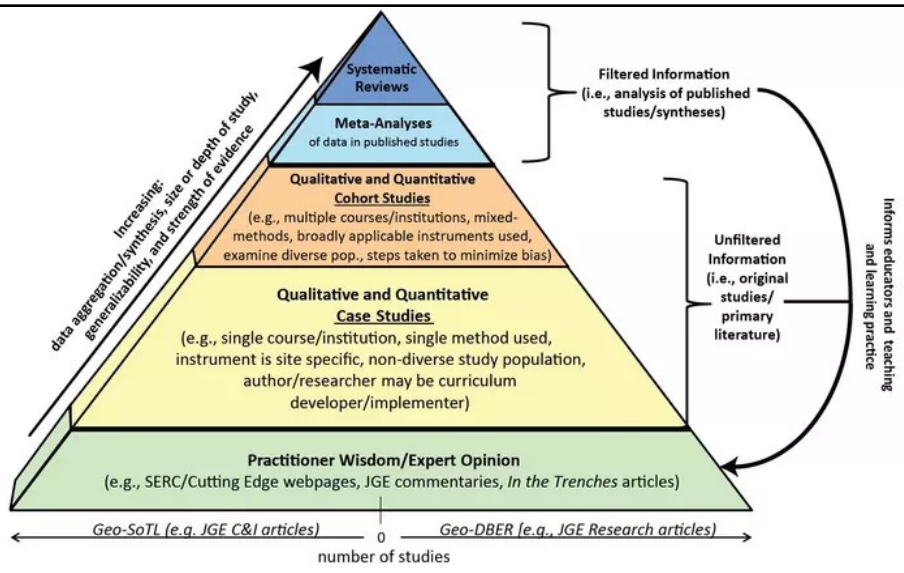
Post-Traumatic Growth

Applying Solution-Focused, Narrative and Meaning Centered Interventions

Dr. Carissa Muth, Psy.D.
November 13 & 14, 2025

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

1

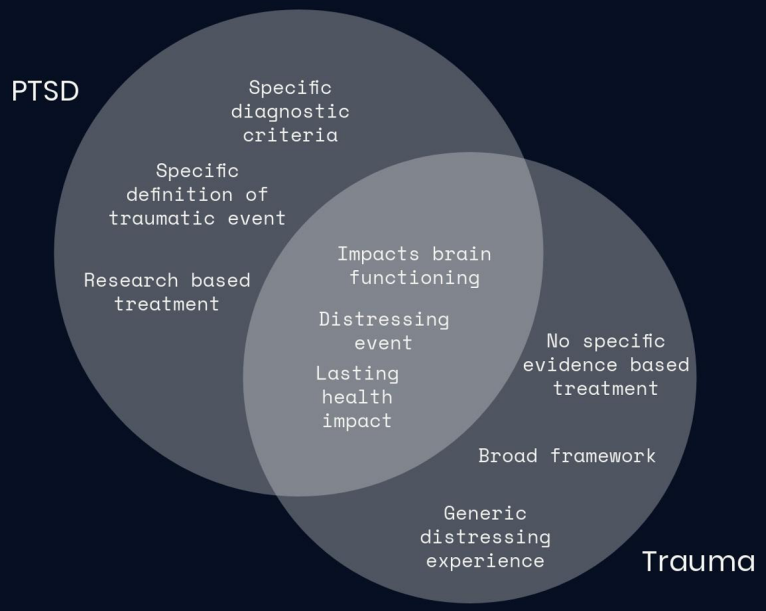


Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

2

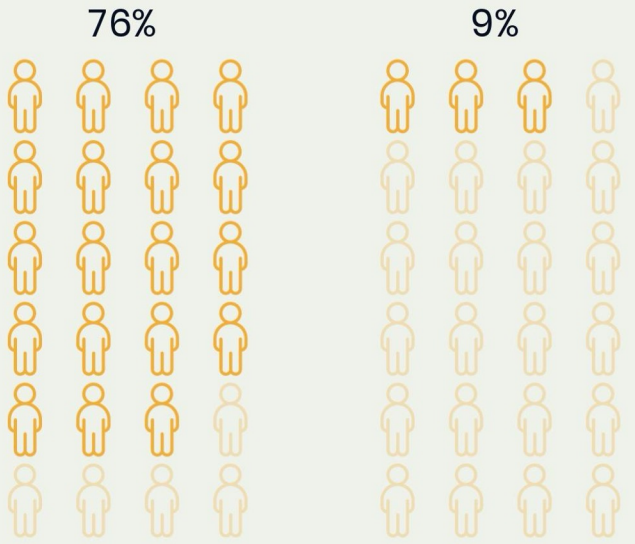
T(t)rauma

Trauma - exposure to a distressing or stressful event resulting in physiological, emotional and/or psychological changes



3

How prevalent is PTSD?



4

Trauma and Stress-Related Disorders in DSM-5

Post-Traumatic Stress Disorder (PTSD)

Exposure to actual or threatened death, serious injury, or sexual violence, leading to intrusive symptoms, avoidance, negative alterations in cognition and mood, and heightened arousal.

Acute Stress Disorder

Temporary but severe anxiety, dissociative, and other symptoms occurring within one month after a traumatic event.

Adjustment Disorders

Emotional or behavioral symptoms in response to an identifiable stressor, occurring within three months of the stressor.

Reactive Attachment Disorder

Failure to form healthy attachments with caregivers in early childhood due to neglect or abuse.

Other Specified Trauma- and Stressor- related disorder

Symptoms do not meet criteria for other diagnosis in category but are due to a stressor. Provide specifics such as PTSD like symptoms

Unspecified trauma-and stressor-related disorder

Typically used in an emergency room when a proper diagnosis cannot be obtained

5

Core Symptoms - PTSD

- Re-experiencing in the present
- Avoidance of traumatic reminders
- Sense of current threat

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

6

Exhibit 1.3-4 DSM-5 Diagnostic Criteria for PTSD

Note: The following criteria apply to adults, adolescents, and children older than 6 years. For children 6 years and younger, see the DSM-5 section titled "Posttraumatic Stress Disorder for Children 6 Years and Younger" (APA, 2013a).

