Original article

# Fostering resilience in psychological trauma victims

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# **INTRODUCTION**

During their lifetime, 51.2% of women and 60.7% of men are estimated to have experienced at least one traumatic event. However, the traumatic events are not isolated or exclusive determinants of psychiatric disorders. Potentially intense and devastating experiences have different effects.<sup>2,3</sup> Some studies revealed that there is a degree of interindividual variability in the processing of memory of life events and basic emotions, which deviates the focus from the idea of "universal" reaction to trauma."5,6 Many victims of trauma look for professional aid, literature, supervision, and friendship, while others focus on the collapse and/or victimization. Even though there are some significant qualitative differences in how traumatized and non-traumatized people process and categorize their own experiences, <sup>8</sup> crucial questions still remain: what makes some individuals develop pathologies instead of others, even when they are submitted to the same stressors? What are the predictors of positive outcomes? Could such factors be useful in the treatment of psychological trauma victims? To partially answer these questions, the present article will discuss the relationship between the individual psychological dynamics and the way how the traumatic events are processed. By handling the internal dialogues set with the traumatic event, we intend to bring new contributions to the psychotherapeutic perspectives, in order to make the treatment of individuals with posttraumatic stress disorder (PTSD) more efficient.

# CONTRIBUTIONS FROM NEUROSCIENCE

Functional and structural findings of neuroimaging suggest that difficulties in synthesizing, categorizing and integrating the trauma memory into a narrative can be related to the decreased volume of hippocampus, to the relative decreased activation of the left hemisphere and to a decrease in the activity of the prefrontal cortex of the anterior cingulum and Broca's area.<sup>5,9</sup> The lower levels of cortisol also affect the traumatic memory formation and processing.<sup>10</sup> Nevertheless, it is crucial to understand the trauma pathophysiology, with the goal of finding out why some individuals develop PTSD after exposure to trauma and other develop resilience to the same stressful events.

The process of perception and memory are directly linked to the formation of adaptive behavior. Perception is also a process of inference and can be influenced by strategies that were functional and adaptive in the past. 11 Past experiences affect the current patterns of behavior by means of future predictions based on memory databases. However, the reconstruction of emotional and traumatic memories is continuous and dynamic. The neuroscience studies demonstrate that the brain does not store factual registers but traces of information that will be used to reconstruct memories, which are not always representative of what really happened in the past. To accomplish such a process, different parts of the brain work as neural nodes that encode, store and retrieve information that will be used to create memories. 12,13 This way, when a traumatic or emotional event is retrieved, it can undergo a cognitive and emotional change. Loftus<sup>14</sup> observed the lack of accuracy in the recovery process by demonstrating the phenomenon of false memories. Leichtman et al. 15 and Gonsalves & Paller 13 revealed that similarities between false and true memories are deeper than researchers had imagined, and McNally<sup>16</sup> demonstrated that trauma responses are also guided by emotional beliefs, regardless of accuracy. Beckman<sup>17</sup> has called the attention both to neurophysiologic responses, which are compliant to those observed in individuals with PTSD, and to memories of events that may have never happened. Such findings about psychological trauma have a paramount importance in psychotherapy. Even if an emotional memory does not provide a completely factual portrait of past experiences, the emotional content configured as memory is an absolutely genuine representation of the individual's internal references. Mixed and false memories are natural processes of the human being and they must be effectively used to promote mental health. Izquierdo<sup>18</sup> claims that "... we are what we remember. Without our memories, we would be nobody, and without evoking them, mixing them and falsifying them, we could not live." Recovery of memories filled with emotion is affected by the individual interpretation of the event. When professionals dismiss patients' retrieved memories as falsehoods or fantasies, they may be greatly adding to their burden.<sup>19</sup>

Even though memories originate from experiences, new memories are built and evoked based on millions of memories and memory fragments found in the brain. Multiple memory systems are simultaneously activated and can interact in several occasions. This way, declarative memories (verbally accessible) together with resilient attitudes (ability to go through difficult periods and recover with satisfactory quality of life), such as learning with experiences, self-esteem, self-confidence and tranquility to face difficulties can be part of this huge repertoire and, consequently, participate in the process of memory reconstruction.

