

The Live Memory of Annihilation as a Hindrance to Existence: A Proposal for the “A” Criterion in PTSD Psychosocial Interventions

Fiks JP^{1*} and Mello MF²

¹Psychiatrist and Researcher at the Violence Care and Research Program (PROVE), Department of Psychiatry, Federal University of São Paulo (UNIFESP), Paulista School of Medicine (EPM), Brazil

²Psychiatrist, Associated Professor and Coordinator at the Violence Care and Research Program (PROVE), Department of Psychiatry, Federal University of São Paulo (UNIFESP), Paulista School of Medicine (EPM), Brazil

Abstract

Introduction: The continuing violence in endemic foci has been one of the greatest challenges to contemporary society. This article is based on a survey of patients who have experienced violence and developed Posttraumatic Stress Disorder (PTSD). Our fundamental idea was to analyze how these individuals narrate their trauma story and how they perceive its psychological repercussions. We chose Charles Sanders Peirce's semiotics as our theoretical framework for its recognized role in semantic analysis.

Method: The methodology chosen was qualitative. We interviewed 20 individuals who suffered urban violence, considered as good informants, determined by saturation sampling, according to Patton's concept. We build the categorical classification deriving from the sample using the grounded theory approach. Of the 20 selected individuals, 16 had PTSD, determined by the CAPS scale. Four patients who had experienced violence but not developed PTSD were also interviewed.

Results: The qualitative categories that we found in the present research concentrated in the semantic fields of hate, fear and trauma. The concept of trauma was found to be an experience of disruption and paralysis of the psyche, a forced cessation in the history of life and of the experience of time. The narrative of PTSD respondents reflected a state of permanent fear arising from an action triggered by hate.

Conclusions: The conceptual categories found in this study illuminate the A criterion required for the diagnosis of PTSD. Besides the experience of horror due to the danger of death, our patients experienced trauma as a time paralysis caused by the memory of the event. The trauma narrative leading to PTSD displays the mark of the horror of the individual undergoing the experience of barbaric violence. The psychosocial intervention proposal entails approaching the trauma through a continuity project.

Keywords: Violence; Memory; Trauma; Semiotics; Posttraumatic stress disorder

Introduction

Violence and its impact on mental health

The diagnosis of posttraumatic stress disorder (PTSD) has been increasingly used, and the release of the DSM-5 makes it a major diagnostic category in contemporary psychiatry [1]. However, the actual clinical practice of PTSD treatment involves a number of psychopathological considerations not clearly delimited to the psychiatric field [2]. Some lay conceptualizations, such as that of violence, were practically adapted from a non-expert field of study to the clinic. Even the notion of trauma, previously worked by psychoanalysis, has been revived without a current appraisal [3]. Steven Pinker [4] has indicated that the statistics about violence as an interpersonal manifestation have fallen throughout history. The author revisited the proposal by seventeenth century thinker Thomas Hobbes [5] holding the state or government as somewhat responsible for maintaining the innate aggressiveness of its citizens. That means that the human organization around what we mean by countries with strong governments has tamed violence among men. In parallel, Pinker revisits the contemporary studies of sociologist Norbert Elias [6] arguing that cities are responsible for the civilizing process. It fell to modernity, led by the great metropolises of history, the transmission of knowledge, which historically shifted from affluent populations – the clergy and nobility – to the ascending middle class, especially since the mid-nineteenth century.

Pinker also listed historical data [4] that proved society's "evolution" to a peace process: the end of hunter-gatherers, i.e., of those with a predatory pattern; society's organization imposed by feudalism; Enlightenment as the supremacy of the pursuit for knowledge; the idea of creating a union of countries after the Second World War and, finally, the fall of the Berlin Wall with the end of communism, symbolizing democracy as a current civilization ideal.

Despite a decline in violence events, its damaging effects on the psyche have been studied in the PTSD frame, whose diagnosis formulated by the DSM-III released in 1980. Until then, diagnoses in the psychiatric field resulting from trauma by violence ranged from adjustment rations to war neuroses. The establishment of the PTSD diagnosis allowed scientific research to focus on violence and on the psychological impact of its acute and chronic forms. This also includes individuals who are immune to mental illnesses even after experiences of violence, known as resilient ones.

