INTEGRATING TREATMENTS

for

PTSD

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INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Introduction

"Above all, do no harm."

- In the DSM, PTSD is one of the rare diagnostic entities elaborated from theoretical perspectives (mostly Horowitz's) as well as phenomenological observations.

- It is a wonderful window to explore the human mind.

- PTSD was an Anxiety Disorder in DSM-IV and it is now classified in a separate category in the DSM-5.

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- PTSD is not a specific phobia (solely based on classical conditioning).

- PTSD is a structural problem involving neurological, cognitive, behavioral and psychic components of a person.

- Therefore, PTSD should not be treated as a specific phobia or an anxiety disorder *per se* as it is often proposed, but as a multi-faceted structural disorder.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models

- Kardiner (1941) noted that PTSD sufferers continue to live in the emotional environment of the traumatic event
- van der Kolk and Saporta (1993), Everly (1993), McFarlane and Yehuda (1996) support the notion that PTSD is an:
    - Arousal disorder, as categories B and D of symptoms are biologically, intimately related
    - But, category C of symptoms appears to maintain those of B and D,
    - PTSD is seen as a pathological manifestation of the inability to modulate arousal
- There is a growing consensus that PTSD is more than an arousal disorder. Most likely, it is both, an arousal disorder and a pathological manifestation of the inability to modulate arousal, and viewing PTSD in both ways contains important clinical implications: need to reduce arousal and control its triggers, as well as developing centers for modulation of arousal (right prefrontal cortex, left prefrontal cortex, and hippocampus).
- Evidence of arousal:
    - Conditioned response (CR, e.g. physiological arousal) follows presentation a conditioned stimulus (CS, e.g. violent movie or traumatic memories)
    - PTSD subjects have an average elevated heart rate of 11 bpm and an unusual atypical long-lasting phasic reaction after CS
    - Increased physiological arousal leads to reexperiencing
    - Non-specific noises may elicit traumatic nightmares
    - Hypersensitivity to CS can develop

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- Kindling hypothesis:
  - Repeated stimulation causes hypersensitivity rather than habituation of the amygdala responsivity, causing long-term alterations in neuronal excitability
- Kindling lowers the arousal threshold = > greater susceptibility to PTSD
  - = > greater susceptibility to flashbacks
  - = > greater hypersensitivity
- As some researchers have argued, patients subjected to intense stress arousal suffer from a form of neurologic "sensitization", and excessive intense stimulation can be toxic to neural substrates

  = > "excitatory toxicity" due to glucocorticoids

So, treatment by exposure may be re-traumatizing rather than creating habituation in some patients, as has been reported by many (e.g. Pitman et al., 1991).

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- PTSD as an Inescapable Shock (IS) Response:
    - Initial alarm response to a traumatic event, followed by
    - Conditioned alarm response
    - Exaggerated reactivity to previously tolerated stressors
- IS is also referred to as "Learned Helplessness", when traumatic events are repeated:
    - Impaired avoidance learning
    - Failure to use previously successful escape strategies
    - Behavioral depression
- IS can involve:
    - Opioid and non-opioid forms of analgesia
    - Stomach ulcerations
    - Immunosuppression
    - Lowered tumor resistance
- Once IS terminates:
    - Strategy escape can be performed compulsively
    - Self-administration of alcohol can develop in animals

As IS occurs in only 2/3 of animals, neurobiological issues are involved in one's response to trauma.

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- Everly (1993) proposed that the phenomenological epicenter of PTSD resides in a functional hypersensitivity of the limbic system; specifically, the arousal and hypersensitivity of the hippocampal-amygdala nuclei, and their efferent projections.

- Hot-Amygdala vs. Cool-Hippocampus (Metcalfe & Jacobs, 1996):

  - Amygdala system responds to unintegrated, fragmentary, fear-provoking features of events which become directly hooked to fear responses. It is quick, direct, highly emotional, inflexible, and fragmentary.

  - Hippocampus system records memory in an integrated, unemotional manner, with well-elaborated autobiographical events, complete with their spatial-temporal context. It is cognitive, complex, informationally neutral, integrative, and subject to control processes from functions of the frontal cortex.

  - Encoding happens in parallel in both the amygdala and the hippocampus.

  - At low to moderate levels of stress, there is good co-functioning:
    - Amygdala shows an increase in responsivity.
    - Hippocampus shows an increase in responsivity.

  - At high level of stress, hippocampus functioning is hampered:
    - Amygdala shows a greater increase in responsivity and, at traumatic levels, an exclusive response, focusing on fear-provoking features of the event in a fragmented way, is observed.
    - Hippocampus is less responsive and, at traumatic levels, it is completely dysfunctional.

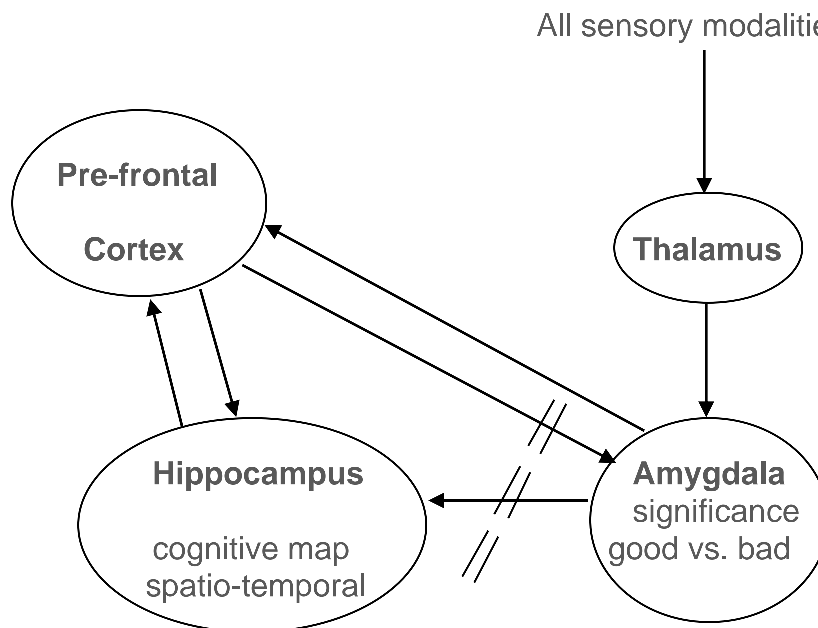
- This model is supported by a meta-analysis of 39 neuroimaging studies of PTSD, showing hyperactive amygdala, hyperactive hippocampus, and hypoactive medial prefrontal regions (Patel et al., 2012). The design of these studies must have stressed PTSD subjects at moderate stress levels. As the cortex is known to be most vulnerable to stress, cortical activity was decreased before hippocampal activity. The hippocampus functionality is hampered solely at extreme levels of stress.

- Most importantly for PTSD is the inverted U-shape association between stress and hippocampal functioning, in line with Yerkes-Dobson law of anxiety and performance.

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- Traumatic memories processing in the hippocampal-amygdala system:



(note that, under extreme stress, the heightened activity in the amygdala interferences with the functioning of the hippocampus)

Schematic representation of the hypothesized effects of emotional arousal on declarative memory

- The thalamus, amygdala, hippocampus, and pre-frontal cortex are all involved in the stepwise integration and interpretation of incoming sensory information. This integration can be disrupted by high levels of arousal: moderate to high activation of the amygdala enhances the long-term potentiation of declarative memory mediated by the hippocampus, while extreme arousal disrupts hippocampal functioning, leaving the memories to be stored as affective states or in sensorimotor modalities, as somatic sensations and visual images. These amygdala-mediated emotional memories are thought to be relatively indelible, but their expression can be modified by feedback from the pre-frontal cortex (van der Kolk, 1996).

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UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- Two parallel memory systems:

amygdala-based	hippocampus-based
implicit	explicit
emotional	non-emotional
fragmentary	integrative
non-verbal	verbal
ready at birth	mature at 3-4 y.o.

- According to Metcalfe & Jacobs (1996), there are three main hypotheses about traumatic memory encoding/retrieval:
    - Hot-cool memory systems hypothesis: only fear-provoking fragments are assumed to be encoded, and not the spatial-temporal context

      = > so, autobiographical elements cannot be retrieved if they were encoded at extreme levels of anxiety, mostly in infancy

    - State-dependent memory hypothesis: if a person encoded an event under a specific emotional mood-state, this person may be able to retrieve it in a normal state of consciousness, but the memory of the event may more fully re-emerge when the original mood-state is reinstated (so, activate the amygdala component of the traumatic memory to activate the hippocampus component of the memory)

      = > so, entire event can be retrieved if it was encoded at moderate levels of anxiety

    - Repressed memory hypothesis: a person is able to push remembrance of painful aspects of traumatic events out of consciousness, such as "repressors" do with their stress-related physiological activation; adaptive because it pushes away things that we cannot deal with at the time

      = > so, the entire event was encoded and can be retrieved

All three hypotheses are useful depending on the situation; indeed, people can recount traumatic events as they happened, but they can also fill in the gaps.

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- The observed variability of responses to traumatic events can thus be a function of:
  - Arousal threshold of the amygdala
  - Strength of the inhibitory systems for such arousal through the hippocampus and pre-frontal cortex
  - Meanings assigned to the event by the hippocampus and the pre-frontal cortex in accordance with innate and experiential information
- Once a fear is encoded or conditioned, it is virtually indelible, although the connection to the frontal lobes and other cortical regions may allow suppression of the fear response. So, fear responses may be inhibited without eliminating the underlying neural basis of the fear response (Metcalfe & Jacobs, 1996).
- Could this indelible encoding also apply to other emotional responses such as anger?
- There may be different ways to inhibit the fear response, among which are:
  - Building an antagonistic response memory structure (e.g. desensitization)
  - Deactivating the associated emotional memories which are fuelling the fear response, thus reducing the maintaining factors of the fear response(i.e. other emotional responses, cognitive schemas, intrapsychic conflicts, etc)
- In psychotherapy, narrating fragments of traumatic memories in an increasingly integrated fashion could weave those memories together into a cool-system framework and defuse some of the anxiety surrounding the emotional fragments by repeatedly associating them with the time and location of the traumatic event (Metcalfe & Jacobs, 1996).

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

So, in psychotherapy, it is:

- Possible to associate conditioned response (i.e. traumatic memory) with an antagonist response, i.e. relaxation

- Possible to associate information encoded in parallel in the amygdala and the hippocampus; that is, to associate free-floating emotional reactions with the spatio-temporal context of the traumatic event, thus activating the amygdala-based emotional memory while "putting it in perspective" by the hippocampus (if, and only if, hippocampus remains functional under such arousal)

- Possible to access the frontal cortex functions to assist the hippocampus in "putting in perspective" the traumatic information (if and only if there are sufficient cortex-related structures to be accessed to counter the emotional responsivity of the amygdala)

* * *

- Because the brain functions through associative processes, traumatic events triggering specific emotions are likely to reactivate past traumatic or highly emotional memories associated with similar emotions. If the processing of these affect-laden memories has been hampered in the past due to an activation of an overwhelming anxiety, the processing the traumatic material is likely to be interfered with by the same control operations, as suggested by Horowitz (1986).

- It is possible to identify the affect-laden memories associated with the traumatic event and work on the control operations interfering with their processing, so that their components be can fully experienced and a resolution can be found to allow its integration; their deactivation should decrease the activation of the contemporary traumatic memory which can then be processed, simultaneously or subsequently, in psychotherapy.

- Disruption of early attachments directly affects the maturation of the limbic system; suggesting that the therapist should thus offer an attachment figure for treating some PTSD patients to provide them with a basic sense of security which was lacking previously, in order to counterbalance the arousal of the amygdala.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

<u>Neurobiological Models</u> (continuation)

- PTSD is also comprised of avoidance and numbing symptoms, which can be partially explained neurobiologically:
  - Viewed as secondary symptoms in response to arousal
  - After exposure to CS, extreme elevated levels of endorphines (comparable to 8 mg of morphine) and extreme higher acute pain thresholds were observed in Vietnam veterans who were chronically traumatized
  - Severe chronic stress in animals results in a physiological state which resembles a dependence on high levels of exogenous opioids (e.g. morphine), and lowers the pain threshold
  - Conditions of extreme stress lead to cathecolamine debt, in turn leading to behavioral withdrawal and depressive affect

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Neurobiological Models (continuation)

- PTSD can be based on fear or anger.
- All of these models are based on a fear-activation model of PTSD. However, the amygdala is also the epicenter of anger, an emotion too often disregarded in PTSD models. Anger can be as overwhelming as fear and it can provoke internal panic states over the fear of losing control over one's wishes of retaliation.
- Theory of adaptation to stress by Cannon suggests two distinct stress reactions:

Fight	or	Flight
(anger-based)		(fear-based)

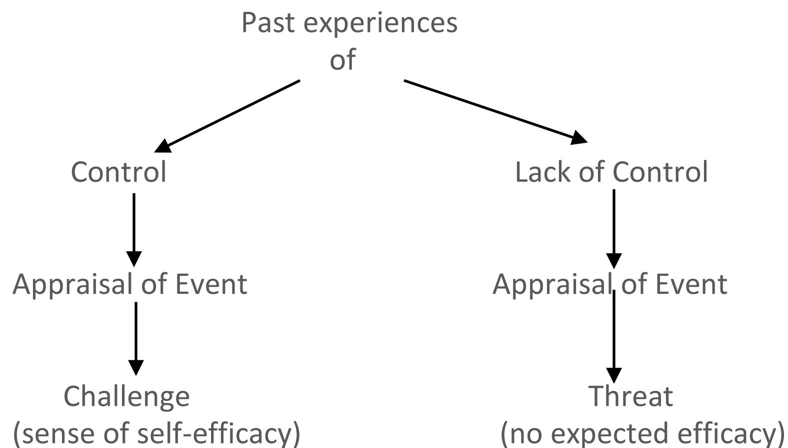
- In PTSD, usually the victim was rendered helpless and could not have used either fight or flight in order to cope with the situation; so, those intended behaviors had to be inhibited.
- Anger can also provoke arousal, just as fear can (same response physiologically).
- Anger can also provoke and maintain fear:
  - Externally in others
  - Internally as one may assault oneself, may be afraid of losing control over one's anger impulses, and may fear reprisal at having been angry.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

<u>Neurobiological Models</u> (continuation)

- According to Chorpita and Barlow (1998), anxiety is characterized by activity of the behavioral inhibition system, including detection and preparation for danger, while fear is related to actual confrontation with danger. These authors have clearly demonstrated how anxiety is related to past experiences of control over the environment, especially the early environment, in both animals and humans.