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as it occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse). **Note:** Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

7

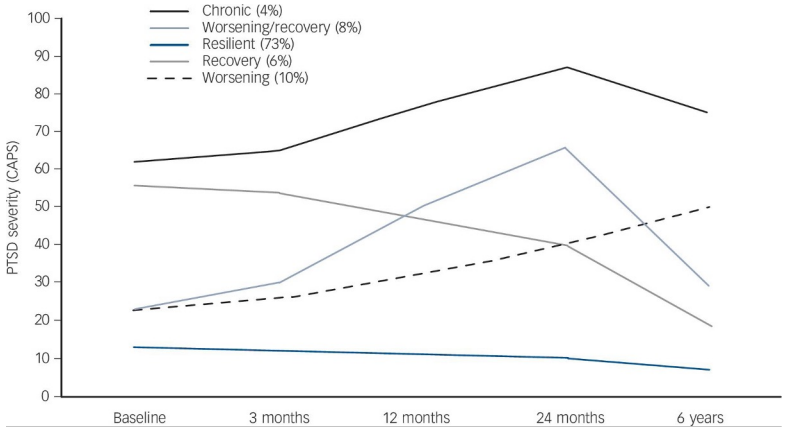
Distinct Nature of PTSD

- Involuntary re-experiencing of traumatic event as unique characteristic[6]
- Re-experiencing of traumatic event often accompanied with painful emotions
- Abnormal memory phenomenon
- No consensus as to cause

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

8

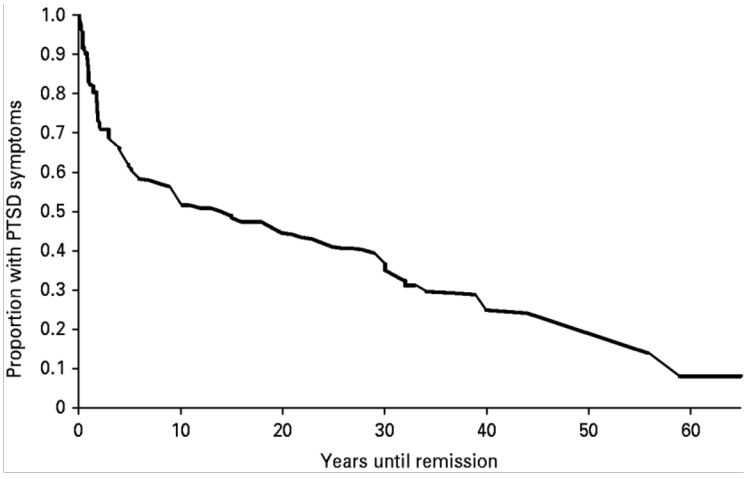
Treatment Resistance



Chapman, C., Mills, K., Slade, T., McFarlane, A. C., Bryant, R. A., Creamer, M., … Teesson, M. (2012). Remission from post-traumatic stress disorder in the general population. *Psychological Medicine*, *42*(8), 1695–1703. doi:10.1017/S0033291711002856

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

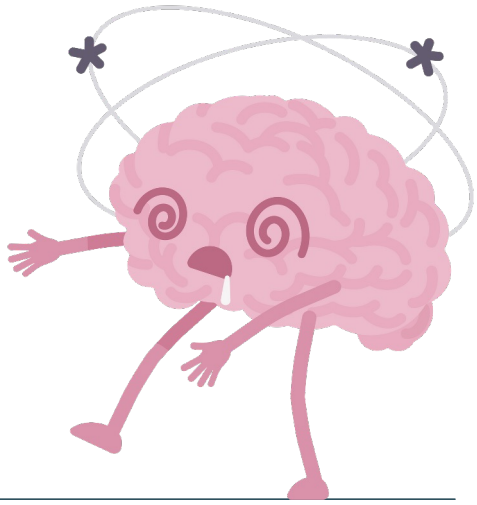
9



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

10

What Creates Problems?

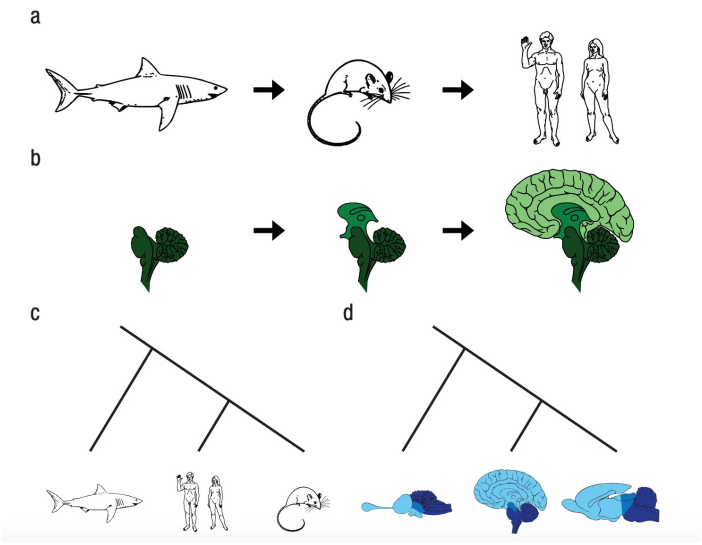


Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

11

How the brain works

Cesario et al., 2020



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

12

Cross species connections

- "What are the general principles by which animals make decisions about opportunity costs?" (Gintis, 2007; Kurzban, Duckworth, Kable, & Myers, 2013; Monterosso & Luo, 2010).
  - Responses to environments
  - Survival needs
  - Behavioural economics (Cost/ Benefit)

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

13

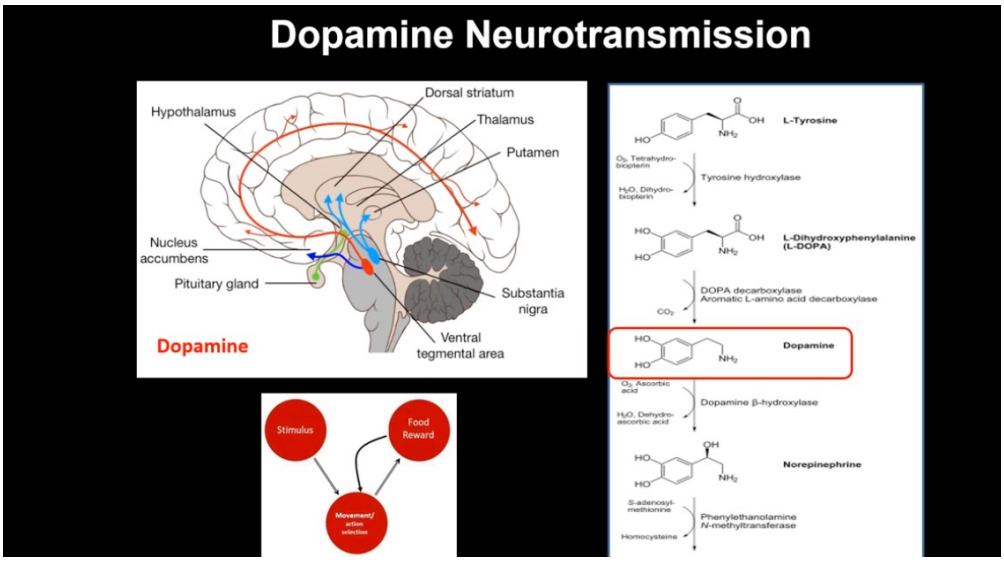
Theories of PTSD

Disorder of Fear Dysregulation

- PFC has a critical role in threat inhibition and extinction, as well as in processes such as emotion regulation and avoidance. (Kredlow et al.)
- Best current treatments are in the form of exposure-based cognitive-behavioral therapies, which are thought to act on the neurocircuitry of threat extinction, in particular through the PFC