***Corresponding author:** José Paulo Fiks, 479/81 Rua Dr. Amâncio de Carvalho, São Paulo, São Paulo, 04012-090, Brazil, Tel: (5511) 99184-2814; Fax: (5511) 5084-2858; E-mail: jpfiks@uol.com.br

Received June 30, 2012; Published July 30, 2013

Citation: Fiks JP, Mello MF (2013) The Live Memory of Annihilation as a Hindrance to Existence: A Proposal for the “A” Criterion in PTSD Psychosocial Interventions. 2: 753 doi: [10.4172/scientificreports.753](https://doi.org/10.4172/scientificreports.753)

Copyright: © 2013 Fiks JP, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

One of the greatest challenges in the field of violence and mental health entails defining concepts, insofar as many terms used in health, and especially in psychiatry, have been appropriated from human sciences. Does violence, as witnessed on television news, have the same meaning in health? Similarly, other ideas such as aggressiveness, trauma, victim and stress have been trivialized by popular use. Would they offer the same meaning to the research on violence and mental health?

This article departs from the analysis of data found in a qualitative study on narratives of patients who have experienced violence and developed PTSD. Thus, throughout this paper – and based on the research data presented below – we will attempt to define concepts and make proposals for treating psychic trauma.

Basic condition for the diagnosis of PTSD

Throughout its more than thirty years of use, the PTSD diagnosis has undergone significant changes. By and large, they involve questioning the A stressor criterion, i.e., the fundamental condition for such diagnosis to be enabled. With the release of DSM-5 in 2013 [7], the A criterion for PTSD has the following indications for trauma: it no longer only requires a response to the event with intense fear, helplessness or horror; the confrontation with actual or threatened death, serious injury or sexual assault will be central to the definition and there must be a risk of death, serious injury or sexual assault. Invariably, the diagnostic guideline points to the traumatic event. But what is the conception used to define trauma?

Violence or barbarism?

Although the term violence is not present in the DSM definitions for the PTSD diagnosis, it appears in a direct manner in the clinical history of patients with such a framework.

The first descriptions of violence that have survived over time in the mental health field were provided in the late nineteenth century, mainly addressed by William James [8]. Although pragmatism as a philosophy was coined by a partner of William James' ideas, Charles Sanders Peirce [9], it was James who popularized it. The post American Civil War atmosphere influenced his understanding of what happened to a country that had until then been seen as a kind of barn of world democracy, according to Tocqueville's work [10].

James refused to participate in the pessimism prevailing in the world of ideas and proposed a pragmatic method, a way of interpreting facts in the world of science, which could also be understood as a way to exist. He wrote influential texts on violence, particularly focusing on war and its impact on the psyche [8].

Twentieth century philosopher Hannah Arendt was the most prominent writer to study the question of violence. Evoking philosophers and facts of a post-World War II period, Arendt made her proposals after covering the judgment of Nazi leader Adolph Eichmann in Jerusalem in 1962 for *The New Yorker* [11,12].

Whereas James understood the human being as highly aggressive, Arendt conceived a kind of architecture of evil, an organization in which few individuals worked in machinery that destructed millions. James saw violence through the history of its taming by laws and moral principles, whilst Arendt perceived violence as the result of a power struggle, but which, at times, could move toward a simple intention to annihilate.

It was the French philosopher Jean-François Mattéi, in the late

twentieth century, who proposed a distinction between the concept suggested by Arendt and the acts of violence that still exist – such as terrorist plots – despite the attempts of the civilizing process to combat them. Mattéi posed the concept of barbarism as the will to destroy, which entails the idea of ignorance on the part of the aggressor and a contempt for the human being assaulted [13].

Hence, this article will preferably use the term “barbarism” in the field of the traumatic pathologies. In other words, violence is understood, as Arendt suggested, as a result of competition for space. A sport can be violent. Art can be violent. A debate can be violent. Politics can be violent. But in these examples, despite a display of force, there is not necessarily a desire to destroy the other. The main characteristic of violence is perhaps its direction toward the exterior in a domineering project. Barbarism is the simple force of annihilation, of extinction – and this should be the field of trauma.