* * *

- Cumulative increasing challenges = > increased sense of control, both internally and externally

- Cumulative overwhelming events = > decreased sense of control, both internally and externally

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Behavioral Models

- Two types of behavioral models:
    - Classical conditioning
    - Operant conditioning
- Classical conditioning:
    - Responses (UR) to potent environmental stimuli (US) may become a conditioned reaction (CR) to conditioned stimuli (CS)
    - After repeated aversive stimulation or intense-enough stimulation, intrinsically non-threatening cues (CS) associated with the traumatic event (US) can elicit CR
    - According to Pavlov, this generalization is a function of temperament. After an aversive stimulation, fear-prone animals become more fearful while anger-prone animals become more aggressive (van der Kolk, 1996).
    - Involved in the development of PTSD
- Operant conditioning:
    - Responses may be maintained or led to extinction by their consequences :
    - Positive and negative reinforcements, and punishment
    - Involved in the avoidance symptoms associated with PTSD, as reactivation equates a punishment and its avoidance entails a negative reinforcement

So, in psychotherapy, it is necessary to consider both the anxiety and anger responses.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Behavioral Models (continuation)

- Model proposing Prolonged Exposure as treatment for PTSD, based on Lang's theory of fear (Foa & Meadows, 1997):
  - Fear as a cognitive (neural) structure containing representations of feared stimuli, fear responses, and the meaning associated with these stimuli and responses (here, meanings are very minimal, such as punishment)
  - Fear structure of anxiety-disordered individuals include pathological meanings
  - Treatment should modify these elements within two conditions:
    - the fear memory must be activated
    - new information must be provided, incompatible with pathological elements in the structure, so that a new memory can be formed
- Exposure provides these two conditions; i.e. eliciting the fear response and providing an opportunity for corrective information, which should lead to habituation (Foa & Meadows, 1997)

* * *

- Foa and Riggs (1993) added the importance of the impact of traumatic events on the victim's schemas of the world as indiscriminately dangerous and of the self as an inadequate coper, and the idea that fear structures are disorganized
- So, treatment should aim at organizing the traumatic memory and correcting the maladaptive schemas. The decrease of anxiety associated with the traumatic memory permits a re-evaluation of the meaning associated with this memory
- But, if there is hypersensitivity in the limbic system, there will be too much arousal associated with exposure treatment and, therefore, no habituation
- Plus, there may be an alteration of the perception of danger without change in the other emotional reactions associated with the traumatic event (e.g. anger, sadness)

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Cognitive Models

- Traditional model of Beck and Emery's (1985), developed for anxiety disorders:
    - Fear reactions emanate from threat appraisal
    - Threat appraisal involves the activation of a pre-existing cognitive schema of fear, so it involves an activation of a consistent self-reinforcing information structure, which is pathological because it is unmatched with reality
    - Leading to a selective attention to only the evidence that is consistent with the fear schema and an inattention to the evidence that is inconsistent
    - Even ambiguous information about threats brings an anxious person's attention toward obtaining further evidence regarding the threat, creating a positive feedback loop between anxiety and attended stimuli
    - Eventually triggering a fear response of escape and avoidance
- In research, anxious subjects do have an attention bias toward threat cues.
- Developed for anxiety disorders such as panic attacks, social phobias, generalized anxiety, etc.
- In PTSD, traumatic events could reinforce cognitive schemas of fear; the problem with this traditional cognitive model is, however, that the information associated with the traumatic event is not so far away from the reality experienced by some individuals.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

<u>Cognitive Models</u> (continuation)

- Information theory:
    - An organism or pre-existing system of information can integrate new significant information in two ways:
        - assimilation
        - accommodation, than assimilation
    - When the new information is too discrepant with the information composing the pre-existing system, <u>assimilation</u> is either impossible or maladaptive, so an <u>accommodation</u> of the pre-existing system is required to integrate the new information
- Hollon & Garber (1988) suggested that when faced with schema-discrepant information, one of two things happens in PTSD:
    - Information may be altered so it can be <u>assimilated</u> into existing schema ("*The rape didn't happen" or "It happened but I managed to be safe now*") = > flashbacks and other intrusive memories may be attempts at integration
    - Existing schemas can be altered to <u>accommodate</u> the discrepant information (*"My neighborhood is a dangerous place");* = > but such self-statement seems to be more a split representation of experience rather than an accommodation
    - Typically, assimilation occurs rather than accommodation because it is easier to alter one's cognition of a single event than one's entire world view

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Cognitive-Dynamic Models (continuation)

- McCann & Pearlman's (1990) constructivist self-development theory (CSDT) for PTSD:
  - Human beings actively create and construe their personal realities or representational models of the world and of themselves.
  - These schemas develop from experience and are associated with specific emotions.
  - These models become the framework from which meaning is assigned to new experience, such as traumatic events.
  - CSDT focuses on the impact of trauma on the self and its related psychological needs and schemas.
  - Six needs and schemas can be affected by victimization:
    - safety
    - trust
    - intimacy
    - esteem
    - independence
    - power
  - These needs are further divided into two loci : self-schemas and other-schemas.
- McCann et al. (1988) suggested that, following traumatic events:
  - Prior positive schemas may be disrupted (Hollon & Garber, 1988), or
  - prior negative schemas may be seemingly confirmed by victimization (Beck & Emery, 1985).
  - Traumatic events have a more pervasive impact when they happen in early childhood, a period when schemas are first elaborated to later serve as frames of reference to assess any new experience.
- CSDT bridges theories of information, object relations and self-psychology.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Cognitive-Dynamic Models (continuation)

- Epstein (1991) proposed a "cognitive-experiential self-theory" for PTSD:
    - Everyone constructs a personal theory about the self and the world.
    - Each personal theory is developed through an interaction between conceptualization and experience.
    - If everything goes well through assimilation and accommodation, the conceptual system becomes more and more differentiated (complex) and integrated (association between its diverse elements).
    - If the self-theory is unable to fulfil its functions under stress, anxiety arises and disorganization ensues if coping fails.
- Epstein proposes four basic functions of a self-theory, with their related beliefs:
    - Maintaining a favorable pain-pleasure balance (Freud)
      = > the world is benevolent vs. the world is malevolent
    - Maintaining a coherent theory of the self and the world (Rogers)
      = > the world is meaningful (predictable, controllable, just) vs.
      the world is meaningless (capricious, uncontrollable, and unjust)
    - Maintaining self-esteem (Adler and Allport)
      = > the self is worthy (competent, lovable, good, powerful, attractive) vs.
      the self is unworthy (inadequate, unlovable, bad, helpless, unattractive)

      These three functions/beliefs were derived from Janoff-Bulman (1989)
    - Maintaining relatedness (Bowlby)
      = > people are trustworthy and worthy for a relationship vs.
      people are untrustworthy and unworthy for a relationship

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Cognitive-Dynamic Models (continuation)

- According to Epstein's (1991) model for PTSD:
    - When unable to carry its functions, the self-theory shifts in the negative direction at a preconscious level.
    - Most basic functions and associated beliefs are under assault in PTSD, forcing a shift in the negative direction at a preconscious level and, consequently, a reformulation of basic views about the self and the world.
    - Resolutions to regain coherence within the system can be:
        - adaptive through an accommodation of the system by an integration of both sides of schemas
        - maladaptive through:
            - generalization of the fear response
            - generalization of the anger response
            - generalization of withdrawal
            - dissociation
            - embracing the trauma
        - a lack of resolution leads to a disorganization of the conceptual system

I have found Epstein's model to be particularly helpful in treating PTSD. For my patients, it has been useful to experientially acknowledge both sides of reality, benevolent and malevolent, in both themselves and others, and to accept these aspects in a modulated affective fashion, leading to their integration into the overall structure of the individual.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Dynamic Models

- Major impediments of traditional psychoanalytical theory to PTSD are:
    - Rejection of the seduction theory by Freud for the libidinal model
    - Dogmatic adherence to Freud's latest model by his successors
    - Authoritarianism
    - Misuse of the concept of neutrality - Blank screen is a fantasy
        - Neutrality does not equal being distanced, disengaged, simply rude or punitive and sadistic; those attitudes equal countertransference
        - Neutrality equals non-judgemental attunement, evenly hovering attention, and acceptance of contradictory aspects of a patient's self and experience (being at equal distance from both sides of the conflict as suggested by Kernberg)
    - Inattention to the therapist's personal meaning of trauma

(Pearlman & Saakvitne, 1995)

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Dynamic Models (continuation)

- Essential psychoanalytical concepts to PTSD (Pearlman & Saakvitne, 1995):
    - Centrality of the body in the psychological experience
    - Recognition of the influence of the past on the present (individual differences, developmental perspective, transference)
    - Structural model (id, ego, superego) considers the relationship of the self to the external world, and includes precursors of internalized objects (superego) and notions of wishes, conflicts and defenses
    - Self-psychology proposes the consideration of the relationships between self and self-objects (internalized objects)
    - Topographical model (conscious, preconscious, unconscious) involves questions of states of consciousness
    - Ego and self-psychology proponents' emphasis on defenses, the self, self-actualization and child development has contributed significantly to the current recognition of PTSD symptoms as adaptations
    - Object relation theory's elaboration of concepts of projective identification, internalization and identification, which are essential to understand reenactments outside and inside of therapy, and allow for the consideration of transference and countertransference phenomena, viewing the patient-therapist relationship as central in the psychotherapeutic process
    - Attachment theory highlights the role of attachment disruptions in understanding a predisposition to PTSD, and the necessity of providing patients with a secure therapeutic figure so they can explore their inner and outer worlds (Bowlby, 1988)
    - In an analytical perspective, anger is viewed as playing a major role in developing and maintaining PTSD (Catherall, 1991)

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Dynamic Models (continuation)

- There are three basic dynamic models of trauma:
    - Infantile conflicts are the pathogenic factors (Fenichel, 1945)

      = > work only on infantile conflicts

        - It was also proposed that traumatic events lead to excessive incursion of stimuli by exceeding the "stimulus barrier" or "protective shield". Therefore, the organism is flooded with impulses and its functioning is disrupted. A regression then occurs, leading to the use of a primitive defense to repeat the event in an effort to master it.
    - Event-related factors are decisive in traumatogenesis (Kardiner & Spiegel, 1947)

      = > work only on reaction to traumatic event

        - A pre-existing conflict may be symbolically revived by a traumatic event, but the conflict occurs as an independent accompaniment, and does not cause the event to be traumatic.
          Only when individuals try to defend against event-related issues, do symbolic meanings of old conflicts become attached to it.
    - Integration of the above hypotheses, with an emphasis on the role played by the appraisal or meanings attached to the traumatic event, arising from an interaction between latent affect-laden conflicts and qualities of the traumatic event (Horowitz, 1976; Krystal, 1985)

      = > work on the interaction between trauma and associated latent conflicts, and on traumatic information per se and associated latent conflicts per se

Clinically, it seems that all these models are adequate depending on the situation.

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Dynamic Models (continuation)

- Horowitz (1976, 2001) first introduced information-theory to understand PTSD:
    - Information can have inner and outer origins
    - Information can correspond to both affects and cognitions
    - The self is composed of many self-others representations or schemas, with associated states of minds (i.e. role relationship models, affects, and cognitions)
    - If new salient, emotionally charged information is too incongruent with the pre-existing conscious self, it cannot be assimilated; so, it is recorded in an active form of memory to be processed and later stored in long-term memory
    - Due to its saliency, traumatic information requires its integration within the pre-existing system through conscious oscillations between the traumatic information and the pre-existing self-others schemas
    - PTSD occurs when oscillations between re-experiencing and avoidance are involuntary and put in place by control operations (defenses) associated with reactivated latent affect-laden conflicts
    - To integrate the incongruent traumatic information, the self must accommodate itself by developing new schematic structures (i.e. altering self-others schemas); so, the traumatic information can become part of the long-term memory system
    - To do so, the conflicts associated with those self-others schemas need to be resolved, along with a transformation of the control operations or defenses employed to prevent the experience of their associated painful affects
    - A "tendency to completion" forces the consideration of the traumatic material

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Integrative Model

- Traumatic events are, in general, pathogenic for 25% of victims only, underlying the contribution of pre-morbid characteristics and the need to consider them in therapy.

- PTSD symptoms can be explained by many theories, suggesting diverse interventions :

  - Re-experiencing :
    - Flashbacks (neurobiological, cognitive, and dynamic models)
    - Nightmares (neurobiological, cognitive and dynamic models)
    - Dissociative flashbacks (neurobiological and dynamic models)
    - Psychological re-experiencing (neurobiological and behavioral models)
    - Physiological re-experiencing (neurobiological and behavioral models)

  - Avoidance :
    - Cognitive avoidance (behavioral, dynamic models)
    - Avoiding conditioned stimuli (behavioral model)

  - Negative cognitions and moods :
    - Partial amnesia (neurobiological and dynamic models)
    - Exaggerated negative beliefs (cognitive and dynamic models)
    - Guilt (cognitive and dynamic models)
    - Negative emotional state (neurological, cognitive, and dynamic models)
    - Loss of interest (neurobiological, cognitive, and dynamic models)
    - Detachment (neurobiological and dynamic models)
    - Incapacity for positive emotions (neurobiological, cognitive, and dynamic models)

  - Hyperarousal :
    - Irritability and anger outburst (neurobiological, behavioral, cognitive, and dynamic models)
    - Risky or self-destructive behaviors (dynamic model)
    - Hypervigilance (neurobiological, béhavioral and dynamic models)
    - Startle reactions (neurological and béhavioral models)
    - Concentration difficulties (neurobiological and béhavioral models)
    - Sleep difficulties (neurobiological, behavioral, cognitive and dynamic models)

INTEGRATING TREATMENTS FOR PTSD

UNDERSTANDING PTSD THROUGH VARIOUS MODELS

Conclusion

- Each hypothesis needs to be evaluated in its own right for every given symptom, in every given patient, at any given phase of therapy.