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

14



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

15

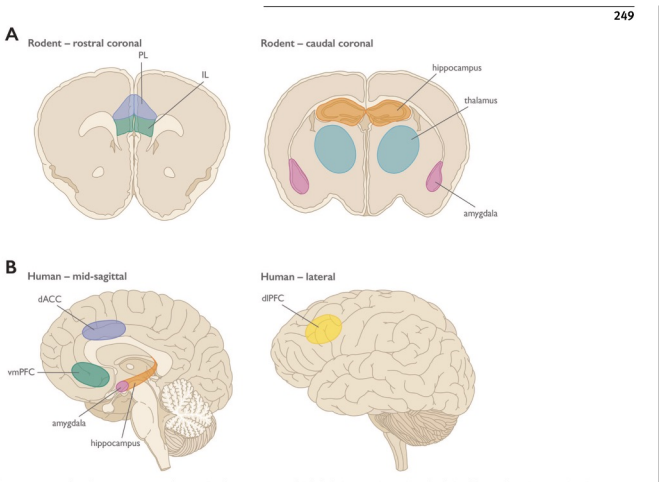
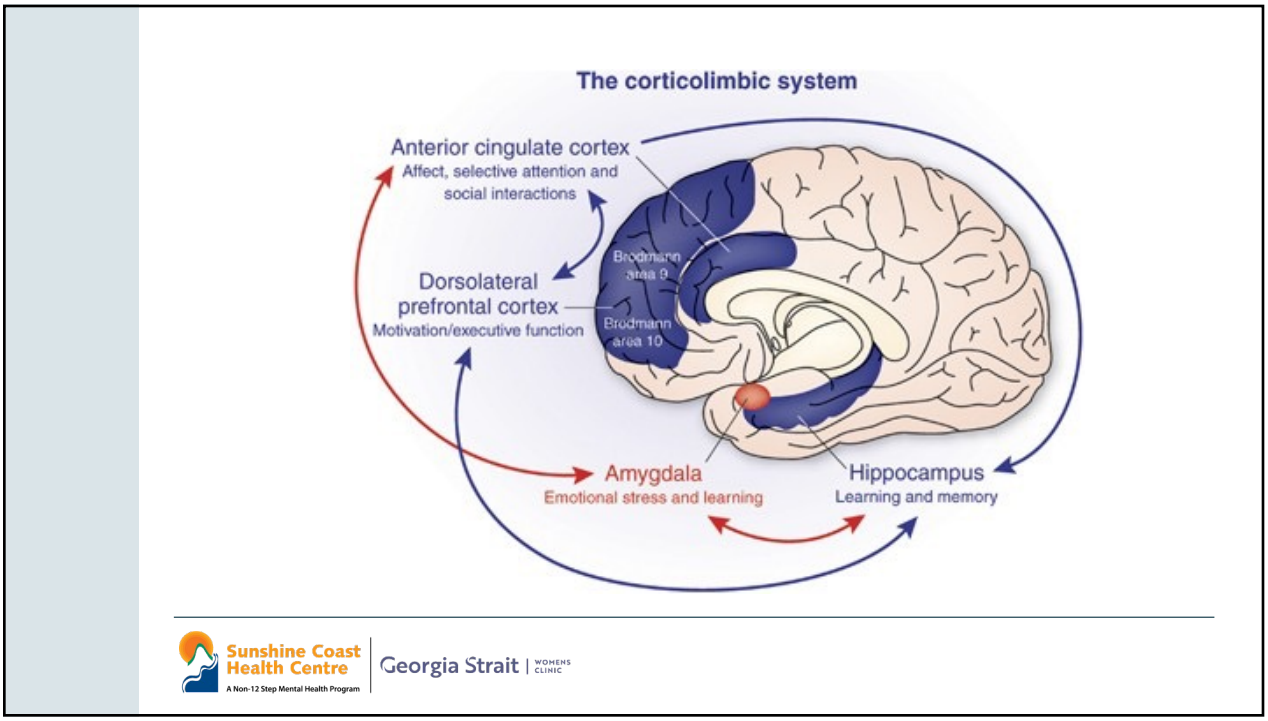


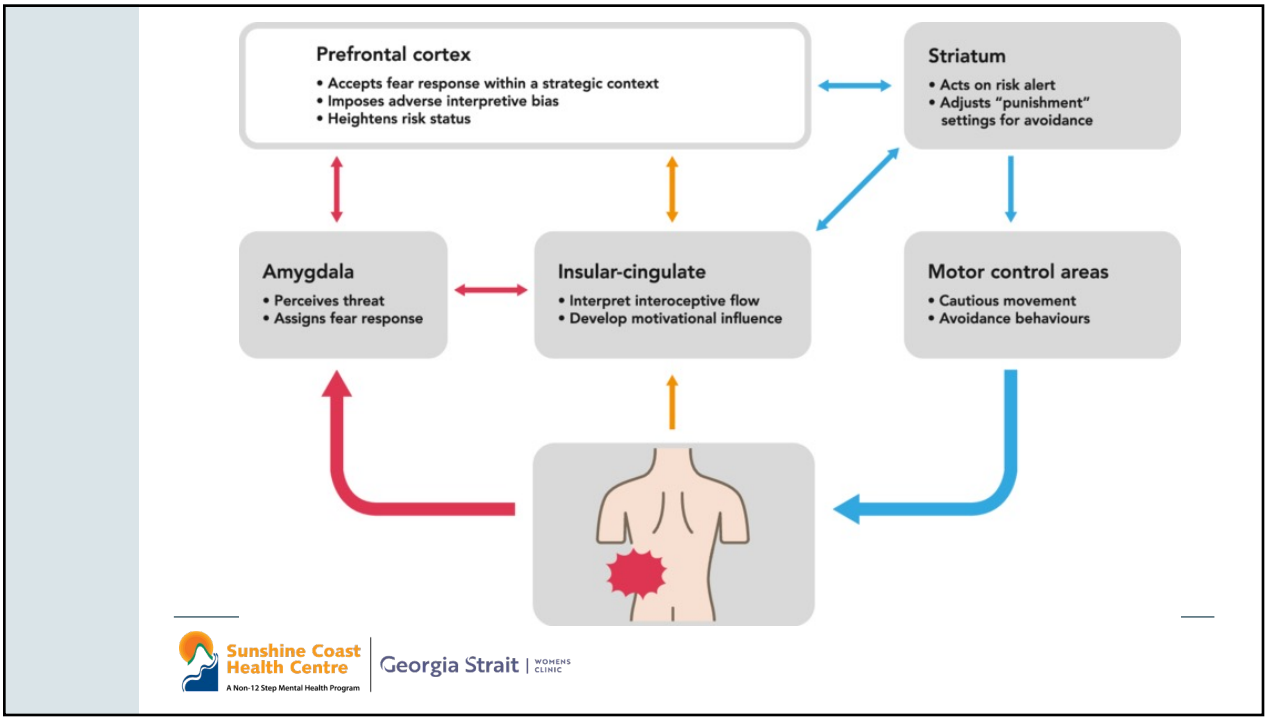
Fig. 1 Threat regulatory neurocircuitry across species. a Rodent anatomy highlighting regions involved in threat learning, extinction, avoidance, and the contextual modulation of threat expression; **b** Human anatomy highlighting regions involved in threat learning, extinction, avoidance, cognitive regulation, and the contextual modulation of threat expression. PL = prelimbic cortex, IL = infralimbic cortex; dACC = dorsal anterior cingulate cortex, vmPFC = ventromedial prefrontal cortex, dlPFC = dorsolateral prefrontal cortex.