Although the issue of violence has been present in the field of mental illness, we understand that if violence is caused by patients with mental disorders, it is due to a psychological disorganization, therefore in the field of aggression, something close to a biological function. Psychiatric patients are seldom violent as a result of a struggle for space: they often behave as cornered animals, threatened by inner fears arising from the disease itself.

The original research for this paper, based on the framework of semantic analysis theory, aimed to study the narrative of subjects who have experienced violence. Our starting point was to assess how these individuals understood violence and its psychological impact, in a particularized manner. As expected from qualitative research, no previous theory was used. The theoretical framework was Charles Sanders Peirce's semiotics, for his devoted study in the field of semantics.

Method

Our general research design was based on qualitative methodology, insofar as it allowed us to analyze in-depth interviews. We conducted a survey between 2009 and 2012 and selected a sample according to Patton's criteria [14], by saturation of information. We interviewed twenty subjects, considered as good informants, all of whom had experienced violence, and were or had been in outpatient treatment focused on mental health care.

The essential proposition of our research was to examine how individuals who have experienced violence developed PTSD. The harvested narrative privileged subjective and personal experience, particularly the trauma experience. Because individuals selected in qualitative research samples should be good informants, our inclusion criteria favored those whose lucidity and clarity of thought could contribute to the narrative of the experience studied.

All of the selected patients were part of the Violence Care and Research Program (PROVE) from UNIFESP's Department of Psychiatry. The age range was set between 18 and 65. Exclusion criteria involved subjects with a history of substance abuse or comorbidity with psychotic or organic disorders. Patients had gone through the experience of violence and were in regular outpatient treatment. All of them were informed about the research, agreed to take part in it, and signed terms of informed consent approved by UNIFESP's Research Ethics Committee. The interviews were conducted in PROVE's outpatient facility, in a quiet and protected environment, familiar to the patients.

The categorical classification emerging from the patients' narratives was drawn according to the Grounded Theory (GT). Of the 20 individuals selected and interviewed, 16 had PTSD according to the CAPS scale. Four patients who had undergone situations of violence, but not developed PTSD, were also interviewed, as a possible control parameter in relation to the group that developed PTSD.

Selected individuals were also assessed by the SCID I and II. The data triangulation, i.e., the comparison between the research data, our theory and specialists on the theme, part of the GT method, was accomplished through: new interviews with the patients and a literature review of classical texts addressing the psychological impact of violence [15-20]. The elements of violence we found represented interpersonal urban characteristics: robbery witness, rebellion, kidnapping, child abuse, domestic violence and suicide witness.

The interviews were transcribed by these researchers. Twelve interviews were selected for final analysis: ten PTSD patients, and two without this disorder. Four were male and eight female, residing in the city of São Paulo, and the mean age was 35. Patients with confirmed PTSD were treated with medication and psychotherapy in PROVE's outpatient facility.

The Grounded Theory (GT) was chosen as a method for coding the interviews in reason of its theoretical affinity with semiotics [21-23]. GT's ultimate aim is the formulation of hypotheses as a tool to verify qualitative data, providing the possibility of building a theory. Typically by this method, as used in this study, the collected data are encoded into groups, which are converted into categories, which are finally formulated into concepts, i.e., leading to the development of the theory itself.

Insofar as our research was based on accounts of experiences of violence under a psychopathological view, the encoded data were initially submitted to a psychopathologist, thereby ensuring the accuracy of the description of the phenomena, as well as their subsequent division into categories.

Still in the field of Peircean semiotics, Umberto Eco's narrative theory was used as a tool for interpreting the collected interviews. Eco's theory [24-26] explored the binary relationships emphasized in the narratives. Thus the coding emerges from the various partnerships that underlie the narrator's speech.

Results

Three narrative categories most often mentioned by patients emerged from the final analyses of the interviews, namely: hate, fear and trauma, two of which – fear and trauma – can be part of the spectrum of the psychopathology, i.e., the typical clinical picture of PTSD. However, one of them – hate – does not often appear in traumatic cases, and here it became the main concept of the patient's understanding of the violent act that leads to trauma.

Hate

The following utterances taken from the patients' narratives illustrate the feeling of hatred as the source of an aggressor's will against another human being.

