, the authors concluded, that one of the possible explanation of the lack of trauma related information is not the irrelevance of such events, but the nature of suicide notes and farewell letters, which usually do not contain relevant personal narratives. Even if they have been narratively constructed, they almost never uncover "early" events in the life of the suicidal individual. It seems that the presuicidal cognition of a person does not seek (or allow) to communicate any trauma-related information.

A study, performed by the authors in an attempt to identify social representations of students regarding suicide (Oravecz and Czigler, 2004), showed that possible traumatic experiences of suicidal individuals have not been perceived by non-suicidal members of the community as facts influencing (or leading to) suicide.

Although the Internet enables the construction of artificial, so-called virtual identities, this environment supports more or less safe trauma-related confessions by hiding the real identity of the person making a confession. The authors gathered information from the archived material of a "pro choice" oriented, suicide related newsgroup (alt.suicide.holiday) which suggest that such a suicide-related discourse does not contain personal, trauma-related narratives connectable to suicide related thoughts of individuals at risk. (Oravecz and Moore, 2004) The research results, noted above well reflect the lack of trauma-related information in sources wich are in the scope of suicidological research.

In contrary to suicidology, contemporary psychotraumatological research, oriented mainly toward quantitative studies, successfully confirmed a tight correlation between self-destructive behavior and traumatic life events, such as childhood sexual and physical abuse, torture, maltreatment, etc.

In 2001, Dube et al published, that *"a powerful graded relationship exists between adverse childhood experiences and risk of attempted suicide throughout the lifespan. Alcoholism, depressed affect, and illicit drug use, which are strongly associated with such experiences, appear to partially mediate this relationship."* Also Ullman, Brecklin & Leanne (2002) reported, that *„women with histories of sexual assault in both childhood and adulthood reported significantly*

*greater odds of lifetime suicide attempts. „*Read et al (2001) made a step forward by suggesting that *„current suicidality was predicted better by child sexual abuse (experienced on average 20 years previously) than by a current diagnosis of depression."*

A study, published by Blaauw et al (2002) confirmed the correlation between abuse and maltreatment and suicide for the population of male inmates. As they report, *„suicidal inmates reported more episodes of sexual abuse, physical maltreatment, emotional maltreatment, abandonment, and suicide attempts by significant others".* Brodsky et al (2001) pointed at a correlation between traumatic life events, suicidality and impulsivity. They claim that *„subjects who reported an abuse history were more likely to have made a suicide attempt and had significantly higher impulsivity and aggression scores than those who did not report an abuse history."* Gladstone et al. (2004) confirmed *"childhood sexual abuse as an important risk factor to identify in women with depression."* It is their opinion that *"the home environment of those with a history of childhood sexual abuse was rated as more emotionally and physically abusive and as having more parental conflict."*

These results show that a correlation between traumatic life events and suicide is incontestable, even *"subjects reporting a history of sexual assault were more likely to be female, younger, and to report higher rates of lifetime suicide attempt and posttraumatic stress symptoms."* (Davidson, et al 1996). A meta-analysis of 37 articles written on trauma and suicide between 1985 and 2002 (database of David Baldwin attainable at http://www.trauma-pages.com/) performed by the authors show, that the majority of articles (21 of them) confirm a positive correlation between suicide and traumatic events during the life span both in male and female. These research findings point to an obvious inconsistency of suicidological and psychotraumatological data and theoretical concepts.

The authors question the avoidant attitude of suicidologists regarding the unambiguous research data, presented by psychotraumatology during the last decade, and wonder if it is due to more than one reason. It appears that, in light of the new psychotraumatology - related data, suicidology needs to re-evaluate its theoretical concepts developed during many decades. However, an accentuation of the abuse history as a "main reason" responsible for the suicide may represent a danger of simplification and reductionism, as has happened many times in the history of social- and human sciences.

The authors are of the opinion that a better understanding of the correlation between suicide and traumatic life events definitely depends on the successful conceptualization of underlying psychological, cognitive and neurobiological processes.

The first and most important question in uncovering the correlation of suicide and traumatic life events is whether every trauma – producing life event contributes to an increasing risk of suicide? The meta-analysis of 37 articles published between 1985 and 2002 (database of David Baldwin) show, that eleven publications did not differentiate between childhood trauma history and adult trauma inducing life events. Many of the authors used research instruments, appropriate to measure the presence of PTSD and related symptomatology in correlation with suicide risk.

It is the opinion of the authors that the use of such methodology does not exclude the presence and role of childhood trauma as an etiological factor contributing to the development of PTSD and a consequent suicidal life carrier. Almost half of the evaluated articles, 17 of them, undoubtedly support the thesis, that abuse and maltreatment during the childhood represent a "hard" descriptor of later suicide risk in both sexes. Only three articles described exclusive suicidogenic role of trauma – inducing events during the adult life span.