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

16


The corticolimbic system
Anterior cingulate cortex
Affect, selective attention and social interactions
Dorsolateral prefrontal cortex
Motivation/executive function
Brodmann area 9
Brodmann area 10
Amygdala
Emotional stress and learning
Hippocampus
Learning and memory
Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | WOMENS CLINIC

17


Prefrontal cortex
• Accepts fear response within a strategic context
• Imposes adverse interpretive bias
• Heightens risk status
Striatum
• Acts on risk alert
• Adjusts "punishment" settings for avoidance
Amygdala
• Perceives threat
• Assigns fear response
Insular-cingulate
• Interpret interoceptive flow
• Develop motivational influence
Motor control areas
• Cautious movement
• Avoidance behaviours
Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | WOMENS CLINIC

18

Fig. (1). Brain regions prominent in the literature of stress-related disorders: the dorsomedial prefrontal cortex (dmPFC; light green), ventromedial prefrontal cortex (vmPFC; light orange), orbitofrontal cortex (OFC; magenta), anterior cingulate gyrus (ACC; dark green), posterior cingulate gyrus (PCC; light purple), cerebellum (grape), dorsolateral prefrontal cortex (dlPFC; turquoise green), insula (dark gray), amygdala (dark orange), hippocampus (plum) and parahippocampus (heliotrope). (*A higher resolution/colour version of this figure is available in the electronic copy of the article*). Created with BioRender.com.

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

19

Flashbacks

- Fleeting (transient sense of traumatic experiences reoccurring in the present) to extreme (total dissociation from the present)
- Only symptom unique to PTSD
- Differential diagnosis
  - Involuntary thoughts
  - Repetitive intrusive thoughts (individuals remain aware of the present and memory they are recalling)
  - Retrieving episodic memories
  - Trauma related preoccupation

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

20

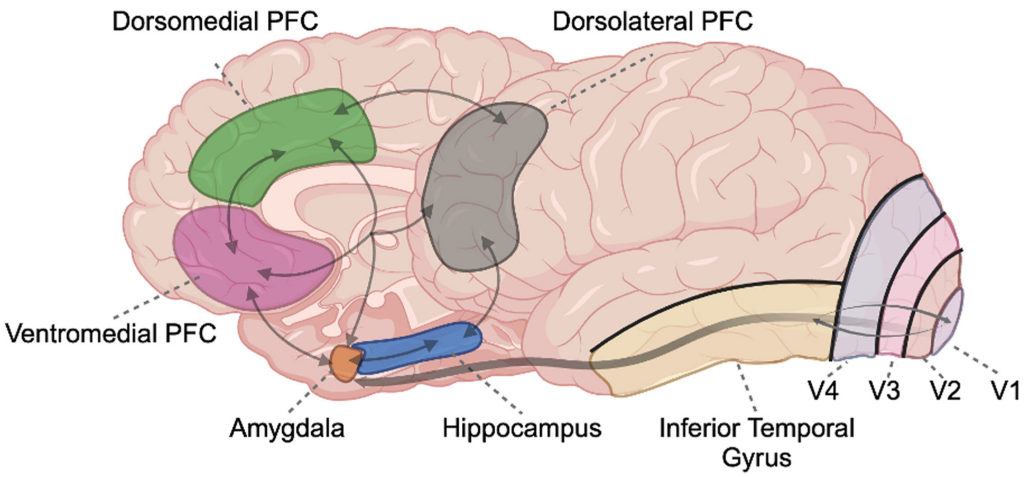


Figure 1. Schematic overview of threat and visual neurocircuitry related to posttraumatic stress disorder susceptibility. PFC, prefrontal cortex; V1, primary visual cortex; V2, secondary visual cortex; V3, visual area 3; V4, visual area 4.

Sunshine Coast Health Centre | Georgia Strait | Women's Clinic

Harnet et al., 2025

21

Theories of PTSD

- Two-factor learning theory[6]
  - Fear conditioning
  - Flashbacks don't extinguish due to avoidance behaviours
  - Treated with imaginal exposure (non-avoidance)

- Stress response theory[6]
  - Cognitive models are incompatible with traumatic experience
  - Triggers psychological defence mechanisms
  - Flashbacks are information overload
  - Treatment includes establishing a new cognitive model

Sunshine Coast Health Centre | Georgia Strait | Women's Clinic

22

Theories of PTSD

- Cognitive model[6]
  - Negative appraisal of traumatic event and self-protective strategies
  - Strong perceptual priming leads to flashbacks
  - Treatment includes addressing maladaptive narratives and providing narrative to traumatic memories to reduce priming strength

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

23

Memory Wars

- Repressed trauma memories - mixed to limited evidence
  - 24.1% of Clinical Psychologists [in USA] agree in repressed memories and 8.6% of Cognitive Psychologists[5]
- Children coping through dissociative avoidance coding style - mixed to limited evidence
- Fragmented memories – scarce peer reviewed evidence of fragmented or dissociated memories[1][2][4]

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

24

Risk factors for PTSD

- 30-40% heritability (Kredlow et al., 2021)
- Various factors that influence fear and emotion regulation
  - Childhood environment
  - Executive functioning ability
  - Previous mental illness

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

25

Childhood Development and Trauma

Early childhood experiences shape development

Traumatic events during formative years can have profound and lasting impacts on mental health and well-being.

schema development

Early experiences shape how children form mental representations and conceptual frameworks.