- Research shows that most clinicians are eclectic. However, if one approach is favoured, the clinician should try it and see if it works. One should always evaluate the efficacy of an approach by considering the state of the PTSD symptomatology and the patient's functioning at home, at work, with others, and with oneself.

Mental health professionals specializing in PTSD should learn the major models of PTSD, and apply them discriminantly after a thorough understanding of the external and intrapsychic dynamics of each patient.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Interventions in the Aftermath of a Traumatic Event

- Crisis intervention:
    - Intervention provided to a victim right after the event occurred
    - Goals are to provide safety, and to respond to physical and psychological needs
    - Promptly assisting the victim in receiving the proper medical help and necessary affective support (interest in the victim and not in the event)
- Debriefing:
    - Structured intervention provided by a trained mental health professional 24 to 72 hours after a traumatic event
    - Goals are to :
        - reduce the secondary anxiety associated with the post-traumatic reactions by explaining such reactions and their normality (if they are not too intense or persistent)
        - encourage disclosure regarding the event and one's related reactions, in an attempt to counter avoidance
        - encourage healthy coping strategies
        - identify victims presenting with an Acute Stress Disorder
        - refer these victims to specialized care
- Dyadic 2-session cognitive-behavioral intervention designed to prevent PTSD (Brunet et al., 2013)

THERAPEUTIC APPROACHES FOR PTSD

Interventions in the Aftermath of a Traumatic Event (continuation)

- A 2-session dyadic cognitive intervention was found to be effective in reducing symptoms at a 2-year follow-up (Brunet et al., 2013).
- Limited efficacy of crisis intervention and debriefing, as there is usually no difference in PTSD rates between victims who underwent a debriefing session and those who did not, except for negative outcomes associated with debriefing:
    - Victims (N=157) were randomly assigned to (1) an education condition, (2) an education plus debriefing condition, or (3) an assessment condition. Using assessors' and subjects' evaluation of PTSD symptoms, all groups improved over time and there was no between-group differences (Rose et al., 1999).
    - For traffic accident victims, in a randomized controlled clinical trial, debriefing was found at 3-month to be ineffective on self-report measures. At a 3-year follow-up, those debriefed were significantly worse symptomatically speaking, as well as financially and functionally. Finally, those who presented high intrusion and avoidance symptoms at onset remained symptomatic if they received debriefing, but recovered if they did not receive debriefing.
    - So, no prevention of PTSD was demonstrated by providing debriefing sessions (Foa & Meadows, 1997; Raphael, Wilson, Meldrum & McFarlane, 1996), although it is claimed by Mitchell (the originator of the Critical Stress Incident Debriefing or CISD) and other originators of such interventions.
    - Over-normalization may also occur following debriefing sessions as an increased rate of delayed PTSD was found in debriefed firefighters (McFarlane, 1988)
    - Two meta-analytic studies using controlled clinical trials concluded that debriefing does not reduce psychological distress, nor does it prevent PTSD. At 1-year follow-up, a significant increased risk of PTSD in those having received debriefing was found (Rose et al., 2001). Non-CISD interventions and the absence of intervention improved symptoms of PTSD, but CISD did not improve symptoms (Emmerik et al., 2002).

So, debriefing is not only ineffective, but it can clearly have adverse long-term effects.
It is thus not an appropriate and even unethical treatment for victims (Mayou et al., 2000).

THERAPEUTIC APPROACHES FOR PTSD

Pharmacotherapy for PTSD

- Current biological research has fostered a growing conviction in many clinicians that pharmacotherapy is sometimes useful in controlling and/or reversing the biological abnormalities associated with PTSD:
    - Antidepressants' use is supported by the model of Learned Helplessness
    - Anxiolytics' use is supported by the kindling model
- Pharmacotherapy is viewed as providing a neurological condition of lowered arousal to allow the processing of the traumatic information, or working on aspect of the patient's functioning.
- The largest body of evidence for short- and long-term efficacy of medication currently exists for SSRIs (Ipser & Stein, 2012). SSRIs have been extensively examined in recent years to test their efficacy to reduce symptoms of PTSD, and the following have proven to be effective in double-blind controlled clinical trials in large numbers of patients: Zoloft or sertraline (Brady et al., 2000; Davidson et al., 2001; Zohar et al., 2002), Luvox or fluvoxamine (Tusker et al., 2000), Paxil or paroxatine (Marshall et al., 2001; Tucker et al., 2001; Wagstaff et al., 2002), Serzone or nefazodone (Saygin et al., 2002), and Prozac or fluoxetine (Martenyi et al., 2002). Prozac and Paxil are not FDA-approved for treating PTSD. Finally, Zyprexa or olanzapine (an anti-psychotic drug) has been found to increase the responses of veterans with chronic PTSD who were refractory to SSRIs.
- An analysis of U.S. Food and Drug Adminstration (FDA) databases (published and unpublished studies) found effect sizes of 0.26 for fluoxetine (Prozac), 0.26 for sertraline (Zoloft), 0.24 for citalopram (Celexa), 0.31 for escitalopram (Lexapro), and 0.30 for duloxetine (Cymbalta). The overall mean effect size for antidepressant medications approved by the FDA between 1987 and 2004 was 0.31 (Turner, Matthews, Linardatos, Tell, & Rosenthal, 2008).
- Evidence for the effectiveness of benzodiazepines (anxiolytics) in treating PTSD is lacking, despite their continued use in clinical practice (Ipser & Stein, 2012). One controlled drug trial with anxiolytics (Freidman, 1993) was conducted with sexually abused children and significant reductions of re-experiencing and arousal symptoms were observed, but caution should be exercised as most anxiolytics are addictive.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Pharmacotherapy for PTSD (continuation)

- A meta-analysis of comparative efficacy of many treatments for PTSD reported that psychological treatments were more effective in reducing PTSD symptoms than medication and had lower drop-out rates than medication (14% versus 32%). All treatments were more effective than controls (Van Etten & Taylor, 1998).

- In two recent studies conducted, a treatment combining propranolol with a brief reactivation session subsequently reduced PTSD symptom severity and diagnosis, as well as reducing psychophysiological responses during trauma-related script-driven imagery. One likely explanation for those results is that memory reconsolidation was blocked by propranolol. To further examine this question, 33 patients with longstanding PTSD participated in a 6-week open-label trial consisting of actively recalling one's trauma under the influence of propranolol, once a week. Treated patients reported a better quality of life, less depressive symptoms, less negative emotions in their daily life and during trauma recollections (Poundja et al., 2012).

- To my knowledge, no study of pharmacotherapy has demonstrated that it led to complete remission of PTSD, despite observed reductions in PTSD symptomatology.

- So, pharmacotherapy can be used as an adjunct to psychotherapy to reduce the patient's overwhelming arousal.

- In severe PTSD, reduction of symptoms by pharmacotherapy allows for the psychotherapeutic processes to take place.

In pharmacotherapy, the rule of thumb is to choose a psychotropic medication by considering the symptoms at hand. Anxiolytics can be considered for treating PTSD if the presented symptoms are mostly related to hypersentivity.

According to a psychiatrist's expert suggestion (Dr. Paul Beaudry, Department of Psychiatry, McGill University) and our subsequent clinical experience at TRAUMATYS with thousands of PTSD patients, an anxiolytic of choice is clonazepam (Rivotril in Canada, Klonipin in the USA) because it reduces the hyper-arousal and has been non-addictive in our patients. SSRIs of choice are Paxil or Celexa because they possess both anxiolytic and anti-depressant propertie.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD

- Two types of behavioral therapy are employed to treat PTSD:
    - Anxiety-management techniques, viewing PTSD as an arousal disorder
    - Exposure techniques, viewing PTSD as a phobia:
        - systematic desensitization, with brief exposure
        - implosive therapy or prolonged exposure (PE)
- To anxiety-management techniques, cognitive techniques are now added to further address another venue for anxiety cues and the modulation of the associated arousal.
- To PE techniques, cognitive techniques are usually added so that reliving the traumatic event during the exposure treatment allows for the reorganization of the traumatic memory and results in a change of self and world schemas (Foa & Riggs, 1993).
- Only exposure techniques have been specifically adapted for treating PTSD, and mostly are PE ones.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Anxiety-management techniques:
    - Often labelled as Stress Inoculation Training (SIT) (Meichenbaum, 1994)
    - May include the following:
        - Behavioral techniques:
            - relaxation techniques
            - assertion training
            - problem-solving training
            - activity structuring
            - increasing pleasurable events
            - functional analysis
        - Cognitive techniques:
            - education about fear response
            - rational thinking
            - guided self-dialogue
            - selective attention
            - thought-stopping
            - compartmentalization-of-worry
            - imagery rehearsal and role-playing
            - cognitive reframing

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Efficacy of anxiety-management techniques (SIT or CBT) has been studied for PTSD, and they were reported to be as effective as trauma-focused techniques, if not more effective:

    - Bryant et al. (1998) compared CBT to supportive counseling (SC) in 24 subjects with Acute Stress Disorder (ASD). Fewer subjects met criteria for PTSD at termination in CBT (8%) than in SC (83%), and at 6-month follow-up (17% in CBT versus 67% in SC). Randomization is not mentioned, which represents a major flaw. Moreover, supportive counseling should never be equated with specialized psychotherapy for PTSD.

    - Relaxation was compared with relaxation with deep breathing and relaxation with deep breathing and with thermal biofeedback. Improvement appeared in only 4 out of 21 patients with PTSD. All treatments were equally effective, indicating relaxation may be sufficient, although mildly effective according to the authors (Watson et al., 1997).

    - CBT was employed with children and adolescents with PTSD in a group protocol after a single-event stressor. Its efficacy was compared to a waiting-list control group. At termination, out of 14 patients, 43% still met criteria for PTSD and 86% were free of PTSD at a 6-month follow-up (March et al., 1998).

    - Resick et al. (1988) found that SIT, assertion training, and SC produced similar but limited changes in PTSD after 6 sessions of 2 hours each.

- Powers and colleagues, including Foa (2010) found, in a meta-analytic study (N = 675), SIT to be as effective as PE, CPT and CT.

Other studies are cited in the next pages comparing SIT or CBT to prolonged exposure (PE). Findings indicate that anxiety-management techniques are as effective, if not more effective, than trauma-focused techniques such as PE (e.g. Paunovic & Ost, 2001), the latter being associated with the risk of aggravating PTSD symptoms and causing severe psychiatric complications.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Systematic desensitization for PTSD:
    - Aims at deconditioning the anxiety response associated with the CS (here, the traumatic memories) and conditioning an antagonist response to the CS
    - For patients who cannot tolerate the intensity of the anxiety associated with the traumatic memories and their associated stimuli
    - Procedure:
        - Teach relaxation techniques, long and brief forms, until patient is successful at inducing a relaxation response
        - Add cognitive skills to help suppress the anxiety response = > So, teach SIT first successfully, then
        - Patient builds a hierarchy of traumatic stimuli to which they will be exposed, starting from stimuli generating SUDS of 0-1 to highest arousal
        - Expose patients in vitro in a relaxed state to the least anxiety-provoking stimuli, so that the patient remains non-anxious
        - Gradually expose patient to more anxiety-provoking stimuli, and proceed only if the relaxation response is easily maintained while facing the previously anxiety-provoking stimuli
        - Continue until all traumatic stimuli are presented and mastery is attained
        - Apply these techniques in vivo to CS if necessary

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Efficacy of systematic desensitization for PTSD:
  - Few studies have demonstrated that systematic desensitization is effective in treating PTSD, with the exception of the study of Brom, Kleber and Defares (1989) which demonstrated its equal efficacy with respect to hypnosis and brief dynamic therapy (this study is discussed in details further).
  - Systematic desensitization significantly reduced the frequency and intensity of nightmares, as well as fear and anxiety (Cellucci & Laurence, 1978)

* * *

Foa & Riggs (1993) suggested that systematic desensitization has a direct impact on the patient's self-schema of a successful coper, and has an indirect impact on the patient's world-schema of a less threatening place in which to be

Systematic desensitization is taught to have some advantage over prolonged exposure in reducing the risks that patient will terminate prematurely and/or develop severe psychiatric complications which sometimes follow prolonged exposure work (Smyth, 1994).

At TRAUMATYS, whenever we have attempted to use systematic desensitization, patients have had a hard time adhering to its gradual exposure to traumatic memories due to their strength, rendering this method less than optimal.

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- According to Smyth (1994), SIT for PTSD consists mostly of:
  - relaxation techniques to reduce arousal
  - rational thinking (telling oneself "I am safe")
  - brief eye-movement desensitization (distracting oneself from the feared stimuli of traumatic images and irrational automatic cognitions)
- For patients who cannot tolerate the duration or intensity of the distress elicited by exposure techniques, SIT should first be taught to patients because it can be employed to briefly expose patients in an hierarchical fashion to traumatic memories and/or related stimuli (Smyth, 1994).

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- PE, or prolonged exposure techniques, for PTSD:
    - Designed by both Lyons & Keane (1988) and Foa & Riggs (1993)
    - Based on an extinction model
    - Involves prolonged and repeated exposure to the CS (e.g. traumatic memories), mostly in vitro, in a safe environment to allow threat cues to be re-evaluated and the related anxiety CR to habituate (become extinct)
    - Proceeds gradually, presenting one anxiety-provoking cue only after the previous one was successfully managed and its related anxiety decreased
    - Entails suggesting "hypothesized cues" about self and the world (Lyons & Keane, 1988), which are truly psychodynamic interpretations
- PE procedure:
    - induce a relaxation response and give suggestions
    - set the traumatic scene in the imagery world of the patient with all sensory modalities
    - elicit feedback and elaboration from patient
    - focus on stimuli cues (sensory input) and response cues (emotional, cognitive, somatic, kinaesthetic) to allow full re-experiencing
    - move action ahead to actual traumatic moments
    - present "symptom-contingent traumatic cues"
    - when anxiety diminishes, focus on "reportable, internally elicited cues" (affects, cognitions, somatic reactions)
    - if anxiety remains, focus on "hypothesized sequential cues" (unreported by patient) by addressing themes such as guilt, shame and fear of reprisal
    - during 5 to 8, adopt a supportive attitude and frequently take SUDS ratings
    - return to relaxation and present time
    - debrief by warn that anxiety may arise and memories may possibly emergence
- PE should be performed repeatedly (Lyons & Keane, 1988)

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Mistakes to be avoided in PE (Lyons & Keane, 1988):
    - allow patient to take a third-person viewpoint
    - move too quickly over traumatic moments
    - conclude when anxiety is high
- When successful, the analysis of victim's narratives of traumatic events during PE indicates that disorganization (i.e. unfinished thoughts, repetitions) decreases from the first to the last exposure session, and that this decrease is correlated with overall improvement (DiSavino et al., 1993).