"They are armed and can kill you for nothing, you know? If you give a mean look, just because they do not like it, they will beat you, they will kill you."

"No, they don't give you no chance of defense, get it? They started shooting, and we were unarmed. And they just left with nothing."

It is difficult to conceive hate only as a feeling, or even a concept. Hate evokes a situation, a prior history with the intention of an act. And just when did we start to hate? Historian Peter Gay [27] noted that some formerly traditional religious elements could lead to hate. Commonly, defenders of one's own religion as the most "correct" one defended themselves as chosen by God, and many of their leaders urged the extermination of so-called unbelievers. It happened at the time of the Crusades, the Inquisition, and it is the motto of many radical groups of various contemporary "religions". Thus, according to Gay, religion is a huge deposit for hate.

Gay also posited that the hate toward foreigners has turned into something as powerful as the intransigence of some religions that causes violent acts. The same can be said about the history of minorities. The recent achievements of their rights lead to the recovery of a prior history of hatred and persecution.

Nothing in the field of trauma may have been more impactful in terms of historical analysis as the event of the Holocaust [28], whose magnitude on the psyche is yet to be further studied. Research and publications on this event [29] established a new understanding to the concept of violence: one that goes beyond the idea of aggression and drives toward another human being – not recognized as such; hatred to be transformed into an extermination project. Applying the point of view of Arendt [10-12], hate is the feeling of pleasure that arises in the course of the assault. According to the author, evil lies precisely in not recognizing the other as human, therefore someone to be justifiably destroyed [30,31].

Only with the creation of the PTSD diagnosis can hate be studied again by psychopathology, as the origin of acts that cause damage to the psyche. In other words, hate is evoked as an element that causes trauma.

Fear

The following excerpts illustrate the feeling of fear almost constantly mentioned by patients affected by PTSD. Fear is a common feeling in these cases, often emerging in presentation anxieties such as phobias, panic or general anxiety disorders. However, in the narratives of PTSD patients, fear arises from a life-threatening event. The traumatic memories that patients recollect have the weight of reality, precisely because of the almost realistic memory of the experience of violence.

"You seem to be always walking sideways or backwards. Anything, any little problem that happens, you seem to be afraid of, of, of... looking at it and facing it."

"It is a physical, mental, psychological, spiritual violence, you name it. And anesthesia! It actually freezes you."

Fear, as a philosophical concept, was widely studied by philosopher Nietzsche, in the second part of the nineteenth century. He argued that this feeling – more than love – motivated the understanding of man [32]. In other words, by focusing on fear, we can reach an understanding of our limitations as humans.

According to French historian Jean Delumeau [33], the history of fear in Western populations emerged from the belief in the supernatural, as if it indicated human destiny. The fear of natural disasters and of the apocalypse has always been present in our imaginary, alongside the fear of diseases and pests. Perhaps man's greatest fear, according to Delumeau, is man himself, a phenomenon he called "terror."

In the psychiatric arena, Karl Jaspers [34], certainly the best-known

organizer of psychopathology, understood fear as an innate emotion, but at the same time the basis for anxiety.

Reflecting a more contemporary thinking on the mechanisms of fear, biologist Robert Sapolsky [35], unlike many psychopathologists, understood this feeling as an inspiration for adaptive function. Fear is thus not necessarily a deleterious emotion. Anxiety, its result, could be a biological preparation for something potentially dangerous.

Trauma

A trauma can be considered as the most pertinent and genuine concept that emerges from the narratives of individuals who experienced life-threatening violence.

"While I am telling you this, I feel a little dizzy. In my mind I'm not absolutely sure that fifteen years from now that memory will not make me bonkers again."

"It's as if it triggered impotence within you, an inability to share, something inside that broke. It's like having some sort of electrical connection that was broken. I do not have the right to go to cool places, because now I belong to the Dark World."

"I still cannot see clearly. What I think is that my mind is no longer absorbing, it hasn't absorbed the situation. It's as if I have regressed. It is a helpless situation, I cannot do anything."