According to the above presented research outcomes, it seems, that suicide generally correlates with the long-term effect of childhood abuse, violence and neglect. The idea that trauma affects the individual and manifests a life long process of identity transformation tightly correlates

with the concepts, introducing suicide as the final event of a process, which lasts for months, years and even decades.

The scientific tradition of the "processional nature" of suicide started in the 1960s. In 1961, Farberow and Shneidman (1961) described the phenomenon of "cry for help" which presupposes the existence of a suicide process present before the suicide act. A few years later Erwin Ringel (1969) described the presuicidal syndrome. He suggests that a suicidal person must
– come to the conclusion that there is no solution to the problem except suicide, then
– blame himself or herself for the situation, and
– experience suicidal fantasies and mentally play out the suicidal act.

In the 1980s Firestone made an important step forward by describing the entity of "inner voice," as "internalized negative thought processes" and their consequences, the "negative self representations," which underlie suicidal manifestations. (Firestone, 1988) According to the therapeutic experiences of the authors, the concept of *negative self representations* represent a well defined link between the past (childhood) experiences and the development of the suicide process, and it is an appropriate model for the understanding of the influence of trauma on self destructiveness of an individual.

To understand the phenomenon of negative self representations, it seems necessary to turn to Sándor Ferenczi, (1955) who was one of the early proponents of psychoanalysis, who described the process of "identification with the aggressor." He wrote: *"The weak and undeveloped personality reacts to sudden unpleasure not by defense, but by anxiety-ridden identification and by introjection of the menacing person or aggressor,"* and *"when the child recovers from such an attack, he feels enormously confused, in fact, split-innocent and culpable at the same time and his confidence in the testimony of his own senses is broken"* (Ferenczi, 1955)

Three decades later, Anna Freud (1966) mentioned: *"By impersonating the aggressor, assuming his attributes or imitating his aggression, the child transforms himself from the person threatened into the person who makes the threat."*

Firestone, a leading proponent of Voice Therapy (1988) found that the *"voice represents the language of the defensive process. It may be defined as an organized system of internalized thoughts and associated affects alien or hostile to a person's self-interest."* He refers to*" the system of thoughts that defines the defensive function of the personality as the voice process, because all people are involved in an internal dialogue… negative events, rejection, or hurt feelings are not nearly as harmful as what we tell ourselves about them."* According to Firestone*, "internalized thoughts are experienced in the form of emotionally loaded statements about the self as though another persona were talking to us."*

Today it seems plausible that the impact of traumatic life events do not impair only the psychic structure but also the underlying neurobiological processes and even the neuro-anatomic (brain) structures. There is now agreement that repetitive, sustained emotional abuse is at the core of childhood trauma (O'Hagan, 1995) and that maltreatment or neglect compromises cognitive and emotional development (Trickett and McBride-Chang, 1995). Perry et al (1995) confirmed that *"childhood trauma has profound impact on the emotional, behavioral, cognitive, social and physical functioning of children."* It is their opinion that *"traumatic experiences in childhood increase the risk of developing a variety of neuropsychiatric symptoms in adolescence and adulthood."*

Because early abuse negatively impacts the developing brain of infants it has enduring effects. There is extensive evidence that trauma in early life impairs the development of the capacities of maintaining interpersonal relationships, coping with stressful stimuli, and regulating emotion. Due to neuro-developmental theories, negative influence on child brain may have:

1) lack of sensory experience during critical periods or, more commonly,

2) atypical or abnormal patterns of neuronal activation due to extremes of experience (e.g.,

child maltreatment).

3) Perry et al (1995) suggest that two major neuronal response patterns are important for the traumatized child: the hyperarousal continuum and the dissociative continuum. The first is more specific for males, the second is more often observed in children and female individuals, as the expression of "freeze" or "surrender" coping strategy.

A few years later, Shore (2001) presented a coherent theory on the "effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health."

Freud observed in his last work (1964) that trauma in early life affects all vulnerable humans because *"the ego...is feeble, immature and incapable of resistance."* According to the recent concepts of developmental neurobiology, this dictum translates to the principle that the infant's immature brain is in a state of rapid development, and is therefore exquisitely vulnerable to early adverse experiences, including adverse social experiences.

Shore (2001) *"integrated current interdisciplinary data from attachment studies on dyadic affective communications, neuroscience on the early developing right brain, psychophysiology on stress systems, and psychiatry on psycho-pathogenesis in order to provide a deeper understanding of the psycho-neuro-biological mechanisms that underlie infant mental health."*

It is plausible that positive attachment relations between the infant and the primary caregiver are responsible for the brain development and differentiation of the child as well as the caregiver during the first years of the child's neuro-biological development. In the case of the attachment relationship being optimal, the primary caregiver of the securely attached infant affords emotional access to the child and responds appropriately and promptly to his or her positive and negative states.