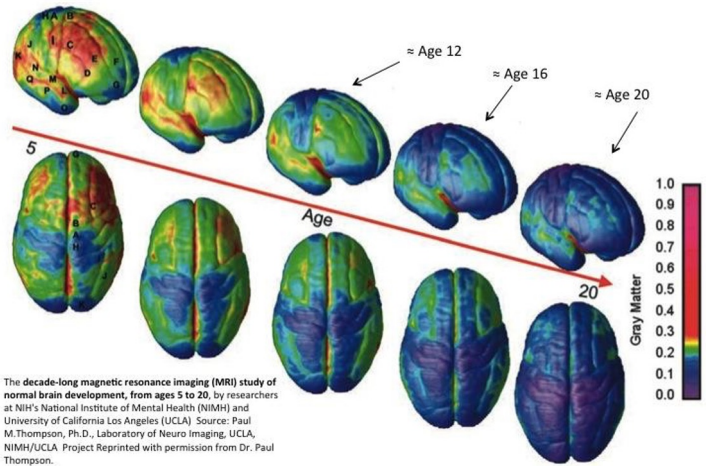
low-grade inflammation

Childhood abuse was associated with low-grade inflammation. Chronic inflammation has been established as the overlying mechanism demonstrating how the immune system contributes to disease development.

Understanding the implications of stress on childhood development is crucial for providing appropriate support and interventions.

26

Brain Development



The **decade-long magnetic resonance imaging (MRI) study of normal brain development, from ages 5 to 20,** by researchers at NIH's National Institute of Mental Health (NIMH) and University of California Los Angeles (UCLA) Source: Paul M.Thompson, Ph.D., Laboratory of Neuro Imaging, UCLA, NIMH/UCLA Project Reprinted with permission from Dr. Paul Thompson.

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

27

Attachment

- Developed in early childhood
- Influences a child's capacity to form mature intimate relationships in adulthood
- Influence cognitive schemas

"Patterning and organization of attachment relationships during infancy is associated with characteristic processes of emotional regulation, social relatedness, access to autobiographical memory, and the development of self-reflection and narrative"

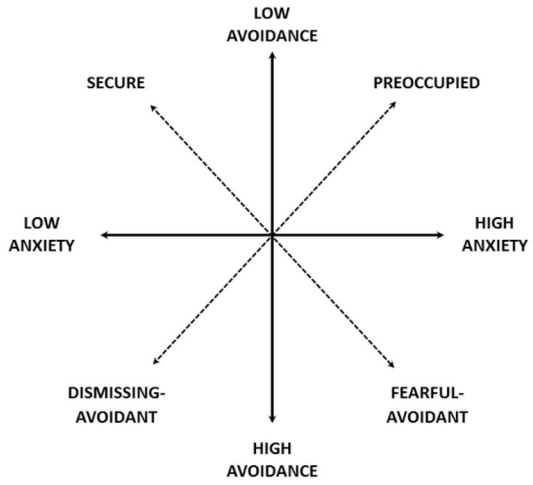
(Siegel, 1999, p.67)

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

28

Secure Attachment

Have adaptive emotional regulation abilities through sustained problem-solving efforts



Anxious Attachment

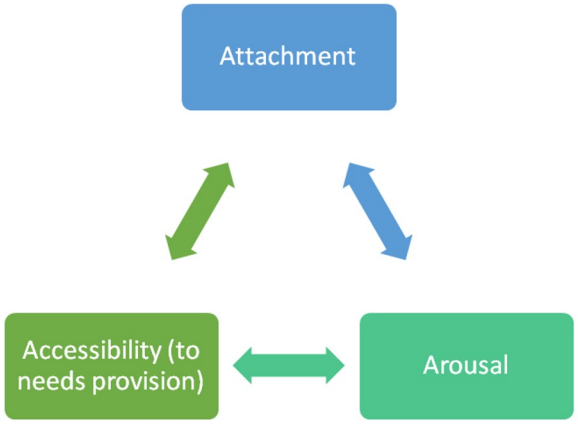
- Crave close relationships
- Engage in strategies that sustain or even exacerbate their distress

Avoidant Attachment
- Suppress or deactivate emotional reactions
- Fearful of vulnerability and emotions

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

29

Lost Attachment



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

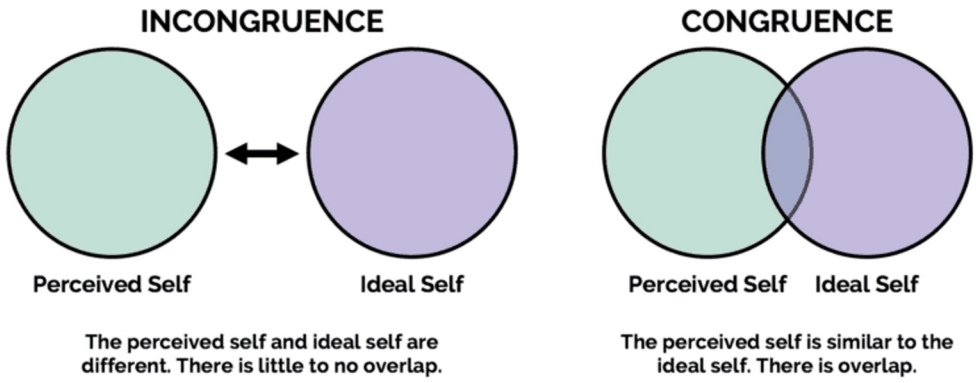
30

Emotional Regulation

- "Survival brain"
  - Distinct neural profiles of CPTSD and PTSD during threat response[9]
- Humans have a unique ability to use cognition to alter fear responses[10]
- Stress impacts the ability of the PFC and subcortical regions implicit in threat control
- Evidence that a history of childhood abuse reduces grey matter in the PFC
- fMRI studies indicate that ongoing PTSD symptoms are contributed by impairment with the PFC
- TMS may help
- Emotional awareness

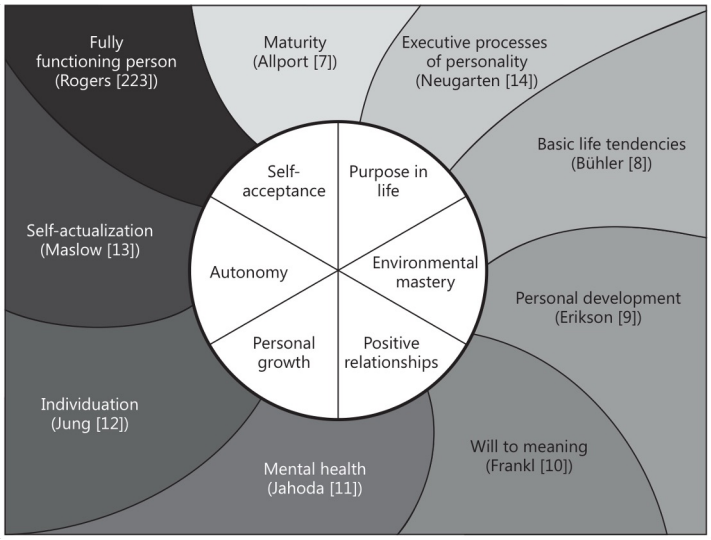
Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