In studies initiated by Sigmund Freud, trauma played a key role. In his late work *Civilization and its discontents* [36], which incorporated various sociological issues, Freud revisited some elements that describe the atmosphere that surrounds individuals prone to traumas in modern life. The psychoanalyst called attention to three special situations that could lead to a trauma: social injustice, including adverse situations such as armed conflicts and interpersonal violence; the frailty of the body, ie, the evanescence of human beings in the face of old age or disease and, finally, the forces of nature: earthquakes, floods, and other variables that indicate that the power of forces well above the human ones could generate virtually traumatic situations.

Freud's contemporary, French philosopher Henri-Louis Bergson [37], also wrote about the power of memory in our present lives. According to him, pure memory is that of recollections, bringing remembrances from the past to the present, which serve to our plans and current thoughts. For this author, memory is a kind of organizer of a lifeline that departs from chaotic experiences – the brain itself – filtered by a perception which, as a psychological function, chooses the most appropriate mental experiences for judgement and thus provides an affective volume, i.e., qualitative. Memory makes that connection.

Similarly, in the field of neuroscience, immunologist Gerald Edelman [38-41] also supported that a healthy memory is that which degenerates, ie, re-interprets the whole time. Like Bergson, Edelman believes that we bring past experiences to the present, which are again judged, interpreted and qualified. This present research indicates that PTSD patient cannot exert this function. Thus, a traumatized patient cannot reinterpret his/her memories in order to place them in a projection for the future. According to the collected narratives of this research, trauma causes a kind of blockage to psychological functioning whose central axis is memory. A trauma is equivalent to an inability of the memory to function as a conducting thread of the actualized experiences of the past, which gives meaning to life. Memory becomes paralyzed by the experience of the event that threatens life with feelings of horror.

Discussion

The ten PTSD patients presented the violence they experienced as traumatic. Their trauma was elaborated as an experience of disruption and paralysis of the psyche, a forced cessation of the life history and the experience of time, besides predominant memory impairment.

The traumatic remembrance was evidenced as the main memory element, all the time actualized by conscience. The psychopathology described by respondents with PTSD was constant fear due to an action triggered by hate. The subjects who underwent violence and risk of life, but who did not develop PTSD, had a history of life continuity, without the psychopathology of those who developed the disease.

A proposal for psychosocial intervention

Some types of psychological treatments have been designed specifically for treating patients with PTSD [42-47]. These approaches include a special type of Cognitive Behavioral Therapy (CBT), known as Trauma-Focused Cognitive Behavioral Therapy (TFCBT), and a psychotherapy treatment called Eye Movement Desensitization and Reprocessing (EMDR).

In the field of psychodynamics, PTSD has not yet formulated an approach to the traumatic life experiences with a project to recover its roots in psychoanalysis. There is some criticism to the analytical treatment of PTSD, as though listening and returning to the trauma could ratify it. But doesn't this occur with exposure therapy, one of the most effective in PTSD? EMDR also often evokes the traumatic memory into its process.

The fact is that psychoanalysts have not yet made a proposal for PTSD treatment different from that of traditional analysis. Researchers working with psychoanalytically-based psychodynamic psychotherapy have long been doing interventions in the field of grief and crisis [48-52], but regarding trauma itself, there has not been a specific look. However, studies in neuropsychology [53-55] may bring a suggestion with a Freudian basis, precisely because of their permanent dialogue with neuroscience. Neuropsychology takes into account the studies in the field of trauma formulated by Eric Kandel [56-58], who understands the Freudian unconscious as a sort of anticipation of choice, and that can shed some light on a psychotherapeutic intervention in PTSD.

The above-discussed concepts of hate, fear and trauma point to an intervention that can be formulated in a focal manner. This involves addressing the trauma as a project of continuity according to Peirce's theory. That is, if trauma is characterized by a cessation of existence, by the pressure of a paralyzing memory and the disembowelment of a being, pointing to a destructive event as responsible, Peirce's theory can provide a good basis for a philosophical and psychological intervention. Influenced by the theory of evolution, Peirce believed that, just like the cosmos, we are expanding. This justifies the use of communication, i.e., the speech as a way of checking our ideas, always in a provisory manner, in order to maintain or modify our concepts. Traumatized individuals have difficulties in this field precisely due to the influence of a kind of memory that always recalls the frailty of an individual after a devastating experience.