Conversely, *"the abusive caregiver (mainly the mother) not only shows less play with her infant, she also induces traumatic states of enduring negative affect. Because her attachment is weak, she provides little protection against other potential abusers of the infant, such as the father. This caregiver is inaccessible and reacts to her infant's expressions of emotions and stress inappropriately and/or rejectingly, and shows minimal or unpredictable participation in the various types of arousal regulating processes."* (Schore, 2001)

Generally, brain development is characterized by 1) sequential development and 'sensitivity' (from the brainstem to the cortex) and 2) 'use-dependent' organization of these various brain areas. The brain plasticity decreases according to the level of development. Once an area of the brain is organized, it is much less responsive to the environment - it is less plastic. Due to the higher level of neuroplasticity during childhood, the effect of trauma is much more devastating in children than in adults.

According to the relevant neurobiological data it seems that right hemisphere plays an important role in understanding the consequences of early relational trauma on brain development and self functioning. The right prefrontal cortex is critical to the processing and regulation of self functions. During the first two years of brain development, a negative attachment relation and the consequent interactive traumatic stress induce not only heightened negative affect, but chaotic biochemical alterations that produce a developmentally immature, structurally defective right brain.

Severe developmental impairments of the right brain are manifest in inefficient and vulnerable coping mechanisms, and they occur in the attachment pathology of disorganized children. An impairment of the right brain is thus central to the disordered mind-body functions that are found in children and adults who continue to experience the relational trauma of their infancy.

A few years ago Weinberg (2000) described the connection between right hemisphere deficiency and suicide. According to relevant neurobiological data, the function of the right brain is parallel processing of many elements of information as a single whole, so it is involved in formation of polysemantic context. Contrary to the function of the left hemisphere, which performs

formal, causality – seeking cognition, right hemispheric thinking tends to form an integral, but ambiguous context. The cognitive style, represented by the right hemisphere is not causality seeking, but dialectical, determined by the interconnections between the elements of the reality.

Right hemisphere plays an important role in "social intelligence," in the sense of developing understanding of intentional (social) relations as well as emotional regulation.The ability to form polysemantic context makes possible perception of spatial information, pain, and representation of self- and body – image.

Severe trauma may lead to unmanaged negative affects that result in elevated corticosteroid release. The stress induced neuro-biological changes lead to structural and functional alterations in the right brain. It is the opinion of Weinberg (2000) that mental pain may represent one of the causes leading to the "collapse" of the right brain. Of course, traumatization of the brain structures during early childhood may contribute to the increased neuro-biological vulnerability.

Turning one's attention toward the socio-cultural impact on brain development and self-destructiveness, it seems that the content of a particular culture plays an important role in constructing an actual social reality, which influences all segments of the society, community or a family. It seems plausible, that socio-cultural descriptors influence the childbearing practices, attachment relations, social coherence and even the self representations of the particular individuals. It seems that, if they live in a confused, irrational and less structured community or society, they have more chances to develop and transfer less adaptive manifestations to their offspring. Such socio-cultural environment contributes also to the increase of incapacitating stressful events, which undermine the neurobiological status of a certain individual, especially the more sophisticated right brain functions.

The impaired right hemisphere function reflects in *"decreased ability to form polysemantic context. This difficulty affects personal experience of suicidal persons, their cognitive style, body and pain perception, contributes to disintegrated self-perception, and to inability to regulate one's affect."* (Weinberg, 2000)

Other authors (Henry, 1997) stated, *"that right hemispheric damaged children lose critical social skills, and in adults the related sense of familiarity critical for bonding is lost. Such losses of social sensibilities may account for the lack of empathy and difficulties with bonding found in sociopathy and borderline personality: conditions now believed to result from repeated psychological trauma during development."*

Due to the right hemisphere collapse, a coherent system of relevant self-representation disintegrates. Such individuals shift to egocentric frame of reference. At the same time also the intentional abilities regress to a less sophisticated level, preferring projective identification to deal with dangerous emotional influences from the environment. According to the presented neurobiologic concepts, it becomes clear that trauma-related experiences of various kinds may represent the key moments of the development of a self – destructive process.

On one hand, trauma-related experiences during the childhood may damage the achievements of normal cognitive and emotional development or deepen the woundedness caused by insecure or disorganized attachment experiences. The nature of the traumatogenic event, the relationship between the victim and the perpetrator and also the duration (and/or the repetition) of the abuse seems to play an important role regarding the consequence of trauma related events. Gergely et al (2001) asserts that borderline personality disorder is due to "*seriously distorted, dysfunctional development of the normal human capacity to mentalize in intimate relationships: or, in other words, that BPD can be considered to be a core dysfunction of our naive theory of mind."* As one of the main „symptoms" of the borderline personality disorder, he described *„vulnerability to trauma, serious difficulties in maintaining intimate attachment relations, proneness to provoke abandonment, and consequent suicidality."* On the other hand, serious traumatic life events during the adult life span may cause right hemisphere dysfunction, which affect the self

representations of an individual in the sense of disintegration.