31



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

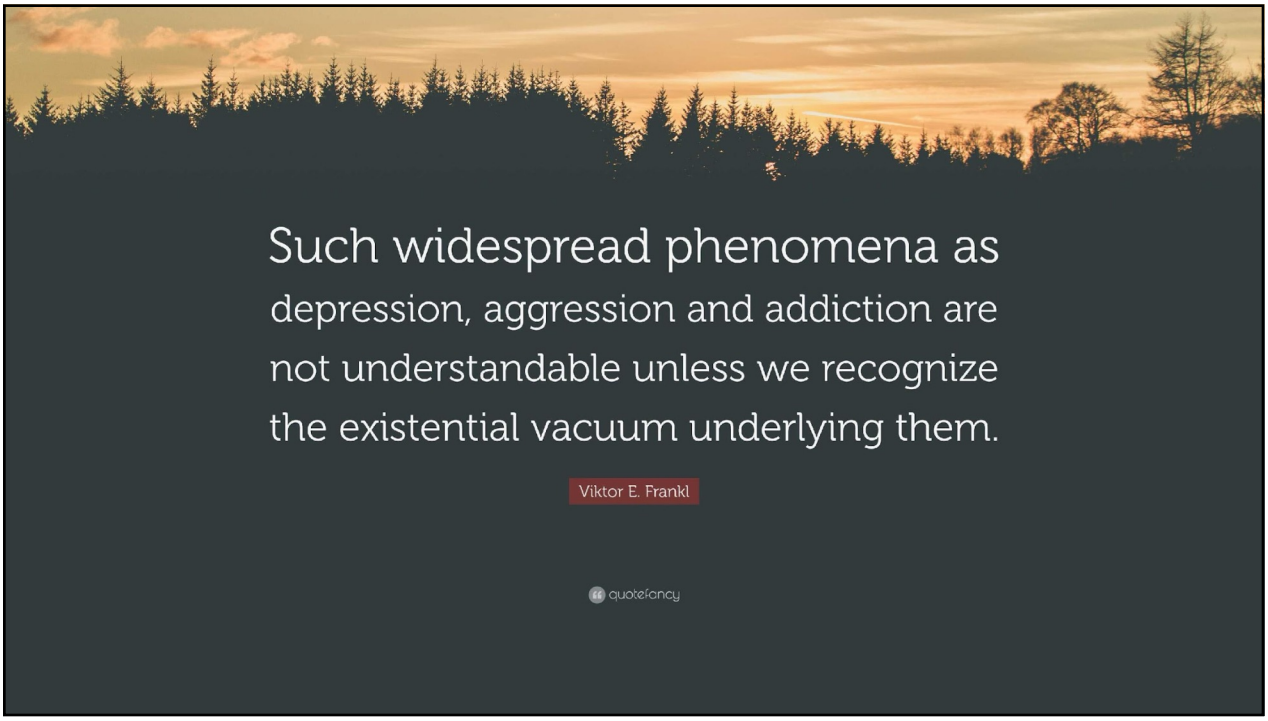
32



Ryff, C.D (2014). Psychological well-being revisited: Advances in the science and practice of Eudaimonia

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

33



34

Healing

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Women's Clinic

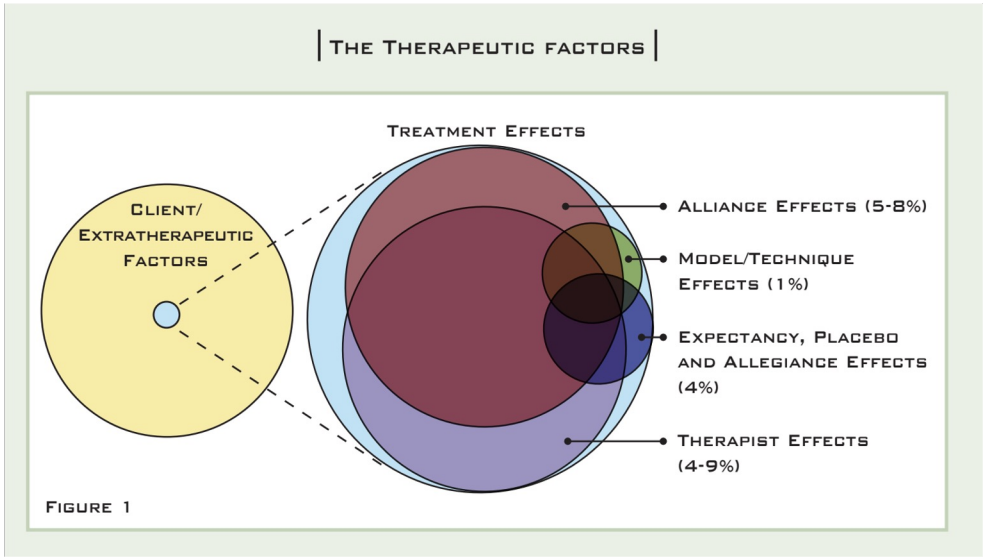
35

Mechanisms of Change

- Improvements in maladaptive trauma- related beliefs and appraisals appear to be the core mechanism of change in PTSD specific treatments[3]
- Some suggestions of increased hope
- Common factors
- Therapeutic alliance (client buy in)
- Emotional regulation/inhibitory learning
- There is little to no evidence that indicate that contextualization of trauma memories or sensory (somatic) based memories into verbally accessible ones is a mechanism of change[3]

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Women's Clinic

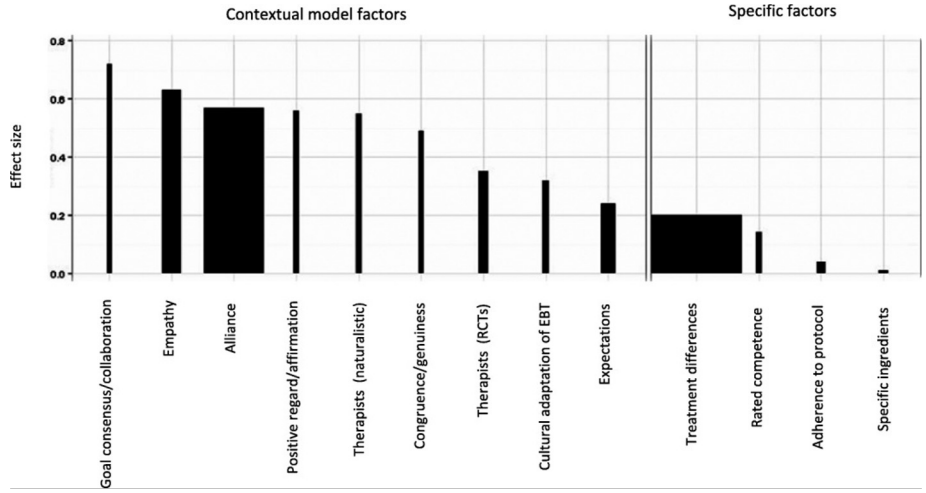
36



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

37

Effective Psychotherapy



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

38

Medical Model - characterized by insistence on the correct explanation of a disorder and adoption of the concomitant therapeutic actions that are responsible for the patient benefits