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- Habituation vs. hypersensitization through exposure techniques:
    - According to proponents of prolonged exposure, hypersensitization should occur only when there is insufficient exposure.
    - This contention is, however, questionable considering the hypersensitivity of the limbic system associated with severe and chronic PTSD, and the fact that the volume of the cingulate anterior cortex, an area involves in affect and behaviour regulation, predicts the efficacy of therapy for PTSD (e.g. Dickie et al., 2011).

With PE, too much activation may occur and no habituation may take place.
Therefore, more sensitization may follow exposure.

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Several controlled studies have suggested that both imaginal and in vivo PE are effective for treating PTSD, primarily with veterans and assault victims. Here are some examples of studies on the efficacy of PE for treating PTSD, with self-report measures unless specified:
    - Keane et al. (1989) found an impact, although moderate, on reexperiencing and arousal symptoms only, with veterans, as evaluated by assessors.
    - Boudewyns & Hyers (1990) found that exposure showed some superiority to standard VA counseling with veterans, although not on physiological measures, which is the mechanism by which exposure should proceed.
- A meta-analysis of the effectiveness of PE has been conducted by Powers and colleagues (2010), examining the efficacy of PE for treating PTSD. The overall efficacy of PE for PTSD was calculated relative to adequate controls in all published randomized controlled trials of PE vs. wait-list or psychological placebo. PE treatments needed to include multiple sessions of imaginal and in vivo exposure and to be based on the manualized treatment developed by Foa, Rothbaum, Riggs, and Murdock. Thirteen studies (N = 675) were included. Primary analyses showed a large to moderate effect sizes for PE (1.08 and 0.77) on outcome measures. At follow-up, effect sizes were reduced (0.68 and 0.41). In these 13 studies, samples were highly selected, which greatly reduces their generalizability and outcome results did not include drop-outs.

Let's remember that empirical findings of any controlled clinical trial may not really be generalizable to the larger PTSD population due to design, statistics, or discussion flaws (even if studies were published in peer-reviewed journals) and due to the selection of samples greatly reducing the generalizability of findings to the general PTSD population.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Let's look at a seminal study on the efficacy of PE :

  Foa et al. (1991) found that assault victims showed improvement after PE, SIT, supportive counseling (SC) or waiting-list control group (n = 45). At post-treatment, all treatments were found to be more effective than the wait-list. At post-test, PTSD rates were 55% in PE, 55% in SIT, and 90% in SC. However, at 3-month follow-up, PTSD rates did differ anymore: 45% in PE, 50% in SIT, and 55% in SC.

  - Therefore, these findings do not support a superior efficacy for PE over of SIT.
  - Furthermore, these results do not even support the efficacy of PE or SIT over SC because it appears that an "experiment bias" or "halo effect" was operative ; 45% of subjects in SC improved spontaneously in 3 months following post-test.
  - Nevertheless, Foa and colleagues (1991) concluded that this study was a "gold standard" for evaluating the efficacy of therapies for PTSD.

Following this study, NIMH has not funded any study comprising dynamic or humanistic psychotherapy for PTSD, or these are now used as "control treatments". Since early '90s, Foa has been the director the NIMH Division for PTSD.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Despite the extensive number of studies supporting the efficacy of PE for treating PTSD, these results may not be generalized to the PTSD population given research selection and self-selection.

  Indeed, these results are generalizable only to about 3% of PTSD population because only 20% of PTSD sufferers have no co-morbid disorders like in efficacy studies, and at best only 15% of sufferers are willing to participate in controlled clinical trials and are selected through the application of inclusion and exclusion criteria (Thompson, Gallagher, and al.).

- PE has also been associated with a high drop-out rate in clinical trials even though subjects were highly selected (i.e. 25% in a study ; van Minnen and Hagenaars, 2002).

- Schnurr et al. (2007) conducted a large controlled clinical study (n=277) with veterans presenting with both PTSD and a co-morbid disorder, that is, a condition closer to the reality of PTSD patients. Results revealed a small outcome difference in PE vs present-focused therapy (PFT):

    - Partial PTSD remission rates were 41% in PE vs 29% in PFT

    - Full PTSD remission rates were 15% in PE vs 7% in PFT.

  Importantly, 38% of subjects abandoned PE in comparison to 22% in PFT, and post-treatment findings did not include these subjects.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- In a study by Pitman et al. (1996) with Vietnam veterans, PE led to significant heart rate activation during session, within-session habituation, and partial across-session habituation, as expected theoretically, but only to modest improvements observed on independent measures of PTSD.

    Here the mechanism by which PE should proceed was partially demonstrated, but PE efficacy did not really occur, lending no support to the hypothesis that PE efficacy is due to the process of habituation *per se* as proposed.

- van Minnen and Hagenaars (2002) found that subjective habituation during the first PE session predicted whether subjects responded positively or not to PE. This variable was the only predictor of outcome, suggesting that the ability to modulate affects is required to undergo PE.

- Powers and colleagues, including Foa (2010) found, in a meta-analytic study on the efficacy of PE, no significant differences between PE and other actives treatments (CPT, EMDR, CT, and SIT).

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- According to proponents of such techniques, iatrogenic effects are rare:
    - Foa et al. (2002) reported that only a minority of participants in PE conditions of clinical trials exhibit reliable PTSD symptom exacerbation. Here, it is important to remember, though, that such report is only based on participants who were self-selected and highly selected through research criteria, which limits greatly the generalizability of this finding.
- However, negative side effects are cited by others:
    - Pitman et al. (1991) reported that 6 out of 20 patients with combat-induced PTSD developed a variety of rather severe psychiatric complications, including:
        - depression
        - suicidal ideation
        - drug/alcohol relapses
        - panic attacks
        - premature termination.

      These authors argue that PE may not be an appropriate treatment for cases of PTSD with a substantial component of guilt/shame and anger.
    - Kilpatrick and Best (1984) also caution against treating sexual abuse victims with PE techniques, contrary to Foa and Riggs (1993).
- Others argue that persons with PTSD oftentimes do not wish to "relive" their trauma, or that PE is not effective for many and that it may even produce unwanted severe iatrogenic effects.
    - In a routine clinical practice rather than in controlled clinical trials, patients' compliance to PE protocol was monitored. It was found that only 57% complied with the audiotape exposure treatment and that compliance was related to initial PTSD severity and depression severity (Scott and Stradling, 1997). They concluded that PE is not a "treatment of choice" for many patients, as claimed by its proponents.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

- Limited efficacy of PE techniques for anger-based PTSD:
    - Fear vs. anger: Foa et al. (1995) explored correlates of fear activation during PE for 12 rape victims. Results indicated that the more intense were the facial fear reactions during exposure, the more patients benefitted from treatment. However, the more anger was reported before treatment, less fear reactions during exposure to traumatic memories were observed, as well as less outcome efficacy. Therefore, PE appears to be an appropriate therapeutic strategy for fear-based PTSD, while it appears not to be so for anger-based PTSD.
    - Clinicians need to differentiate fear-based PTSD from anger-based PTSD
- The efficacy of PE has been found to be limited for patients presenting with higher PTSD symptoms and/or reduced signs of habituation, which support the notion that many PTSD sufferers present deficits in affect modulation and that exposure treatments are inadequate for them unless these deficits are compensated for:
    - Using patients' data files from controlled clinical trials, it was found that the only outcome predictor of PE response was the initial severity of PTSD symptoms, at both termination and outcome (Van Minnen et al., 2002).
    - Non-improved patients from PE had significantly higher ratings of anxiety at the start of the first exposure session. Improved patients showed more within session and between-session habituation. Even after controlling for initial PTSD symptom severity, habituation between first and second exposure sessions was related to outcome (Van Minnen & Hagenaars, 2002).
- With PE (as with any other technique probably for treating PTSD), an early intervention (30 to 60 days after the traumatic event) led to fewer treatment sessions than did the delayed PE intervention (more than 120 days) (Weiss, 1999).
- Finally, PE advocates argue for the use of PE through virtual reality Rothbaum & Hodges, 1999). This is scary.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Behavioral Therapies for PTSD (continuation)

* Conclusions about PE techniques:

- PE techniques were developed to address the conditioned anxiety response to the conditioned stimuli, and were applied to traumatic memories in the case of PTSD.
- PTSD is more than a phobia. Often times, the anxiety is mostly secondary to other emotional responses, or the anxiety is a sign that an intolerable schema or conflict has been activated.
- Therefore, direct work on the anxiety component is likely to be ineffective in those cases.
- Behavioral therapists have realized over the years that PE alone is not sufficient to effectively treat PTSD in most cases, and that it is thought to not be necessary either.
- According to Smyth (1994), the proper use of cognitive and psychodynamic techniques, within the context of a supportive therapeutic relationship, are required in behavioral therapies for PTSD.

If SIT has been found to be as effective, if not more effective than PE, one wonders why PE is being ongoingly recommended as the treatment modality of choice for PTSD, given that SIT is a gentler treatment with no known associated side effects while PE is a harsher treatment with known and sometimes severe side effects.

Furthermore, those findings cannot be generalized to the general population of PTSD because 80% of PTSD sufferers present with co-morbidity (a condition of exclusion in clinical trials), and participants in controlled clinical trials are first self-selected and then selected by the research criteria, which further eliminates PTSD sufferers from the remaining 20% without co-morbidity.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD

- Two types of cognitive therapy for PTSD:
    - Traditional cognitive therapy (not suggested as core PTSD treatment):
        - emphasizes the pathogenic nature of pre-existing dysfunctional thinking or danger schemas
        - deemphasizes the expression of emotions
        - focuses on pathogenic beliefs regarding anxiety-provoking stimuli
    - Cognitive models for PTSD, based on information theory:
        - emphasizes the discrepancy between the traumatic information and the pre-existing system
        - emphasizes the expression of emotions
        - utilizes exposure to the traumatic material to identify pre-existing schemas to be transformed
        - integrates dynamic concepts in a very significant way

    Examples are:

        - Cognitive Processing Therapy (Resnick & Schnicke, 1992)
        - Constructivist Self-Development Therapy (McCann & Pearlman, 1990)
        - Cognitive-Experiential Self-Theory Therapy (Epstein, 1991)

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Resick and Gerrol (1988) found an association of emotions and states to PTSD severity, in 256 rape and robbery victims with PTSD, 1 month after the traumatic event:
    - detachment
    - anger
    - guilt
    - confusion
    - humiliation
    - betrayal
    - anxiety

Anxiety is the last significant predictor, after the influence of emotions and states. Interestingly, the DSM-5 diagnosis of PTSD takes into account the pathological presence of these predictors as PTSD symptoms (APA, 2013).

- After 1.5 year, in 17 of the rape victims from the above study, these emotions and states predicted 83% of PTSD severity (Resick & Schnicke, 1992):
    - confusion (55%)
    - hurt
    - humiliation
    - anxiety

- Resick and Schnicke (1992) concluded that it was insufficient to conduct exposure to traumatic memories and conditioned stimuli for deconditioning the fear response in PTSD:
    - Patients should be encouraged to fully experience all emotions associated with the traumatic event.
    - Conflicts among schemas and maladaptive beliefs should be confronted.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Cognitive Processing Therapy, CPT, by Resnick and Schnicke (1992):
    - CPT aims at identifying "stuck points", or “conflicts”, between the prior schemas and the new traumatic information
    - Conflicts may be due to:
        - negative, conflicting schemas imposed by others
        - a person's avoidance coping style, interfering with processing
        - absence of relevant schema in which to store information
- Procedure in group, for 12 sessions of 1.5 hours:
    - 1st session:
        - information processing theory of PTSD is presented
        - patients are asked to write about the meanings of the event
    - 2nd session:
        - patients are taught to identify and differentiate feelings from thoughts
        - A-B-C homework sheets are provided to illustrate this connection
    - 3-4 sessions:
        - patients are asked to write an account of the traumatic event, with sensory and emotional details
        - patients are encouraged to experience emotions while writing and reading their account (exposure component)
        - homework to identify "stuck points"
    - 5th session:
        - patients are taught to identify and challenge their maladaptive beliefs
        - questions to ask oneself are provided
        - challenging self-blame and accepting the traumatic event are introduced
    - 6th session:
        - Concept of faulty cognitive patterns is introduced

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Cognitive Processing Therapy (CPT) (continuation):
  - 7-10th sessions:
    - worksheet about challenging beliefs is provided, with questions and analysis of faulty cognitive pattern (Beck & Emery, 1985)
    - schemas involved in PTSD are presented (from McCann and Pearlman, 1990)
    - modules as to how positive schemas can be disrupted (Hollon & Garber, 1988)
    - modules as how negative schemas can be seemingly confirmed about both self and others (Beck & Emery, 1985)
    - more adaptive self-statements are proposed through cognitive restructuring or reframing)
    - particularly difficult "stuck point" are confronted
  - 11th session:
    - patients are asked to write again about the meanings associated to traumatic event
  - 12th session:
    - patients analyse their beliefs regarding intimacy
    - goals for the future are discussed

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Efficacy of CPT:
    - With 19 patients in CPT vs. 20 on a waiting-list, without randomization, victims of rape, 3 months after the event, were treated with CPT or were in a waiting-list control group. There were significant reductions of PTSD symptoms in CPT group only, and most patients did not present PTSD after treatment (Resick & Schnicke, 1992). Subjects presented no co-morbidity.
    - Later, Resick et al. (2002) compared CPT to PE and a waiting-list control group in a large sample of raped females (n = 171) who were randomly assigned to the three conditions: CPT, PE or waiting-list. Only 121 subjects completed treatments. On independent assessors' measures, CPT and PE were both found to be more effective than wait-list.
    - At a 12-month follow-up, 61% of subjects treated in CPT or PE were still improved, leaving 39% still met criteria for PTSD (Tarrier et al., 1999).
- Liverant et al. (2012) assessed the comparative effectiveness and harms of psychological treatments for adults with PTSD in a meta-analysis of 92 trials. According to the authors, evidence supports the efficacy of CPT, cognitive therapy (CT), cognitive-behavioral therapy (CBT), eye movement desensitization and reprocessing (EMDR), and narrative exposure therapy for improving PTSD symptoms or achieving PTSD remission.
- Powers et al. (2010) found, in a meta-anytic study, CPT to be as effective as CT, SIT, and PE (N = 675).
- Barrera et al. (2014) found, in a meta-analysis study of GCBT (CBT in groups) (N = 651), an overall pre-post effect size of 1.13, suggesting suggests that GCBT is an effective intervention for PTSD. Again, to significant differences in effect sizes were found between GCBT treatments that included in-group exposure and those that did not. Furthermore, the attrition rate was higher in treatments including exposure to trauma memories.