The combination of trauma-related experiences during childhood and re-traumatization during adulthood undoubtedly increase the risk of self-destructiveness and the likelihood of a suicide carrier.

According to the Weinberg's interpretation, *"...when painful injury cannot be contained, processed or worked through, the right hemisphere collapses, which leads to catastrophic disintegration of self-representations" (*Weinberg, 2000), and the consequence of such disintegration is an unbearable feeling of psychological pain. Therefore, neurobiological data well support the thesis, presented by Shneidman (1993), who wrote in his article *Suicide as Psychache*: "*Nearing the end of my career in suicidology, I think I can now say what has been on my mind in as few as five words: Suicide is caused by psychache.*"Suicide occurs when mental pain is deemed by the person to be unbearable.

According to Israel Orbach (2001), mental pain has many different aspects and the appearance of mental pain reflects some traumatic life events, such as:

– loss and separateness,

– the experience of emptiness, or

– »an awareness of a disruption in the person's tendency toward maintaining a sense of wholeness and social unity.« (Bakan, 1968).

Other authors pointed out, that mental pain is in essence due to the perception of a negative change in the self. Orbach (2001) formulated a definition based on Styron's literal description of personal experiences on mental pain: "*Mental pain is the experience of inner torture, perturbation, and surfeit of negative emotion brought about by an inner estranged and hostile force, which destroys the unity of the self and the mind."*

It is the opinion of the authors that the concept of mental pain has a central role in understanding the interplay between trauma and suicide. Trauma-related processes undoubtedly contribute to the condition of "woundedness" of an individual at risk, enabling the development of mental pain, "*which destroys the unity of the self and the mind."* As well, the activation of right hemisphere regulates the level of pain perception, so the right brain dysfunction usually leads to distorted, decreased pain perception. However, only in suicidal individuals is intense mental anguish associated with low sensitivity to bodily pain. Weinberg (2000) offers an explanation for the described phenomenon: during the suicide process, the feeling of mental pain is high. Due to the increasing deficiency of the right brain, it collapses. As a result, the perceived intensity of bodily pain decreases. As it has been noted above, high level of perceived mental anguish (psychache) plays an important role in the proliferation of the suicide process. Michel and Valach described that human actions, supposedly also those leading to suicide, "*are motivated and accompanied by emotions.* (Michel and Valach, 2001). It is the opinion of the authors that „psychache" may represent the fuel necessary to push the suicide process toward the final outcome.

According to the above presented theoretical concepts, it appears that the relationship between suicide and trauma is a complex issue, which needs further research to develop a more efficient suicide preventive instrumentation. In any case, it seems that psychological trauma, especially in early childhood, always represents a high risk for suicide in later life. Due to the recognition of the role of trauma related risk of self destructiveness, many new questions about and opportunities for suicide prevention appear.

One of these is the question of socio-cultural influence on the well-being of individuals living in a certain community or society. As it is well known, the impact of some, overwhelming social experiences, such as war, genocide and political terrorism, persists for decades or even centuries. They contribute to the presence of some "hard" determinants directly influencing the society, such as alcohol consumption, violence, sexuality, gender relations, etc.

All these elements influence the childbearing practices and attachment relations. During

"bad" times, intense stressful events work against secure relationships between the infant and the caregiver, spreading the neurobiological messages, which support the development of less humanized, aggressive or dissociative individuals, which may be able to fight, flee or to surrender and survive.

Societies, which have been the »tidal area« of, repeated military and political violence during the last centuries, such as the central- and east - European and Baltic countries with high suicide incidence, well support this hypothesis. The profound and frequent socio-political and the consequent socio-cultural changes deeply correlate with the low level of social coherence, decreasing life expectancy, especially in the adult male population and increasing alcohol consumption, suicide rate and trauma sensitiveness.

It is the opinion of the authors, that frequency, intensity and multitude of traumatic experiences is a more important determinant of long term suicide incidence in a community and society than genetic background, as suggested by Voracek, Fisher and Marusic (2003). With to the above presented scientific theories, the newly conceptualized relationship between early trauma and self-destructiveness opens some new pathways to general suicide prevention, which have been overlooked by suicidology. It seems that efficient suicide prevention necessarily includes efficient nationwide programs on general mental health development with a focus on the trauma – related work oriented to the general population as well as the groups, communities and individuals at risk. □

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