Common factors - aspects of therapy that are common to most psychotherapies, such as hope, expectation, relationship with the therapist, belief and corrective experience

Common factors model understands the therapist as an agent of change and that outcomes are linked to the therapist's characteristics and relationship with the client

Sunshine Coast Health Centre | Georgia Strait | Women's Clinic

39

Therapist Effects

- Preponderance of evidence indicates that there are important therapist effects (3-7% of variability)
- Therapist effects general exceed treatment effects
- What are the characteristics and actions of effective therapists?
  - Empathy
  - Authenticity (real relationship)
  - Ability to form strong alliances across the range of clients
  - Interpersonal skills (Higher linked to better client outcomes)
    - Verbal fluency
    - Interpersonal perception
    - Affective modulation and expressiveness
    - Warmth and Acceptance
    - Empathy
    - Focus on other
  - Reflective about practice

Sunshine Coast Health Centre | Georgia Strait | Women's Clinic

40

General Effects

- Working alliance
  - Healthy, affectionate, and trusting feelings toward the therapist without transference
  - Agreement about the goals of therapy
  - Agreement about the tasks of therapy
  - Bond
  - Early symptom change may increase rates of alliance
- Placebo/ Expectation (Hope)
  - Desire to feel relief
  - Induction of an expectation that treatment can accomplish goal
  - Presence of emotional arousal
- Attribution
  - Client attributes changes to their own efforts (Self-efficacy increase)
  - Acquisition of the belief that one's efforts are responsible for improvement

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

41

Emotion Processing Theory

- Fear Structure - Mental framework for reacting to a fear stimulus
- Can become Distorted – individuals do not reflect sufficiently upon the initial event and associated emotions so harmless stimulus are interpreted as dangers
- Treatment based on this theory (such as Prolonged Exposure) involves the repetitive exposure to the event memory in a safe (therapeutic) environment
  - Recoding of the fear response
- Proposed by psychologist Edna Foa and Michael J. Kozak

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

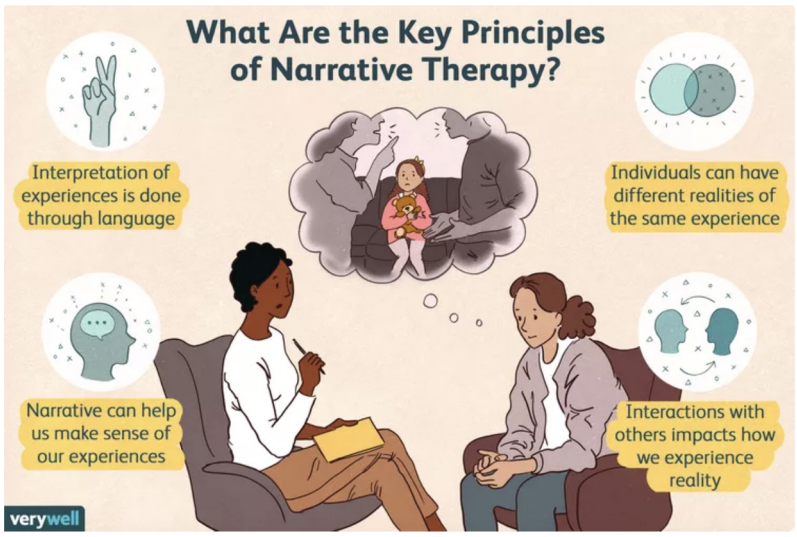
42

Necessity of Exposure?

- Exposure- systematic confrontation of a feared stimuli
- Habituation – reductions of fear over time and exposure
  - Often measures through Subjective Units of Distress (SUDS)
- Little research supporting the belief that in session decrease in distress (a.k.a. evidence of habituation) is linked to treatment success
- New evidence is indicating that exposure is not needed and is actually less about reducing fear than helping people adapt to their experience of fear[7]
- "Therapeutic efforts are better directed towards toleration of distress within a structure that enhances the consolidation and retrievability of exposure-based inhibitory learning over context and time."[7]

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

43



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

44

Narrative Therapy

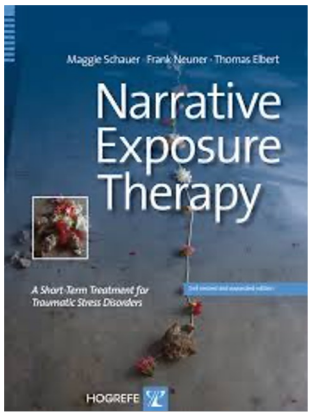
- Understanding yourself and becoming an expert
- Externalization of the problem
- Utilize stories linked by a theme
- Emphasize that we are the stories we tell ourselves
- Therapists engage with narrative ideas and work with clients on resisting the influence of problem stories and deficit descriptions
- Re-authoring stories of their lives

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

45

Narrative Exposure Therapy

- Small group or individual
- Establish a chronological narrative of life
- Contextualizes experiences
- Redefine traumatic stories
- Client describes emotions, thoughts sensory information
- Engages their entire life story



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

46

Solution Focused Therapy

- Goal oriented
- Incorporates positive psychology principles
- Client change is created by constructing solutions rather than focusing on problems
  - Generate a detailed description of how the client's life would be different when the problem is gone
  - Discover necessary resources needed to co-construct practical and sustainable solution

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

47

Pre-session change	What has already changed since . . . ? What is better since . . . ?
Goal seeking	What do you do instead (of the problem)? What are you hoping for? What difference would that make? What else?
Exceptions	When is/was it less serious? When is it[a]/was it[a] better? What do/did you do differently? What did you try? What was helpful? What else?
Scaling	When 10 is . . .[b], When 1 is . . .[b], Where are you now? How did you do that? What is your next step? What is your next sign of progress? How can you get there?
Competences	How do/did you do that? How did you succeed? How do/did you manage? How are/were you able to . . . ?

[a] It is the problem as described by the client.
[b] Preferably: one word.