Cognitive therapy can thus be as effective as PE for treating PTSD. It would be a treatment of choice over PE because it is likely less likely to provoke iatrogenic effects.

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Constructivist Self-Development Therapy, CSDT, by McCann and Pearlman (1990):
    - Managing acute symptoms and distress
    - Building an alliance based on respect for the individual
    - Educating the patient about trauma and psychotherapy
    - Setting realistic expectations of treatment
    - Helping the patient acknowledge the trauma by:
    - Recognizing the traumatized self (wording by Gaston)
    - Revising traumatic details
    - Encouraging self-work:
        - develop ability to tolerate strong affects
        - moderate self-loathing
        - increase being alone without feeling lonely
        - encourage enjoyable, interpersonal activities
    - Assessing disrupted needs and related schemas
    - Managing intrusive memories by selective inattention, etc.
    - Revising disrupted schemas by challenging disruptive schemas providing counter-learning experiences
    - Working on transference and counter-transference (Pearlman & Saakvitne, 1996)

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Cognitive Therapies for PTSD (continuation)

- Cognitive-Experiential Self-Theory Therapy by Epstein (1991) :
  - Goals:
    - Decondition the anxiety response
    - Develop a more differentiated and integrated self-theory
  - Three components:
    - Accommodation to allow assimilation of a significant experience:
      - PTSD symptoms are signs of adaptation to be used and paced, validating fundamental beliefs
      - staying away from adopting extreme beliefs
      - recognizing that emotions are due to interpretations and one's interpretation is among many
      - consideration of existential problems
    - Extinction of traumatic response:
      - systematic desensitization or
      - prolonged exposure
      - only in simplest forms of PTSD
    - Experiential counter-learning:
      - offering a predictable and controllable treatment
      - being a trustworthy psychotherapist
      - regaining control over traumatic causes
      - fostering loving and respectful relationships
      - encouraging enjoyable experiences

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Dynamic Therapies for PTSD

- Brief dynamic therapy for PTSD by Horowitz (1974, 1986, 2001):
    - 12-session model for acute, single PTSD in a functioning adult
    - Goals:
        - retention of a sense of competence and self-worth
        - acceptance of unalterable limitations
        - continuation of adaptive actions, including relationships,
        - development of new adaptive actions and relationships
        - viewing the traumatic event as an opportunity for growth
    - Phases:
        - Testing:
            - obtain information about traumatic event and individual's reactions to it
            - explain PTSD
            - take history and relate the traumatic event to present and past events
            - identify character typology to adapt work to control operations (defense mechanisms)
            - control overwhelming affects and validate utility of some avoidance
            - develop an alliance, a safe relationship
        - Working-through:
            - recollect the traumatic event with associated affects and cognitions
            - alter maladaptive affect-laden schemas by differentiating reality from fantasy
            - progress toward completion of emotional and ideational processing about the traumatic event
            - reconsider the focus of treatment toward linking the traumatic event with past events/relationships
            - work on the meanings associated with the event (defenses, conflicts and developmental difficulties)

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Dynamic Therapies for PTSD (continuation)

- Brief dynamic therapy for PTSD by Horowitz (1976, 1984, 2001) (continuation):
    - Working through:
        - interpret manifest transference reactions interfering with processing of information by linking them to the traumatic event and past relationships
        - consider therapist's countertransference to patient's reactions
        - revise inner models of self-others
        - make new plans for the future
    - Termination:
        - foresee termination and address progress and gains as resulting from a dual effort
        - address reexperiencing of loss (/therapist) and link it to the traumatic event (especially in bereavement cases)
        - congratulation and gratitude are expressed, along with recommendation for the future

- The efficacy of BDT has been reported:
    - Horowitz and colleagues (1986), with 52 bereaved patients with PTSD and bereavement, given brief dynamic psychotherapy, found a significant decrease in PTSD symptoms from pre- to post-treatment, and improvement in relationship and occupational functioning. Patients' symptoms improved more than did their social and work functioning.

      As usual, pretreatment levels of impairment or distress were significantly related to outcome. These subjects were selected according to their lack of co-morbidity.

    - Brom et al. (1989) reported it to be as effective in reducing PTSD in 60% of subjects, as systematic desensitization and hypnosis. (see in subsequent section)

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Comparative Efficacy

- Brom et al. (1989) have conducted a controlled comparative clinical trial across major therapeutic approaches for PTSD):
  - Subjects (n = 112) with PTSD were randomly assigned to 4 conditions:
    - trauma desensitization
    - hypnosis
    - brief dynamic therapy (Horowitz's)
    - waiting-list
  - Treatment lasts 14 to 20 sessions
  - Results:
    - all treatments were equally effective
    - all treatments were more effective than the waiting-list
    - tendency toward systematic desensitization and hypnosis as better for reducing reexperiencing symptoms, and dynamic therapy for reducing avoidance symptoms
    - efficacy of dynamic therapy tended to be more gradual
    - clinically significant improvement in 60% of patients and 25% of controls
    - at 3-month follow-up, effect sizes (ES) on the Impact of Event Scale (IES on pre-test data compared to follow-up data)):
      - trauma desensitization (1.0)
      - hypnosis (1.0)
      - brief dynamic therapy (1.2)
      - waiting-list (0.3)

However, this study does not contain observer-rated measures of PTSD symptoms.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Comparative Efficacy (continuation)

- A meta-analysis of comparative efficacy of many treatments for PTSD reported that psychological treatments were more effective in reducing PTSD symptoms than medication and had lower drop-out rates than medication (14% versus 32%). All treatments were more effective than controls (Van Etten & Taylor, 1998).

- McFarlane and Yehuda (1996) highlighted that:

    - Longitudinal studies of PTSD indicate a changing course in symptoms

    - As a result, different treatments may be more effective at different points over the course of PTSD

    - Given that exposure to a traumatic event is not sufficient to cause PTSD, interventions need to be more multi-faceted than just focusing on trauma

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Comparative Clinical Use

- Summarized roles of diverse approaches:
  - Pharmacotherapy:
    - reduces arousal
  - Prolonged exposure:
    - deconditions the anxiety response
    - indirect processes the traumatic information
  - Systematic desensitization:
    - Deconditions the anxiety response
    - indirectly transforms self-schemas
  - Anxiety management methods:
    - reduce arousal
    - indirectly transform self-schemas
  - Cognitive approaches:
    - process the traumatic information
    - transform self-others schemas
    - alter faulty cognitive patterns
    - possibly consider emotions other than fear
    - reduce arousal
  - Dynamic approaches:
    - process the traumatic information inking it with events/relationships and the therapeutic relationship
    - alter related defenses
    - resolve related conflicts
    - manage transference/countertransference
    - transform self-others schemas
    - consider reactions such as anger, sadness, abandonment anxiety, etc.
    - recognize self-activation as a primary psychological drive

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Integrative Psychotherapy for PTSD

- In 1990, Dr. Gaston founded TRAUMA*TYS*, a clinic specialized in evaluating and treating PTSD.

- Dr. Gaston studied under Dr. Mardi Horowitz, author of Stress Response Syndrome (1976, 1984, 2001) during a 2-year post-doctoral fellowship, learning his model of brief dynamic therapy for PTSD.

- From her clinical experience at TRAUMA*TYS* and her knowledge of theoretical models and empirical findings, Dr. Gaston developed an integrative model (psychodynamic, humanistic, cognitive, behavioral, and neurobiological) for treating PTSD, in order to respond to all the needs of persons presenting with PTSD.

***

- The integrative psychotherapy of Gaston (1995) has three phases:
    - Regaining Control and Recognizing Traumatized Self
    - Integrating the Traumatic Event
    - Preventing Relapse and Terminating

THERAPEUTIC APPROACHES FOR PTSD

Integrative Psychotherapy for PTSD (continuation)

- Regaining Control and Recognizing Traumatized Self:

  To help patients regain control over both their inner and outer worlds:

  - Educate about PTSD and the therapeutic process
  - Lower any overwhelming arousal by:
    - addressing safety issues
    - reducing trauma-related exposure
    - obtaining adequate social support
    - limiting external and internal demands
    - reducing self-criticism
    - enhancing self-care
    - augmenting pleasurable events
    - addressing stressors
    - taking medication
  - Reinforce adequate coping strategies, and reframe one's contribution to the traumatic event
  - Teach suppressive techniques for reducing intrusive and arousal symptoms

  To help patients recognize PTSD as ego syntonic, and their traumatized self:

  - Explore PTSD and comorbid symptoms
  - Provide empathy toward the patients' distress and associated defenses
  - Get a detailed account of the traumatic event (before, during and after)
  - Take a complete history and a description of patients' actual situations to develop a good-enough picture of their intrapsychic structures

  A good-enough alliance should be developed, in a safe therapeutic relationship.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Integrative Psychotherapy for PTSD (continuation)

- Integrating the Traumatic Event:

  While continuing the use of elements of phase A as necessary,

  - Experientially revise the traumatic event to identify and work on associated issues, and/or

  - Revise childhood-based schemas, conflicts, and/or deficits (e.g. lack of modulation of dysphoric affects, critical relationship to oneself, etc.) which are linked to the traumatic event and its processing, so that the traumatic information can be directly, or indirectly, integrated into a new accommodated structure

- Preventing Relapse and Terminating:

  - Recognize gains and patients' active participation in their gains

  - Insure automatization of gains through repetition of newly acquired skills and defenses, and repeated activation of newly developed, complex schemas

  - Readdress trauma-related issues with respect to newly occurring life stressors

  - Prevent relapse by experientially anticipating the successful mastery of patients' reactions toward a future traumatic event

  - Readdress the view of the traumatic event as an overcome challenge which was handled successfully in psychotherapy, and validate a more realistic sense of self-efficacy within the limits of reality and toward the adversity of life (patients often come to say "After all, I am glad to have experienced this traumatic event because of everything I have discovered about myself")

  - Address termination of psychotherapy by reviewing gains and progress, identifying remaining vulnerabilities and issues to potentially be further addressed, and address feelings regarding the loss of the therapist

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Integrative Psychotherapy for PTSD (continuation)

- Since 1991, TRAUMA*TYS* has evaluated and treated thousands of persons presenting with PTSD, associated with co-morbidity and functional limitations.
    - No selection criteria are applied, except for the presence of an acute psychotic episode requiring hospitalization.
    - Many patients present with both PTSD and PD according to Bowlby's and Masterson's models.
    - The psychotherapy is conducted following Gaston's specialized and integrative model for treating PTSD (1995), including the components described in this document.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Integrative Psychotherapy for PTSD (continuation)

- According to an independent and retrospective study by the research team of Dr. Brunet at McGill University, using 100 files of TRAUMA*TYS* randomly selected (2004, unpublished),
    - This specialized and integrative psychotherapy for PTSD, based on Horowitz's dynamic therapy for PTSD) lasted naturalistically an average of 9 months, varying from few weeks to many months (sometimes few years)
    - Using the SCID structured diagnostic interview, PTSD remission rate was 96% (48% complete remission and 48% partial remission)
- In addition, a prospective neurological study of 25 persons treated at TRAUMA*TYS* (Dickie et al., 2011) showed that, using magnetic resonance imaging (fMRI),
    - PTSD changes were associated with activity changes in key neurological centers :
        - amygdala (conditioned memory, anxiety, fear, anger)
        - hippocampus (non-emotional memory, integration of complex information)
        - right anterior cingulate cortex (modulation of affects and behaviors)
    - Using the CAPS structured diagnostic interview, after 6 to 9 months of psychotherapy, although some had not terminated yet, the PTSD remission rate was 65%.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Essential Ingredients of Psychotherapy for PTSD

- Relational ingredients (Gaston, 1995):
    - Developing an alliance by:
        - providing a secure therapeutic figure onto which the patient can attach
        - providing a soothing, benevolent attitude toward the patient
        - providing hope through offering a coherent model of PTSD and its recovery
        - facilitating the patient's increased sense of control
        - restoring the patient's self-esteem
        - reducing overwhelming levels of arousal
        - proceeding at tolerable dosage
    - Managing transference by:
        - identifying transference manifestations
        - interpreting transferential meanings in term of the patient's fantasies and affects, and its displacement of affects/schemas onto the therapist
        - expecting that the therapist may be perceived and made to act as an aggressor, a violator, a betrayer, an interrogator, a controller, an indifferent witness, and a potential victim of patient's aggressiveness (McCann & Pearlman, 1990)
        - understanding transference reactions as based on relationship with significant caretakers in childhood

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Essential Ingredients of Psychotherapy for PTSD (continuation)

- Relational ingredients (continuation):
  - Managing counter-transference by:
    - Identifying one's countertransference due to projective identification from the patient; containing its associated affects, avoiding acting upon it and using it as salient information to better understand the intrapsychic world of the patient developed from traumatic experiences.
    - Such management of countertransference can be therapeutic in its own right as the patient views the therapist handling this emotionally charged material in an adaptive way (Catherall, 1991).
    - Counter-transferentially, a therapist may become hostile or indifferent toward a victim, be angry or enraged at the perpetrator or society while losing sight of the patient, feel helpless or overwhelmed, or attempt to save the patient from further pain (McCann & Pearlman, 1990); these counter-transferential reactions need to be recognized and contained.
    - Countertransference reactions due to one's own conflicts should be identified and left outside of the therapeutic situation.