Other findings from neuroscience show that the most important regulators and modulators in the acquisition, formation and recall of memories are emotions and the conscience level. 12,222 Recovery of traumatic memories, both spontaneously and by induction, occurs in an altered state of consciousness, with remarkable emotional expression. Once the state of consciousness is altered by means of induction and relaxation, 23 the perception of an event can undergo changes as well, 24 and consequently, a new interaction and relationship with the trauma context will take place. Therefore, psychotherapists treating trauma victims must be qualified to work with emotions and altered states of consciousness that directly modulate memory formation. We postulate that the neurophysiologic faculty of reinterpretation and reconstruction of memories with emotional content can be effectively used in psychotherapy. 25

# RESILIENCE AND PREDISPOSITION TO PSYCHOLOGICAL TRAUMA

The search for understanding trauma responses includes also assessing the contribution of personality and environmental factors. Studies suggest that previous exposure to trauma and intensity of the response to acute trauma may result in the development of PTSD.<sup>10</sup> It is suggested that individuals with lack of confidence, lack of personal control and alienation are more likely to experience high levels of depression and PTSD symptoms subsequent to exposure to traumatic events.<sup>26</sup> Individuals who are not able to trust other people, who are sensitive to rejection, easily injured and have difficulties making friends usually experience the highest levels of distress

following a potentially traumatic event.<sup>27</sup> Meta-analytical studies have revealed several PTSD predictors, including fragmentation of the familial nucleus, low educational level and prior psychiatric history.<sup>7,28</sup>

There is evidence that hardiness is a personality trait that protects against extreme trauma.<sup>29</sup> Hardiness has three dimensions: motivation to find meaning to daily life, the belief that one can influence surroundings and the outcomes of events, and the opinion that one can learn and grow with positive and negative experiences. These aspects predispose confidence, social support and overcoming of adversities, making it easier to handle the experience stress. In a study performed in 2003, resilience and adjusting factors that followed stressors were mediated by the experience with positive emotions, such as solidarity, gratitude, interest and love.<sup>30</sup> It was reported that the contribution of Buddhist practices, such as meditation and prayer, also play an active role in the development of protective coping mechanisms among Tibetan refugees. 31 Moreover, the subjective confidence manifested by believing a beloved and responsive God influenced positively the resilience of individuals that had to cope with serious illness. 32 The crucial factor for the development of resilience is on how individuals realize their capacity do handle events and control their outcomes. The perception of one's own and the internal dialogues that take place after a traumatic event are predictors of satisfactory psychological results or not.<sup>33</sup> Internal dialogues of self-pity, abandonment, self-victimization and self-depreciation can highlight negative emotions associated to the traumatic memory and exacerbate psychological suffering. People who cultivate internal dialogues of bravery, trying to modify present positively, overcome psychological traumas more easily.<sup>25</sup>

#### HOW INTERNAL DIALOGUES AFFECT TRAUMATIC MEMORIES

The original meaning of the Greek word trauma is wound or damage caused by an external agent. The concept migrated to the psychology field and, consequently, it is frequently assumed that trauma takes place when natural psychological defenses are exceeded. Freud<sup>34</sup> considered that

psychic trauma is a result of excessive excitement related to an individual's tolerance and capacity to integrate and psychically elaborate the stimulus. The way people process the stressor event after the occurrence is critical for a trauma to be configured or not. The characterization of an event as traumatic does not depend only on the stressor stimulus, but, among other factors, on the tendency of the individual to process his or her perceptions.

Psychological dynamics can be understood as an emotional interpretative tendency which affects the internal dialogue related to a meaningful event. In the same way as several people in the same environment can experience and realize different and common situations, emotional memories can be similar, but never identical. The internal dialogues, based on self-referring processes of daily experiences, will affect the external relationship with daily events and also traumatic episodes. If a psychotherapist gives two individuals the same elements for them to build a story, with or without emotional valence, the narrative will present different circumstances and psychological aspects, which will make the story very peculiar to each narrator. The experience rebuilt in the form of a memory that brings sadness or any other emotion should be respected as a subjective process. The narrative of a traumatic memory is affected by the individual repertoire of representations and psychological dynamics, which configure interpretative patterns of the event. As a consequence, we understand that psychotherapists must observe the interpretative narrative that arises with the "memory content" in addition to the emotional or traumatic episodes. Our clinical experience has shown that understanding the traumatized individual and the relation between the emotional content and the psychological dynamics that maintains the distress, favors an efficient psychotherapy.