Much unlike the depressive, traumatized individuals do not see in themselves the blame for the ills of the world. Also unlike the delirious, and despite recognizing in the other their enemy, they have not broken with logic. Their speech convinces their listeners, makes social bonds. The event existed; it is neither part of a mind incapable of dialectical

thinking, nor of interpretations that lead to delirium. A traumatized subject just cannot maintain his/her previous continuity project because it was intercepted by an experience that destroyed the concept of him/herself as an individual.

Hence, a project of psychosocial intervention for the treatment of PTSD involves the retrieval of memories; an approach to memory-remembrance to be recovered as memory-recollection, a type of a projection for the future, as proposed by Bergson, and pointed out by Edelman as the healthy memory, one that degenerates and simultaneously reconstructs, continuing into the future.

Based on the findings that traumatized individuals believe they are hurt because their offenders hate them, it is up to the therapeutic project here proposed to capture forces in the individual that do not hold him/her in that place of hatred. This could avoid resentment, the feeling of revenge and their eternal perception of fragility.

Concomitantly, the persistence of fear should be treated with the convening of elements of courage, as proposed by Nietzsche, the will as power. Treating the element of hatred founder of the trauma hinges on a psychological mobilization to remove the individual from the place of someone to be destroyed by the "evil", according to the viewpoint of Hannah Arendt.

One of the promises in the field of psychosocial approach to PTSD is mediation. Mostly used in cases of bullying in the school environment, mediation can be a way to avoid victimhood, or even a resentful and vengeful position. Moreover, mediation as a basis for intervention for patients with PTSD revisits elements of the civilizing process that still seem to be the best practice to reduce violence in our societies.

Conclusions

"A" stressor Criterion for PTSD

The elements found in this study illuminate the A criterion – life-threatening trauma – necessary for the PTSD diagnosis. Caused by the memory of a destructive event, trauma has been described as a paralyzing experience, which prevents one from projecting into the future, from continuing. The trauma narrative shows the mark of the terrifying fear experienced by those who suffered barbaric violence. The PTSD can thus be interpreted as a sign of annihilation, as the perpetuation of hate by an individual paralyzed by fear.

Intervention

The proposals for psychosocial approaches raised through this research can indicate an intervention strategy that shows a path of choice involving the continuity of existence.

Limits of the work

The sample studied consists almost exclusively of cases of interpersonal urban violence in the Brazilian reality. Hence, these findings cannot be generalized to other countries or regions without a proper contextualization, such as armed conflicts, natural disasters or terrorism. New research into different realities could confirm or not the characteristics of this sample, as well as the conclusions and proposals resulting from this work.

Acknowledgement

This work was sponsored by the PNPd CAPES / CNPq program. We thank Professor Jair Mari for his support to the project.