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Essentials Ingredients of Psychotherapy for PTSD (continuation)

- Clinical factors of importance for treating PTSD:
    - Rapid intervention; otherwise, address consequences of chronicity
    - Proceed from periphery to the core
    - Recognize contribution of external reality
    - Actively explore and help the patient be specific
    - Provide empathic support to the patient's pain
    - Constantly render control to the patient
    - Provide information to the patient as information is power
    - Help the patient to restore and preserve self-esteem
    - Proceed gradually, at tolerable dosage
    - Avoid colluding with avoidance tendencies
    - Facilitate the experiential/emotional revision of the traumatic event

INTEGRATING TREATMENTS FOR PTSD

THERAPEUTIC APPROACHES FOR PTSD

Essential Ingredients of Psychotherapy for PTSD (continuation)

- Technical ingredients (Gaston, 1995):
  - Humanistic and dynamic techniques are used to assist a patient in recognizing the psychological distress associated with PTSD, or traumatized self, and one's relationship to one's traumatic self.

    => empathy, validation, exploration, interpretation, and differentiation of external and internal realities

  - Arousal-reducing techniques are used to assist a patient in regaining control.

    => pharmacological, behavioral, cognitive, and dynamic techniques

  Combined, these two should lead to a self-soothing attitude.

  - Arousal-provoking techniques are used to revise and integrate the traumatic event.

    => a controlled experiential review, with exploration and interpretation (associating intrapsychic components, and interpreting defended against affect-laden components)

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Experientially Reviewing a Traumatic Event

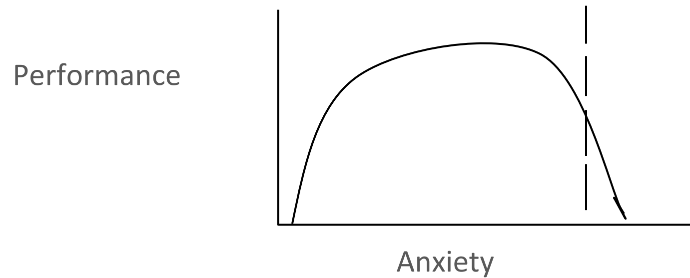
- Goals of experientially reviewing a traumatic event are to:
    - Extinguish the anxiety response associated with the traumatic memory
    - Identify conflicts interfering with the full revision of a traumatic event and its integration
    - Recognize, experience and accept the dysphoric affects associated with the traumatic event, along with the traumatized self
    - Identify and revise the basic schemas challenged by the traumatic material
- Requirements for experientially reviewing a traumatic event:
    - Agreed upon by the patient after the rationale, procedure and side effects are explained
    - Having a rationale for revising the traumatic event, in accordance with the intrapsychic structure of the patient
    - Creating a viable treatment plan, acceptable by the patient
    - Developing an alliance where the patient feels safe enough
    - Knowing the intrapsychic and interpersonal dynamics of patient
    - Patients should be structured-enough and functioning-enough in terms of a capacity to contain intense affects and good-enough internalized objects to tolerate the intrusion and proximity associated with an experiential revision of the traumatic event.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

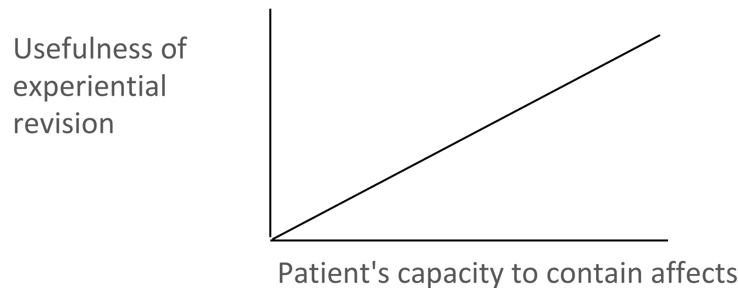
Experientially Reviewing a Traumatic Event (continuation)

- Main requirement is that the patient's anxiety remains at a sub-panic threshold:



* * Otherwise, restructure the patient's inner world * *

- Usefulness of reexperiencing a traumatic event increases as the patient's capacity to tolerate anxiety and its related affects, hypothetically augments as follows:



This hypothesis is supported by a neurological study (Dickie et al., 2013) of patients treated at by Gaston's integrative psychotherapy for PTSD at TRAUMATYS, showing that the thickness of the right anterior cingulate cortex pre- treatment predicts PTSD severity 6 to 9 months later.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

<u>Experientially Reviewing a Traumatic Event</u> (continuation)

- When to experientially review a traumatic event:
  - Revision performed at a usual state of mind is at an impasse (no new material is emerging and yet PTSD symptoms are still present).
  - PTSD has almost disappeared and such revision would assure complete processing of the information attached to the traumatic event.
  - To further acknowledge the vulnerability and resilience experienced during the traumatic event, so that these experiences can become better integrated into one's self schemas.
- According to Dancu and Foa (1992):
  - When patients' symptoms largely involve dissociative symptoms, such as numbing or cognitive avoidance, exposure treatment is recommended*. I cannot agree with this recommendation.*
  - When PTSD symptoms involve chronic arousal, SIT is recommended.
  - When a patient presents both, a combination of treatments is recommended.

Such recommendations appear to lack an understanding of the intrapsychic world of patients. They are enclosed within a restrictive cognitive-behavioral framework and, in my clinical experience, possible complications are not hereby taken into account.

REVIEWING TRAUMA AND RESTRUCTURING

Experientially Reviewing a Traumatic Event (continuation)

- Contra-indications toward exposure-based techniques:
  - A survey of therapists expert with prolonged exposure techniques in PTSD suggested the following "warning signs" (Litz et al., 1990):
    - current substance abuse
    - history of impulsivity
    - ongoing life crises
    - failed previous treatment with exposure
    - history of noncompliance
    - a recent claim for compensation
    - difficulty using imagery
    - absence of re-experiencing symptoms
    - inability to tolerate intense arousal
    - history or presence of psychiatric co-morbidity (Axis I or II)
    - no heart disease
  - Allen and Bloom (1994) noted contraindications as:
    - marked psychological dysfunction
    - personality disorder
    - suicidality
    - impulsiveness
    - substance abuse
    - treatment resistance
  - Meichenbaum (1994) added that:
    - client should be a collaborator
    - patients should have stabilized their symptoms and situation
    - patients should have engaged in self-care work
    - their self-esteem should have been bolstered

Otherwise, there is an important risk of re-traumatizing victims.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Reviewing a Traumatic Event

- Before reviewing a traumatic event:
  - Decide the event to be revised before the session and adhere to it; the choice of the event can, however, be spontaneously modified by the patient under hypnosis, EMDR, or PE
  - At the pre-determined session, try to adhere to the agreed-upon course of the experiential revision, and/or address the patient's anxieties about it
- When reviewing an event (especially with hypnosis):
  - Adhere to the procedure as agreed upon with the patient
  - Always start and end at a secure place, as determined by the patient
  - Proceed from outer experience to inner experience
  - At pivotal moments, as with a video, freeze the image and explore the others' and the patient's behaviors, then the patient's inner reactions (thoughts, sensations, emotions, wishes/intentions, images)
  - First, allow full emotional experience, then, induce perspective taking, along with cognitive restructuring and/or interpretative work, allowing for an oscillation between experiencing and observing
  - One can "rewind" to deepen the exploration of a skipped moment
  - One can "go fastforward" to skip over intolerable parts of the traumatic event or simply to terminate a hypnotic exercise so to arrive at the predetermined safe place before the end of the session
  - One can also travel through "inspaces"

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Reviewing a Traumatic Event (continuation)

- After reviewing a traumatic event:
  - Conclude with "awakening" suggestions, and others
  - Review the hypnotic experience with the patient, as well as the patient's mental status
  - Closure statement informs the patient of possible disorientation, emotionality, and emergence of new memories for few days afterward
- Important caution:
  - If a patient enters an uncontrollable panic attack, quickly end with the concluding suggestions to awaken.
  - If a patient has been overwhelmed by a hypnotic exercise, there should be a persistent activation and/or disorientation over the following days, which represents a counter-indication for redoing an experiential revision of a traumatic event with this patient before completing more restructuring work.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques

- There are many atheoretical techniques available for treating PTSD by focusing on the traumatic even:
    - Hypnosis
    - Eye Movement Desensitization and Reprocessing (EMDR)
- Hypnosis has been traditionally employed and is a flexible technique. Hypnosis carries the risk, as any other similar technique, to allow unwarranted changes to the traumatic memory revisited. In my opinion, traumatic memories should always remain intact, untouched. Non-altering question on the part of the psychotherapist need to be open-ended and non-suggestive. Hypnosis has been found to be as effective as systematic desensitization and brief dynamic therapy in treating PTSD (Brom et al., 1989)
- EMDR is a new technique which has been claimed to be extraordinarily effective, but this claim has not been supported by meta-analytic studies (Barrera et al., 2012; Powers et al., 2010), although EMDR has been demonstrated to be as efficacious as PE, SIT, and CPE in reducing PTSD symptoms in controlled clinical trials.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Hypnosis (traditional):
  - Traditional hypnosis is simply an altered state of mind with inwardly-focused attention and free-floating peripheral awareness (Spiegel, 1988). It highly resembles relaxation technique plus imagery work, although it appears to involve a deeper focus inwardly.
  - Although ironically associated with fears of losing control, hypnosis can be especially effective in helping PTSD patients regain control over their traumatic memories and associated impact.
  - As PTSD is associated with hypnotizability/absorption, hypnosis is viewed as particularly useful with dissociative disorders, as it capitalizes on this mental function (Spiegel, 1988).
  - The major advantage of hypnosis is that it is highly flexible; everything done under traditional hypnosis can be done without it, and vice versa. It simply intensifies the experience by its inward focus.
  - In revising a traumatic event, as in prolonged exposure, hypnosis can reinstate the emotional state of mind experienced during the event, allowing a more complete processing of information, with enhanced mnemonic decoding of the internal reactions which occurred at an extremely fast pace during the traumatic event (which explains the impression of extended time).

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- With PTSD, traditional hypnosis can perform many tasks:
  - Revising a traumatic event
  - Anticipating one's reactions to a future traumatic event
  - Restructuring a patient's inner world
  - Allowing an imaginal response of inhibited action during a traumatic event, with an understanding of its deep-seated intention
  - Associating a traumatic memory with its spatio-temporal context
  - Allowing the emergence of traumatic memories in dissociative disorders
  - Exploring somatic complaints
  - Deconditioning a traumatic memory
  - etc.
- Orientation to hypnosis before its use:
  - Differentiate therapeutic hypnosis from stage hypnosis
  - Explain procedure in detail, along with its phases
  - Reassert that the patient has total control; the patient can move, speak, and stop the session at anytime
- Traditional hypnosis involves four phases:
  - relaxation induction
  - hypnotic induction
  - hypnotic task
  - termination

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Possible impact of hypnotically reviewing a traumatic event:
  - Recognition of helplessness in an experiential, least defended fashion, and in a stimuli-specific context, so to firmly associate it with the traumatic event and, therefore, integrate the circumscribed possibility of helplessness in one's self schema; allows a full recognition and acceptance of the traumatized self
  - Recognition of one's power during a traumatic event, in an experiential fashion, so it can firmly be associated with feelings of helplessness, which should counterbalance them, so to render them tolerable to the patient
  - Exposure is accomplished so there can be a deconditioning of the anxiety response, although not addressed directly
  - Deeper recognition of one's schemas, emotions, needs and wishes, even conflicting ones; so the inner world can become more integrated
  - Association of traumatic affects to the past; although affects are experienced in the present, patient should gain an experiential recognition that these affects belong with the occurrence of the traumatic event in the past
  - Identification of the defended-against part of conflicts; possibly and hopefully leading to their resolution
  - Identification of schemas and their associated emotions, as defenses against more painful realities (such as coming to view guilt as a defensive imagined power to counter one's feelings of helplessness)
  - Recognition of one's pain so patients can view themselves as victims rather than aggressors or guilty participants
  - Compartmentalization of experience (no need to feel physical pain again)

So, traditional hypnosis is potentially more controlled and deeper work than PE per se.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Reviewing/restructuring with the split-screen hypnotic technique (Spiegel, 1988):
    - Split-screen hypnotic technique can be useful in assisting patients to revise traumatic events even though they do not have the capacity to tolerate the otherwise overwhelming affects elicited by a direct and prolonged exposure
    - Traumatized patients often have split schemas of self and others, so the split-screen hypnotic technique capitalizes on that and attempts to repair the split by presenting both parts simultaneously
    - The events to be revised on each screen must first be identified from an elaborate understanding of the patient's inner structure, and the "dissociated" schemas of self and others
    - Procedure:
        - Two or more screens are imagined
        - One contains a positive event
        - One contains a negative event
        - Revise positive, then negative, then positive again, and finally view both screens simultaneously
    - While revising the negative event, it is always possible to come back to the positive one to help contain/counter the negative affects
    - The positive event supports the patient's schemas and allows toleration of the negative schemas (i.e. its associated affects) associated with the negative event

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Other uses of traditional hypnosis in PTSD:
    - suppress traumatic images
    - change its course (e.g. Janet)
    - desensitize the memories
    - substitute a memory with another
    - transformation through metaphors