Freud wrote that if someone does not recall trauma, it will probably be acted out again: "trauma is not reproduced in the form of a memory, but as an action, behavior." Freud emphasized that individuals would repeat behaviors unaware of the trauma underneath, and this would be the way how trauma would be recalled.<sup>34</sup> DelMonte<sup>19,35</sup> also observed that certain traumatic memories may be acted out behaviorally by a compulsion to repeat the abusive experience or engage in other self-destructive behaviors, such as substance abuse and self-mutilation. In our clinical practice we

observe that, in general, the patient is not conscious about the psychological dynamics that triggers behaviors associated to trauma. These dynamics were generally repeated in the past with less intensity. The psychotherapist can help the patient be aware o the "place/role" he or she has in different past emotional events. This would allow the patient to choose new healthy attitudes towards the current context of life. When the traumatic memory narrative is structured, <sup>19</sup> it is important that psychotherapists realize and work with the psychological dynamics of their patients. The disentanglement of pathologic dynamics happens with the gradual strengthening of new internal resilient dialogues. When self-victimization or self-pity dynamics are repeated in the patient discourse, the therapist can ask whether the same script is present in the narrative of the traumatic memory. If a specific "place" is occupied in several past emotional stories, then the same dynamics can be present in the current difficulties of the patient. Psychotherapy is thus able to bring previously unconscious behavior patterns into the light of consciousness. New cognitive decisions based on the individual's resilient repertoire can promote the elaboration of new internal dialogues, healthier feelings and adaptive behavior.

# PROMOTING RESILIENCE IN PSYCHOTHERAPY

The goal of psychotherapies applied to victims of psychological traumas is to gradually attribute new emotional meanings to the past traumatic experience that do not take place in the present anymore. <sup>36</sup> Psychology has paid more attention to therapies of imaginary exposure that intend to restructure past events cognitively, using a new perspective of understanding and learning. <sup>23,37</sup> An essential component in the exposure treatment involves repeated confrontation with the memories of the trauma (imaginary exposure). On the other hand, confrontation with traumatic memories in group therapy (debriefing) has shown to be ineffective in the treatment of individuals with PTSD. <sup>38</sup> Consequently, the therapeutic effect does not occur only with confrontation but with the way how memories are confronted in order to promote cognitive and therapeutic restructuring. The therapeutic principle of repeated confrontation must be added to

resilience predictors, such as facing difficulties instead of recreating suffering. Exposure and cognitive restructuring therapies remarkably improve the PTSD symptoms, and results continued stable.<sup>23</sup>

In our clinical experience, we observe that psychological dynamics affect the interpretation of a traumatic event and take part in the memory recovery, affecting the relation with the event. Below we briefly describe the three main phases necessary to rebuild the traumatic memory through therapy, according to our psychotherapeutic approach, based on the Exposure and cognitive restructuring therapy. <sup>23,25</sup> The first phase takes place during anamnesis: the positive valence of emotional memories related to resilient actions; self-esteem, self-confidence and positive self-interpretation are recovered and strengthened.

First phase: during anamnesis

Therapist – Do you remember situations in which you overcame difficulties? How did you feel?

Patient – When I was 10, I overcame the fear of darkness to take my younger brother, who used to cry, to my uncle's and aunt's bedroom. I felt quite good, a winner.

The interpretations of the stressor event are made by means of internal dialogues about how the individual recovers the trauma. Consequently, during the second phase, the individual evokes and narrates the traumatic memory to understand, with the aid of the therapist, emotions and states of consciousness that modulated memory, perception, interpretation and the relation regarding the stressor event. The patient becomes conscious of the psychological dynamics and respective interpretations that cause the psychological suffering. Once the multiple memory systems are simultaneously activated and can interact in several occasions, <sup>20,21</sup> therapeutic reconstruction of the trauma memory is directly connected to the interface, this means, to the resilient memory database previously enhanced.

Second phase: during imaginary exposure

Therapist – Now, bring back the car accident memory... Be conscious of emotions/sensations/thoughts related to your perception of the traumatic event ...

Patient – I am anguished, my body shivers, I can't run away, escape, I am despaired, trapped within the car, I hate cars ...