References

1. Santiago PN, Ursano RJ, Gray CL, Pynoos RS, Spiegel D, et al. (2013) A systematic review of PTSD prevalence and trajectories in DSM-5 defined trauma exposed populations: intentional and non-intentional traumatic events. *PLoS One* 8: e59236.
2. Pitman RK (2013) A Brief Nosological History of PTSD. *J Trauma Stress Disor Treat* 2:1.
3. Allen JG (2013) Restoring Mentalizing in Attachment Relationships: Treating Trauma With Plain Old Therapy. *Am J Psychiatry* 170: 565-565.
4. Pinker S (2012). *The Better Angels of Our Nature: A History of Violence and Humanity*. London: Penguin Books.
5. Karlfriedrich H (2013) Além do bem e do mal: o poder em Maquiavel, Hobbes, Arendt e Foucault. *Rev. Bras. Ciênc. Polít.* [online] 10: 267-284.
6. Siniša M (2013) The Disfigured Ontology of Figurational Sociology: Norbert Elias and the Question of Violence. *Crit Sociol* 39: 165-181.
7. Resick PA, Bovin MJ, Calloway AL, Dick AM, King MW, et al. (2012) A critical evaluation of the complex PTSD literature: implications for DSM-5. *J Trauma Stress* 25: 241-251.
8. James W (1988) *Writings 1902-1910 : The Varieties of Religious Experience / Pragmatism / A Pluralistic Universe / The Meaning of Truth / Some Problems of Philosophy / Essays*. Library of America.
9. Peirce CS (1992) *The Essential Peirce: Selected Philosophical Writings (1867-1893)*. Indiana University Press, USA.
10. Tocqueville A (2003) *Democracy in America*. Penguin Classics, USA.
11. Arendt H (2006) *Eichmann in Jerusalem*. Penguin Groups, USA.
12. Shiraz D (1984) Hannah Arendt on Eichmann: The Public, the Private and Evil. *The Review of Politics* 46: 163-182.
13. Braga LL, Fiks JP, Mari JJ, Mello MF (2008) The importance of the concepts of disaster, catastrophe, violence, trauma and barbarism in defining posttraumatic stress disorder in clinical practice. *BMC Psychiatry* 8: 68.
14. Patton MQ (2005) *Qualitative Research*. Encyclopedia of Statistics in Behavioral Science. John Wiley & Sons.
15. Yehuda R (2002) Post-traumatic stress disorder. *N Engl J Med* 346: 108-114.
16. Pratchett LC, Pelcovitz MR, Yehuda R (2010) Trauma and violence: are women the weaker sex? *Psychiatr Clin North Am* 33: 465-474.
17. Kessler RC (2000) Posttraumatic stress disorder: the burden to the individual and to society. *J Clin Psychiatry* 61 Suppl 5: 4-12.
18. Breslau N, Chilcoat HD, Kessler RC, Peterson EL, Lucia VC (1999) Vulnerability to assaultive violence: further specification of the sex difference in post-traumatic stress disorder. *Psychol Med* 29: 813-821.
19. Breslau N (2009) The epidemiology of trauma, PTSD, and other posttrauma disorders. *Trauma Violence Abuse* 10: 198-210.
20. Swartz MS, Swanson JW, Hiday VA, Borum R, Wagner HR, et al. (1998) Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. *Am J Psychiatry* 155: 226-231.
21. Goulding C (1998) Grounded theory: the missing methodology on the interpretivist agenda. *Qualitative Market Research: An International Journal* 1:50-57.
22. Starks H, Trinidad SB (2007) Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. *Qual Health Res* 17: 1372-1380.
23. Roy D (2005) *Semiotic schemas: A framework for grounding language in action and perception*. Cognitive Machines Group, The Media Laboratory, Massachusetts Institute of Technology 167: 170-205.
24. Eco U (1984) *Semiotics and the philosophy of language*. Indiana University Press, USA.
25. Schmitz KI (2010) Semiotics or metaphysics as first philosophy? Triadic or dyadic relations in regard to four ages of understanding. *Semiotica*: 119-132.
26. Neshier D (1984) Are There Grounds for Identifying "Ground" with "Interpretant" in Peirce's Pragmatic Theory of Meaning? *Transactions of the Charles S. Peirce Society* 20: 303-324.