- Restructuring through hypnotic techniques:
    - Ego-strengthening suggestions
    - Revision of successful or happy experiences
    - Compartmentalization of memories
    - Self-soothing by creating a safe place
    - Regression to a moment with a nurturing figure
    - Television technique to control flashbacks
    - Etc.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Risks associated with hypnosis:
    - According to Philipps and Frederick (1995), there are two real dangers: use of hypnosis by an untrained hypnotherapist, in both hypnosis and psychodynamics, or use of hypnosis for inappropriate purposes
    - There are also risks associated with the use of hypnosis if one misunderstands PTSD and the risk of iatrogenic effects (as for any re-experiencing technique).
    - Like any other effective intervention, hypnotic treatment can occasionally cause harmful effects as well as beneficial ones. Harmfulness of hypnotic interventions include patients' unexpected reactions, leading to clinical complications, including amnesia, catharsis, paralysis, disorientation, literalness of response, accelerated transference, and memory contamination. In addition to these unexpected reactions by patients, complications can also arise from a practitioner's need for power and by the inappropriately narrow focus on the hypnotic process itself, leading to distraction from the more fundamental clinical process (Barber, 1998).
- Cautions about hypnosis:
    - Never use it if not properly trained
    - Never do it if there is no clear rationale as to the reasons for employing it and for employing it now
    - First, always try to work on traumatic issues at the usual state of consciousness
    - Particularly useful to counter numbing but not appropriate for all patients and perceived as dangerous by patients such as schizoids
    - Always value therapeutic relationship over hypnosis, and develop a hypnotherapeutic relationship before revising traumatic memories
- Efficacy of hypnosis:
    - In Brom et al.'s (1989) study, traditional hypnosis has been shown to be as effective as systematic desensitization and brief dynamic therapy, but only subjective measures of PTSD were employed.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Eye-Movement Desensitization and Reprocessing (EMDR):
    - Shapiro (1995), the originator of the eye-movement technique, first conceptualized it as a desensitization technique (EMD), and later as a powerful procedure for "curing" PTSD by directly causing the assimilation of the traumatic memories.
    - Although first employed as a 1-session method, Shapiro became more cautious in her statements, stating that EMDR should be employed within the context of a therapeutic relationship after completing a history taking and having developed an understanding of the dynamics involved, with a special attention to personality and dissociative disorders.
    - EMDR can be experienced as a method:
        - involving prolonged exposure, with eye movements rather than a relaxation response
        - processing traumatic information
        - provoking dissociation through a dual task of remembering and following an outer movement with the eyes
        - long-term follow-up studies support the latter hypothesis (see further)
    - In several years, EMDR has been greatly expanded to address many psychological disorders.
    - EMDR advocates also recommend using EMDR as an ego-strengthening tool before using it to review experientially traumatic memories.

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

<u>Atheoretical Techniques</u> (continuation)

- Eye-Movement Desensitization and Reprocessing (EMDR) (continuation):
    - Orientation phase:
        - procedure is briefly explained, with a limited rationale provided
        - chairs are set to allow for the movement of fingers in a comfortable distance from the patient's eyes; the comfort of the proximity of the chairs and speed of the fingers is tested
        - instructions are given to just notice what happens internally and to give accurate feedback about it
        - patient is instructed that there are no good or bad answers
        - Subjective Unit of Distress, SUDS (from 0-10), are taken regularly
    - Memory retrieval phase:
        - worst moment of traumatic memory brought back in memory, with associated:
            - negative cognition identified (SUDS from 0-10)
            - wished-for positive cognition (from 1-7)
            - emotions identified and experienced
            - somatic sensations identified and felt
    - Processing phase:
        - while the patient keeping this in awareness
        - eye movements are made for about 20 strokes
        - if there is an emotional reaction, keep on doing the eye movements while saying "It's only old stuff" or "Let it go like a scenery seen from a train"
        - after stopping the eye movements, say "Let it go", then "Take a deep breath", and "What do you get now?"
        - therapist provides no comment when material is identified, repeat the sequence

INTEGRATING TREATMENTS FOR PTSD

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Eye-Movement Desensitization and Reprocessing (EMDR) (continuation):
  - Ending phase:
    - continue until there is no new material emerging and SUDS ratings are at 0 after 2 sets of eye movements
    - return to the original traumatic material and reassess SUDS; if > 0, repeat procedure
    - if 0, ask to think about positive cognition and see how true it sounds (1-7); do the eye movements until 7 is reached, and as 7 is reached
    - do a body scan, and repeat the eye movements if any uncomfortable sensation is present, and as it disappears
    - closure statement informs patient that new traumatic memories may resurface

As for hypnosis, formal training is required to employ EMDR.

In my clinical experience with patients with PTSD and comorbidity, EMDR caused a disturbing flight of ideas in some patients, provoked somatic symptoms such as headache and nausea in others, and induced overwhelming emotions. These patients' reactions led me to terminate EMDR before the session was completed.

When I gave continuing education courses throughout the North America, many psychotherapists reported to me that some of their patients suffered severe side effects from EMDR (suicidal attempts, psychotic episodes, self-mutilations, alcohol relapses, panic attacks, etc.). Some also reported that they had been themselves harmed by EMDR.

In my own personal experience at the EMDR training, the dysphoric emotional associated with a painful childhood memory was obliterated by the EMDR exercise, but, despite the relief at the time of the exercise, the emotion resurfaced with the same intensity several years later in association with the memory ; nothing was resolved.

Therefore, I hypothesize that EMDR, due to dual simultaneous activities (experientially remembering inwardly and focusing outwardly with an eye movement), derives its observed efficacy from provoking a dissociative defense toward the targeted dysphoric memory. Over time, the dissociative defense dissolves and the dysphoric memory resurfaces.

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Examples of studies on EMDR efficacy:
    - Jensen (1994) randomly assigned 74 veterans with PTSD to 3 sessions of EMDR or a control condition of standard VA services. On PTSD measures, groups did not differ neither improved, although SUDS ratings decreased during EMDR. So, the process of EMDR was observed, but without improvement on PTSD symptoms.
    - Rothbaum (1995) randomly assigned 21 rape victims to either 4 sessions of EMDR or a wait-list control group. EMDR led to a 57% reduction in PTSD severity, but it was not found to more effective than the wait-list control group.
    - Carlson et al. (1998) randomly assigned 35 veterans to 12 sessions of three conditions: EMDR, biofeedback-assisted relaxation, and routine clinical care. EMDR group improved significantly on self-report measures. Some psychophysiological habituation occurred, but equally across treatments.
    - Scheck et al. (1998) randomly assigned 60 women to EMDR or an active listening control condition, for 2 sessions. Both groups improved, but effect sizes were greater in the EMDR condition (1.56 vs 0.65). Such improvement after only two sessions of active listening is remarkable, suggesting a halo effect in this study.
    - Wilson et al. (1995) used a delayed-treatment design with 80 subjects with full or partial PTSD. Those who immediately received 3 EMDR sessions showed decreases in anxiety, depression and PTSD symptoms, whereas the 30-day wait-list participants showed no improvement. At post-test, effect sizes were 1.43 on the IES for full PTSD.
    - At a 15-month follow-up, Wilson et al. (1997) reported 84% reduction in PTSD diagnosis, but without the waiting-list comparison and including partial PTSD.

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
  - Contrary to the theorization of EMDR proponents, the eye movements do not appear to be an active ingredient (Boudewyns and Hyer, 1996; Devilly et al., 1998; Pitman et al., 1996; Renfrey and Spates, 1994). For example:
    - Pitman et al. (1996), a non-advocate of EMDR, tested the contribution of the eye movements to the efficacy of EMDR. They compared the outcome of EMDR with or without the eye movements. Treatment effects were modest in self-reported symptoms, but no improvement was found in PTSD diagnosis, indicating no enhanced efficacy related to the use of eye movements versus fixating a dot on the wall.
    - Another study conducted this time by an advocate of EMDR, but only with 7 subjects on a time-series design, reported that there were no differences between EMDR and a non-eye movement analogue (NEM) on all outcome measures, including an independent assessment of PTSD symptoms on the CAPS. Eye movements added no efficacy. Nonetheless, the author concluded that "*the present study supports the role of eye movements in attaining treatment gains with EMDR* “ (Cerone, 2000).

      This study is incredible, but we can give the author some slack in this case because the author was a Ph.D. candidate at the time. Nevertheless, we can hope that the author will realize her blatant bias.
    - Carrigan and Levis (1999) have compared the efficacy of imagery, with or without eye movements, in treating public anxiety, with a fear-relevant imagery or relaxation imagery (n = 71). No significant differences among groups were found on all outcome measures, including physiological anxiety during exposure and behavioral indices of anxiety while giving a speech. Furthermore, participants in the eye movement condition were less likely to give a speech after treatment.

The efficacy of EMDR has not yet been demonstrated to be specifically associated with the eye movements per se. Given the heightened enthusiasm of many toward EMDR, the observed findings can be a function of many factors: dissociation, prolonged exposure, experimenter bias, a placebo effect, a halo effect, or simply the reactivity of the selected subjects.

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
  - After reviewing the scientific and clinical literature on EMDR, Perkins and Rouanzoin (2002) concluded that there is:
    - a lack of a convincing and supported theoretical underpinnings,
    - inacurrate and selective reporting of research,
    - poorly designed empirical studies, and
    - multiple biased or inaccurate reviews by a small group of authors. "Reading the original research articles frequently helps to reduce the confusion arising from the research review literature."
  - EMDR versus other PTSD treatments:
    - According to PE (prolonged exposure or flooding) proponents, research findings thus far indicate that EMDR contributes little to treatment outcome beyond the contribution of exposure techniques (Rothbaum & Foa, 1996).
    - In a pilot study, EMDR efficacy was compared to that of PE in 22 university students. Each patient received at least one session after 3 preparatory sessions. Both EMDR and PE produced significantly decreases in PTSD symptoms but only on self-report measures (Ironson, 2002).
    - In a randomized controlled clinical trial comparing EMDR, SIT plus PE, and a wait-list control group, PTSD patients (n = 24) were treated. Both treatments were equally effective in reducing PTSD on observer-rated measures of PTSD (Lee et al., 2002).
    - In a controlled clinical study comparing EMDR to CBT for treating PTSD, it was found that CBT was more effective than EMDR, both statistically and clinically, in reducing PTSD symptoms. CBT superiority was maintained at follow-up (Devilly & Spence, 1999).

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):

  So, when compared to PE, SIT, CPT or CBT, EMDR appears to equally effective (Barrera et al., 2012 ; Powers et al., 2010). Nonetheless, Albright at al. (2010) reiterated their conclusion that the evidence supporting the use of EMDR to treat combat veterans afflicted with PTSD does not rise to the threshold of an empirically supported treatment.

  - High drop-out rates such as 35% have been found in studies like that of Devilly and Spence (1999). In this same study, EMDR efficacy was observed only for 36% of the PTSD subjects who completed treatment, which does not support the various claims about its exceptional efficacy.

  - One wonders why such a treatment like EMDR, associated with potentially serious side effects and high dropout rate, is so popular and ongoingly recommended, especially given that its theoretical formulations are unfounded (lack of efficacy associated with the parameter of eye movements).

  - More importantly, severe side effects of EMDR are not reported to my knowledge in the literature, except for Brunet's (2002) and Kaplan & Manicavasagar (1998), but they certainly exist.

    Brunet (2002) exposed a case in which the patient had a severe dissociative episode, leading him to identify the therapist as the tormenter who tortured him many years previously in his country of origin. The patient became acutely homicidal and required a 10-day hospitalization.

  - Here are some severe side effects observed by me or reported to me by mental health professionals:

    - partial facial paralysis (several patients)
    - intense vomiting for days
    - severe self-mutilations
    - psychotic breakdowns
    - severe loss of motivation

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
  - Testimonies of severe side effects:

    Many testimonies of EMDR's adverse side effects can be easily found on the internet by entering 'EMDR side effects' in www.google.com. On the first few links, I have found on November 27, 2014, the following unedited personal reports:

    One example at: http://www.healthboards.com/boards/post-traumatic-stress-disorder-ptsd/934679-emdr-side-effects.html

    So... Yesterday I went for my first EMDR therapy treatment. We made a list of my "Top Ten Traumas" before hand and she told me to put stars around the top two most traumatic events so we could focus more on these. Before I even left to drive to the session, I had worked myself up into a full blown anxiety attack. I was pacing around the house, heart rate through the roof, breathing heavy, mind racing, quickly getting worse and worse. I don't know why all of a sudden I was so freaked out about this therapy because when we previously discussed it I had no problems or concerns doing it.

    Anyways, I got there in my panicked frenzy and my therapist suggested that maybe we start off with something a little less severe to start since I was so frazzled. She didn't want me to feel worse than I already felt, not to mention I had a migraine working its way into my brain.

    The session seemed to run smoothly and I could feel my progress. The heartache and pain i was feeling in my chest when we first started the session subsided quickly and was completely gone once we finished. My head felt a little cloudy, but I didn't feel like I wanted to curl up into a ball and cry myself to death anymore.

    I went home and laid on the couch for a few hours to "just veg" as she suggested. I felt light headed yet my brain felt heavy and "sloshy" in my head. My eyes started to droop and I decided to go to bed (I haven't slept in almost three weeks, so the fact that I felt tired was a GREAT relief) and I fell asleep. Not into a deep sleep, since I know I was awake many times throughout the night, but it was sleep none the less. This is when the nightmares started.

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
    - Testimonies of severe side effects (continuation):

      One after the other after the other. I had numerous TERRIFYING nightmares about the apocalypse, being possessed by a demon, earthquakes, trains on fire full of people screaming to get out, running away from terrible things etc. I NEVER have nightmares, and if I do they do not scare me. I am a huge fan of horror films and nightmares have always excited me. These did NOT excite me. I woke up this morning trembling and dizzy and hysterical.

      I turned on the light, ran upstairs crying and almost fell over. My head felt like it weighed more than I did. I felt terror coursing through my whole body. I felt afraid and scared. The nightmares were so REAL. I had to turn all the lights on in my house and open all the curtains because I was afraid of the dark. I was afraid to go back down into my room because it was dark down there. Even when i went into the kitchen throughout the day to get something from the fridge, the thought of even looking towards the top of the stairs sent me into a panic.

      All day I have cried. I was in hysterics so badly that my boyfriend left work to come over and check on me. I have never felt so out of control in my whole life. I do not feel like myself. I dont feel like I am even in my own body.