Therapist – Now breath deep, relax, feel yourself comfortable, observe how your breath is calm ... (after inducing relaxation) Remember the pleasant memories you reported when you overcame the fear of falling off and learned how to ride a bike at the age of 12, when ... Be conscious of the positive emotions/sensations/thoughts you experienced and talk about them in the present tense.

Patient – I feel good, I can do things I couldn't before, I am stronger!

The third phase promotes the "relocation" of the internal dialogues aligned to the resilient memory database aiming at generating new interpretations, that will make the therapeutic restructuring of the traumatic memory easier. The possibility of neural circuits interaction is a crucial aspect in the development of a psychotherapeutic approach, which can favor the integrative translation of trauma memories into a declarative and resilient memory system.

Once psychological dynamics can feed dysfunctional patterns of behavior, psychotherapy will be more efficient when the patient understands the relation between emotional/traumatic memories and psychological suffering, which is their complaint. The way how the individual realizes, interprets and relates with the stressor event in his or her memories can be therapeutically modified. Our clinical experience shows that understanding such dynamics would guide the individual towards new choices that can predict resilience.

Third phase: during imaginary exposure and cognitive restructuring

Therapist – Now, preserving this pleasant relaxing state, this strength and capacity, recover the car accident memory and observe how you can modify your interpretation about that event.

Patient – It seems that I can look at everything with less anguish. I am more secure watching the memory.

*Therapist – How do you feel about fear of cars now?* 

Patient – It doesn't seem so strong.

Therapist – Now, think of an assertion that can help you remember this positive state when you come close to a car.

Patient – I can drive a car again.

# FINAL CONSIDERATIONS

Regardless of trauma nature and severity, the most prominent predictor of future positive adjustment and resilience is the healthy perception of self-efficacy, based on awareness of one's own capacity of facing and overcoming difficulties.<sup>27</sup> Memories filled with emotion are subjective representations of an event. Although there is an interindividual variability in how the memory of daily events and basic emotions is processed,<sup>4</sup> the neural ability of emotional reconstruction and reinterpretation of traumatic memories can also be effectively used in psychotherapy. The level of consciousness and emotions modulate the memory formation, <sup>12,22</sup> and the multiple memory systems can be simultaneously activated and interact in several occasions.<sup>20,21</sup> According to neuroscience findings, the key-factor for the therapeutic reconstruction of traumatic memories relies on managing the consciousness states and emotions properly, in order to modify the modulation of the traumatic memory and, consequently, the relation with the past event. The psychological dynamics that frames the narrative of the traumatic memory can also change. We postulate that psychotherapy with trauma victims should propitiate the perception and awareness of the patient on the psychological characteristics that are involved in the event interpretation and the influence of the respective psychological dynamics in the continuation of the distress. Learning and growing with

positive and negative experiences and developing the capacity of handling severe drawbacks are crucial aspects to be managed in psychotherapy. However, therapists do not have to tell the patient "how to do it," but rather facilitate the self-understanding about the psychological dynamics to be chosen to develop new self-growing interpretations and behaviors.<sup>25</sup>

The main purpose of this article is to draw the attention to the psychotherapeutic work with internal dialogues of psychological trauma victims. Clarifying the unconscious behavioral patterns that maintain the psychic suffering predicts the conquest of better psychological dynamics, aligned to a healthy present.

"The past is malleable and flexible, changing as our recollection interprets and re-explains what has happened." 39

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**ABSTRACT** 

Exposure to life-threatening and violent events is relatively common in a significant portion

of the population. Efforts aimed at understanding responses to traumas have also focused on the

contribution of personality factors. The way people process the stressful event is of paramount

importance for the determination of trauma. The brain does not store records of facts; rather, it

keeps traces of information that are later used to recreate memories, which do not always express a

completely faithful picture of the past experience. Whenever a traumatic event is retrieved, it may

undergo cognitive and emotional changes. We postulate that therapists must go beyond the

traumatic event itself and work with the internal dialogs that maintain the pathological relationship

with the past episode. Therapy based on exposure and cognitive restructuring may help trauma

victims experience psychological growth from their negative experiences, by fostering resilient

internal dialogues.

Keywords: Traumatic memory, psychological dynamics, psychotherapy, resilience, post-

traumatic stress disorder.

Title: Fostering resilience in psychological trauma victims

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