27. Gay P (1994) *Cultivation of Hatred: The Bourgeois Experience* Victoria to Freud. W. W. Norton and Company, USA.
28. Braga LL, Mello MF, Fiks JP (2012) Transgenerational transmission of trauma and resilience: a qualitative study with Brazilian offspring of Holocaust survivors. *BMC Psychiatry* 12: 134.
29. Charny IW (1968) Teaching the Violence of the Holocaust: A Challenge to Educating Potential Future Oppressors and Victims for Nonviolence. *Journal of Jewish Education* 38: 15-24.
30. Diner D and Bashaw R (1997) Hannah Arendt Reconsidered: On the Banal and the Evil in Her Holocaust Narrative. *New German Critique* 71:177-190.
31. Aschheim SE (1997) Nazism, Culture and The Origins of Totalitarianism: Hannah Arendt and the Discourse of Evil. *New German Critique*. 70: 117-139.
32. Kaufman C (2009) Knowledge as Masculine Heroism or Embodied Perception: Knowledge, Will, and Desire in Nietzsche. *Hypatia* 13: 63-87.
33. Santos LO (2003) The contemporary fear: approaching its different dimensions. *Psicol. cienc. Prof.* 23: 48-49.
34. Walker C (1994) Karl Jaspers and Edmund Husserl: The Perceived Convergence. *Philosophy, Psychiatry, & Psychology* 1: 117-134.
35. Sapolsky RM (2003) Stress and plasticity in the limbic system. *Neurochem Res* 28: 1735-1742.
36. Moghaddam FM (2005) The staircase to terrorism: a psychological exploration. *Am Psychol* 60: 161-169.
37. Klein KL (2000) On the Emergence of Memory in Historical Discourse. *Representations* 69: 127-150.
38. Edelman GM, Reeke GN Jr (1982) Selective networks capable of representative transformations, limited generalizations, and associative memory. *Proc Natl Acad Sci U S A* 79: 2091-2095.
39. Tononi G, Edelman GM (1998) Consciousness and complexity. *Science* 282: 1846-1851.
40. Edelman G (2001) Consciousness: the remembered present. *Ann N Y Acad Sci* 929: 111-122.
41. Tononi G, Edelman GM, Sporns O (1998) Complexity and coherency: integrating information in the brain. *Trends Cogn Sci* 2: 474-484.
42. Bradley R, Greene J, Russ E, Dutra L, Westen D (2005) A multidimensional meta-analysis of psychotherapy for PTSD. *Am J Psychiatry* 162: 214-227.
43. Foa EB, Zoellner LA, Feeny NC, Hembree EA, Alvarez-Conrad J (2002) Does imaginal exposure exacerbate PTSD symptoms? *J Consult Clin Psychol* 70: 1022-1028.
44. Marcus SV, Marquis P, Sakai C (1997) Controlled study of treatment of PTSD using EMDR in an HMO setting. *Psychotherapy: Theory, Research, Practice, Training* 34: 307-315.
45. Siegel DJ (1995) Memory, trauma, and psychotherapy: A cognitive science view. *Journal of Psychotherapy Practice & Research* 4: 93-122.
46. Marmar CR (1991) Brief dynamic psychotherapy of post-traumatic stress disorder. *Psychiatric Annals* 21: 405-414.
47. McFarlane AC (1994) Individual psychotherapy for post-traumatic stress disorder. *Psychiatr Clin North Am* 17: 393-408.
48. Layne CM, Pynoos RS, Saltzman WR, Arslanagic B, Black M et al.(2001) Trauma/grief-focused group psychotherapy: School-based postwar intervention with traumatized Bosnian adolescents. *Group Dynamics: Theory, Research, and Practice* 5: 277-290.
49. Piper WE, McCallum M, Joyce AS, Rosie JS, Ogrodniczuk JS (2001) Patient personality and time-limited group psychotherapy for complicated grief. *Int J Group Psychother* 51: 525-552.
50. Allumbaugh DL, Hoyt WT (1999) Effectiveness of grief therapy: A meta-analysis. *Journal of Counseling Psychology* 46: 370-380.
51. Boelen PA, de Keijser J, van den Hout MA, van den Bout J (2007) Treatment of complicated grief: a comparison between cognitive-behavioral therapy and supportive counseling. *J Consult Clin Psychol* 75: 277-284.
52. Shear K, Frank E, Houck PR, Reynolds CF (2005) Treatment of Complicated Grief: A Randomized Controlled Trial FREE. *JAMA* 293: 2601-2608.
53. Schore (2002) Advances in Neuropsychoanalysis, Attachment Theory, and Trauma Research: Implications for Self Psychology. *Psychoanalytic Inquiry: A Topical Journal for Mental Health Professionals* 22: 433-484.
54. Dierckx A (2008) Psychoanalytic and psychodynamic therapies: the state of the art. *Psychiatry* 7: 212-216.
55. Yeates G (2009) Posttraumatic Stress Disorder after Traumatic Brain Injury and Interpersonal Relationships: Contributions from Object-Relations Perspectives. *Neuropsychoanalysis: An Interdisciplinary Journal for Psychoanalysis and the Neurosciences* 11: 197-210.
56. Etkin A, Pittenger C, Polan HJ, Kandel ER (2005) Toward a neurobiology of psychotherapy: basic science and clinical applications. *J Neuropsychiatry Clin Neurosci* 17: 145-158.
57. Kolb LC (2006) The psychobiology of PTSD: Perspectives and reflections on the past, present, and future. *Journal of Traumatic Stress* 6 : 393-304.
58. Piore A (2012) Totaling Recall. *Scientific American Mind* 22: 40- 45.