      So, the point of this post is to ask if anyone has done EMDR and has had adverse side effects like this. Does it get better? Do you think it will get worse with other treatments? This wasnt even my worst trauma, will it be worse with treating my more severe ones? I did a bunch of research online about the side effects and found a bunch of people stating that it did not help their multiple traumas. I do not want to live feeling like this, it is unbearable. My anxiety is worsening and I cannot turn my lights off or my heart starts to race and i start to lose it.

      Oh, not to mention I seem to be getting brain "shocks" or nervous system "ticks" where my head kind of shakes back and forth and sometimes even jerks to the left. Loud noises give me anxiety and hurts my ears. I tried to unload the dish washer this afternoon and the sound of plates clanging together was too much for me to handle..

      Ugh, hopefully someone reads this, sorry it is so long..

      ladydawn

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
    - Testimonies of severe side effects (continuation):

      Another one at: https://www.myptsd.com/c/threads/emdr-lashback-when-emdr-goes-wrong.1388/

      Many people have asked about EMDR.. so I thought I would share part of what is going on with me.. and it's due to that aweful treatment..

      I've been triggered and triggered and triggered these past few weeks. I am out of it. and I know it. Anyways, I did around three ? sessions of EMDR last summer. I have multiple traumas stemming from childhood to last year. I did not know when I did the treatment that it is not recommended for someone with numerous traumas. After the first three sessions, I snapped and had to be medicated (I still am medicated now.) The first week or so after that I kept getting this horrid "things." My traumas (not all but way more than I could handle) would flash like a picture book through my mind. I would have my eyes open and the whole room was flashing as if a bulb was going off.. then I would go off the deep end and get violently ill for about a week. Since then I have noticed everytime I get triggered, I have this weird "thing" happen to me. It is not a flashback. It is like the EMDR is burned into my brain.. and it won't stop. It's painful and gives me migraines and my body shuts down.. not to mention the horrid anxiety this event causes. I have no idea if this will ever go away at the present, nor what is causing it. I have no one to ask because this area sucks. I worry that it has damaged me.

      I just thought that for those of you considering this treatment.. consider this. I don't want anyone else to be stuck where I am from crappy information and a therapist that is too pushy for something that is very dangerous.

      bec

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
    - Testimonies of severe side effects (continuation):

      Another one a: http://forums.psychcentral.com/psychotherapy/207530-does-emdr-have-side-effects.html

      I had a first session last week and ever since then I just feel dead. I can't feel anything. Nothing. I am a shell, harboring nothing.

      Trigger- Self harm

      I cut myself last night to see if I could feel and I couldn't. I felt nothing. I realize the risk in harming oneself when one cannot feel, so I have chose to not do it for the time being. I can't feel anything. I am so dead inside it makes me sick. Using the word "numb" is an understatement. I am dead. It's like I don't even exist anymore. I've always experienced this in someway, but since the session I have been very bad.

REVIEWING TRAUMA AND RESTRUCTURING

Atheoretical Techniques (continuation)

- Efficacy of EMDR (continuation):
  - Furthermore, PTSD relapse in EMDR is high:
    - At a 5-year follow-up, Macklin et al. (2000) found that, after modest to moderate benefits from EMDR, not only the reductions in PTSD severity were lost at follow-up, but there was a worsening of PTSD symptoms in improved patients, as in the untreated control group.

      Five years later, PTSD was deteriorated from pre-test to follow-up in the EMDR group (d = -.82) and the untreated control group (d = -.83) on the CAPS. Their general psychopathological symptomatology had also deteriorated. These results suggest that EMDR remitters had regained their PTSD as if it had not been left treated.

Such findings are in line with the hypothesis that EMDR fosters a dissociative mechanism in most individuals showing improvement, a dissociation mechanism which lessens distress. However, the dissociative mechanism weakens over time, allowing for the psychological distress to resurface along with a PTSD left untreated and thus deteriorated.

According to this hypothesis, using EMDR for treating PTSD would be like treating a skin wound with an analgesic but without an antibiotic. One does not feel the pain anymore, but the wound worsens until one has to pay attention to the worsened wound.

Therefore, if I had to limit myself to a therapeutic approach in treating PTSD, dynamic psychotherapy or cognitive-behavioral therapy would be treatments of choice over EMDR, PE, or any other trauma-focused technique.

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Clinical Decision Making

- Two fundamental questions to ask:
  - Whether or not to treat PTSD directly?
  - What is the sequence in which to treat PTSD and its co-morbidity?
- Address psychosocial stressors first, before treating PTSD:
  - Safety issues
  - Legal/compensation issues
  - Financial problems
  - Marital/family issues
  - Health problems (e.g. chronic pain, surgery, etc)
  - Employment problems
  - Losses involved (e.g. bereavement, chronic pain, etc)
- Treat PTSD before co-morbid disorders on Axis I if:
  - Patient's expectations allow it; educate about necessary treatment plan
  - Type and severity of co-morbid disorders (anxiety and depression) allow it
  - They are functionally related to the PTSD; that is, subsequent to the PTSD onset and the causal relation was not severed over time
  - Especially if they are driven by anger related to the traumatic event

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Clinical Decision Making (continuation)

- When PTSD is interpersonally-related, anger is addressed before fear, as follows:
    - When anger is under-controlled, anger is validated and psychological distress is empathically interpreted, and means to control it are addressed
    - When anger is over-controlled, repressed anger is validated and interpreted
    - Anger is differentiated from aggression (i.e. wishing does not equal doing)
    - Fear of losing control over sadistic-homicidal wishes is identified and normalized
    - Anger is proposed as an important carrier of information about others' transgression of one's limits, or one's unrealistic expectations
    - Sadistic-homicidal wishes are validated as representing one's attempt to :
        - regain control, or
        - have one's pain recognized so the aggressor will cease aggressing others
- When anger-related issues are resolved, then the fear component can be successfully addressed:
    - Divide fears into realistic vs. unrealistic; patients should come to see fear as an important carrier of information about one's vulnerability and the world's intrinsic dangers
    - Brought under the patient's decision-making process as to reengage in risk-taking activities
    - Dealt with cognitive-behavioral techniques if necessary

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Clinical Decision Making (continuation)

- Treat co-morbid disorders before treating PTSD if:
  - They were premorbid to the PTSD, either on Axis I (e.g. depression, agoraphobia, dissociative disorders) or Axis II (i.e. personality disorders).
  - They are causally related to PTSD but became autonomous over time (e.g. substance abuse).
  - They interfere with the patient's capacity to address PTSD issues, especially personality disorders; work on mastering internal and external worlds, along with recognizing the traumatized self if appropriate.
  - Contemporary PTSD may not have to be treated directly if past traumas occurred, a personality disorder is present (level of defense mechanisms, quality of object relations), neurobiological limitations are hypothesized, or PTSD symptoms have remitted by restructuring work only.
- Address rare resistances to treatment before treating PTSD when they emerge from:
  - Patient (make sure that these are true secondary gains)
  - Patient primary social support group

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Predictive Factors

- Epidemiology examples:
  - 25%-33% of those exposed to traumatic events develop PTSD (Green, 1994)
  - Following rape, 94% presented PTSD after 1 week, 65% after 1 month, 47% after 3 months and stable thereafter (Rothbaum et al., 1992)
  - PTSD rates of 45% in burn survivors at 12 months (Perry et al., 1992)
  - PTSD rates of 44% in severe disaster survivors at 2 years, and 28% after 14 years (Green et al., 1990)
- Longitudinal studies of PTSD change over time:
  - In a study comprising a community sample, Perkonigg et al. (2005) observed that 52% of PTSD remitted during the 4-year follow-up period, while 48% showed no remission. Non-remitters showed more initial PTSD symptoms.
  - In a very large sample of Gulf War veterans, Orcutt et al. (2004) investigated the course of PTSD symptoms a 7-year period:
    - Those with low levels of PTSD symptoms, comprising 57% of the sample, showed little change over time.
    - Those with higher levels of PTSD symptoms, comprising 43% of the sample, showed a significant increase of PTSD symptoms over time.

So, PTSD can be a long-lasting disorder for many but not all victims.

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Predictive Factors (continuation)

- To understand PTSD severity and change over time, we need to look at precipitating, predisposing, and maintaining factors.
  - Event-related factors:
    - Intensity of violence (in 16 out of 19 studies; Green, 1994)
    - Duration of event
    - Uncontrollability of the event
    - Peritraumatic distress
    - Peritraumatic dissociation
    - Number of losses involved
    - Certainty of immediate death
    - Others' responses (e.g. reactions on site, reactions of support network, institutional attitudes, compensation delays, adequacy of family functioning for traumatized children, etc.)
    - Event-related stressors (e.g. criminalization, medical care, etc.)
  - PTSD-related factors:
    - Higher PTSD symptoms one week after traumatic event led to greater risk of chronicity (Rothbaum et al., 1992).
    - PTSD chronicity leads to longer treatment and more permanent complications (Freidman et al., 1988).
    - Co-morbidity leads to longer treatment (Freidman et al., 1988)

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Predictive Factors (continuation)

- Environmental response:
  - Immediate vs. delayed treatment; sooner is better (Freidman et al., 1988).
  - Presence of a supportive group (protective factor) is associated with lesser symptomatology, and most likely shorter treatments.
- Pre-event variables (Krystal, 1990; Green, 1994):
  - Neurobiological disposition
  - Maternal deprivation (as shown in animals)
  - Experience of previous traumatic events
  - Age (older, the better)
  - Gender (better for men in general)
  - Pre-morbid psychiatric symptoms
  - Previous experiences of control over such events (protective factor)

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

<u>Prognosis</u>

- According to Smyth (1994), in the real world:
    - If PTSD follows a life-time, single traumatic event, good to ideal outcomes can be obtained in 2/3 of cases, in 3 months, if:
        - PTSD occurs in adulthood
        - PTSD is acute or chronic but uncomplicated (e.g. no losses, chronic pain)
        - Good pre-morbid functioning (including no personality disorder)
        - No ongoing stressors
        - No Axis I co-morbidity is present
        - The patient is willing to revise the traumatic event
    - If PTSD follows a life-time, single traumatic event, but it is complicated by co-occurring anxiety or depressive disorders, good to ideal outcomes can be obtained in 2/3 of cases, in 6 months, if:
        - same as above
    - If PTSD follows repeated exposures to traumatic events, good to ideal outcomes can be obtained 2/3 of cases, in 12 months, if:
        - PTSD, acute or chronic, occurs in adulthood
        - Good pre-morbid functioning (including no personality disorder)
        - No ongoing stressors, or complicating factors

CLINICAL DECISION MAKING AND PROGNOSIS

Prognosis (continuation)

- If PTSD is associated with ongoing stressors, good to ideal outcomes can be expected only if:
  - Stressors are somehow brought under control
  - Especially if they are related to the traumatic event (e.g. court testimony)
- If PTSD is associated with severe pre-morbid conditions, good to ideal outcomes are expected in less than 10% of cases, unless:
  - These conditions are successfully addressed
  - Such conditions include substance abuse disorders, personality disorders, dissociative disorders, and psychotism
  - The 10% rate is inferred for cognitive-behavioral approaches (Smyth, 1994)
  - When such conditions are successfully addressed, prognosis improves to those defined above
- If a contemporary PTSD is associated with childhood traumatic events, good outcomes can be reached if:
  - The internal world of the patient is restructured
  - Past traumatic events are addressed, at least cognitively
  - Their impact on the internal world of the patient is worked through

- Longer therapy should be expected for chronic and complicated PTSD, along with more permanent complications and higher costs ($8,300 for acute PTSD or uncomplicated chronic PTSD, and $46,000 for chronic and/or complicated PTSD) (Freidman et al., 1988).

- These prognostic estimates are based on the weekly provision of a double session, or bi-weekly sessions, on an outpatient basis (Smyth, 1994).

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Frequency of Sessions

- To provide the necessary support and counter avoidance tendencies, psychotherapy sessions should occur twice a week when:
    - Psychosocial and occupational functioning is disrupted.
    - There is an ongoing crisis.
- When functioning is resumed and most PTSD symptoms are decreased or absent,
    - Psychotherapy sessions should occur once a week.
    - Work should be resumed in a progressive fashion.
- When therapeutic gains are stabilized and functioning is good,
    - Psychotherapy sessions should decrease to once every two weeks.
    - Termination should be addressed and scheduled.

INTEGRATING TREATMENTS FOR PTSD

CLINICAL DECISION MAKING AND PROGNOSIS

Length of Psychotherapy

- Psychotherapy should proceed as long as PTSD is not remitted, along with co-morbid disorders and functional limitations, unless a therapeutic plateau is clearly reach.

- A meta-analytic study (Leichsenring & Rabun, 2008) compared long-term psychodynamic therapy (1 year or 50 sessions) with shorter term therapies for the treatment of complex mental disorders (defined as multiple or chronic mental disorders, or personality disorders). An effect size of 1.8 was found for long-term dynamic therapy for overall outcome. Furthermore, effect sizes increased from treatment completion to a 2-year follow-up on all five outcome domains (overall effectiveness, target problems, psychiatric symptoms, personality functioning, and social functioning).

- A second meta-analysis (de Maat, de Jonghe, Schoevers, & Dekker, 2009), examined the effectiveness of long-term psychodynamic therapy (average of 150 sessions) for adult outpatients with a wide range of diagnoses.

  For patients with mixed but moderate pathology, the effect size was 0.78 for general symptom improvement at post-treatment, and the effect size increased to 0.94 at long-term follow-up, in average 3.2 years later.

  For patients with severe personality pathology, the effect size was 0.94 and it was 1.02 at long-term follow-up, in average 5.2 years later.

- In a review of the effectiveness of dynamic therapy, Shedler (2010) emphasized an important recurring finding. The benefits of psychodynamic therapy not only endure, but they increase with time. In contrast, the benefits of non-psychodynamic empirically-supported therapies in controlled clinical trials tend to decay over time for disorders such as major depression and anxiety disorders.

Longer psychotherapy is thus worth the investment, especially if PTSD is chronic and if there are structural deficits.

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