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

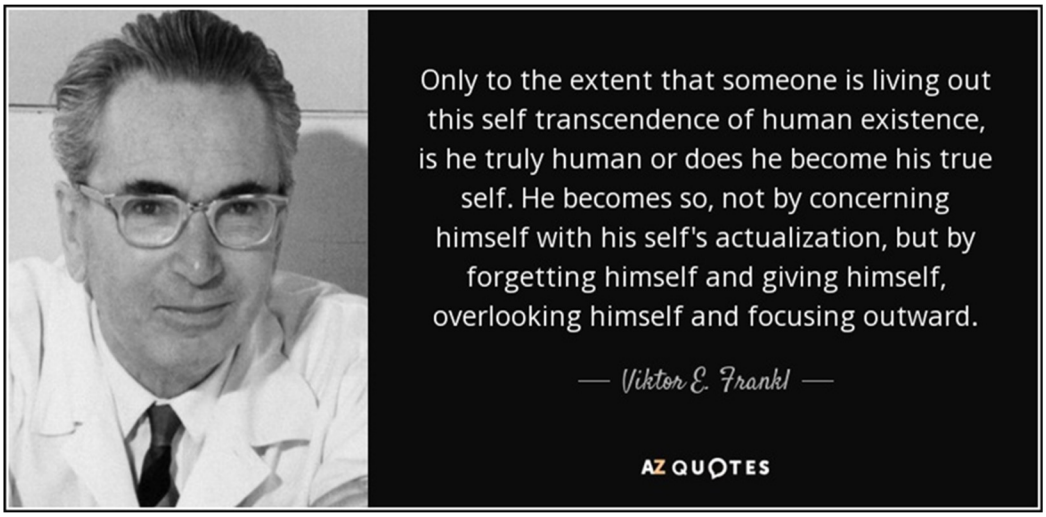
48

Purpose in Life

- Has goals in life and a sense of direction; feels there is meaning to present and past life; holds beliefs that give life and purpose; has aims and objectives to living
- *"A human being, by the very attitude he chooses, is capable of finding and fulfilling meaning in even a hopeless situation." (Frankl)*
- Principal ways to find meaning (Frankl)
  - What they gives to the world in terms of creations
  - What they take from the world in terms of encounters and experiences
  - The stand they take to their predicament in case they must face a fate which they cannot change

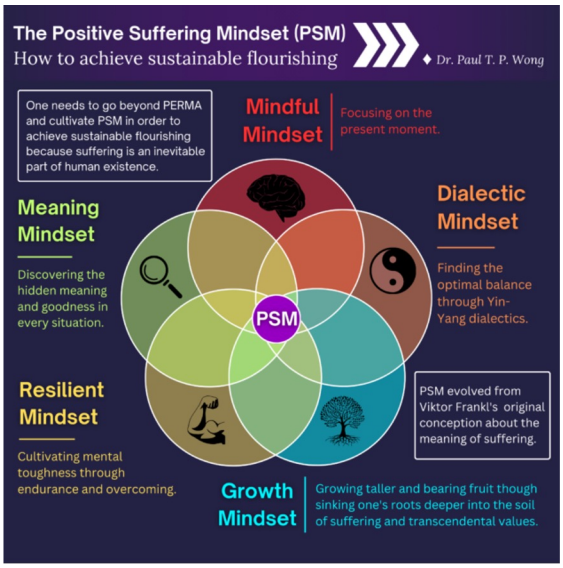
Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

49



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

50



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

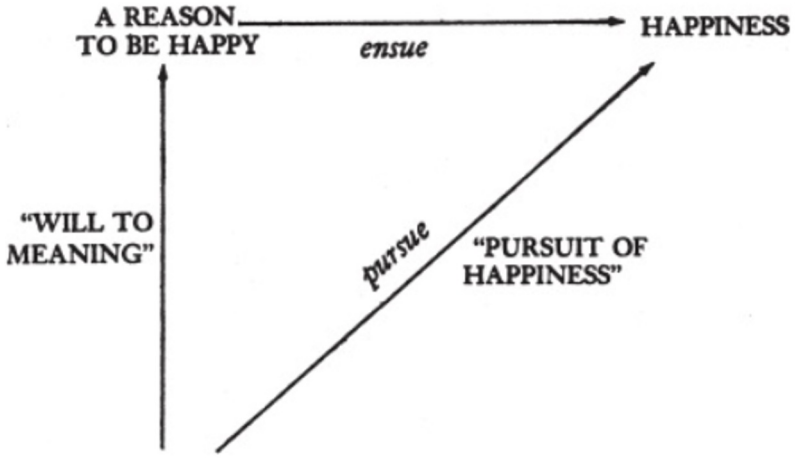
51

Pain and Suffering

"As soon as a painful fate cannot be changed, it not only must be accepted but may be transmuted into something meaningful, into an achievement" (Frankl)

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

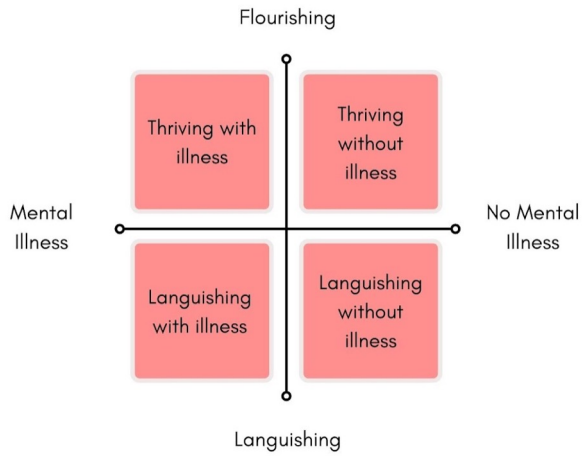
52



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

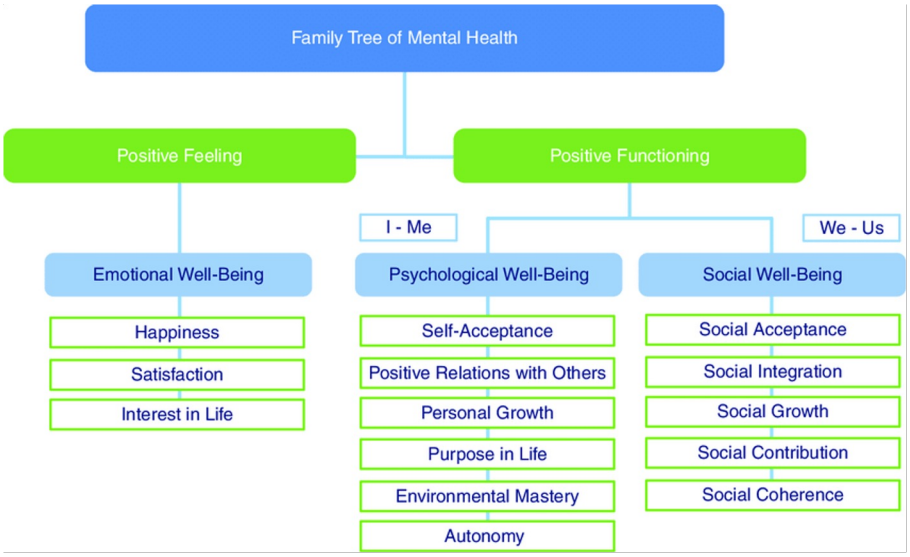
53

Corey Keyes' Dual Continuum Model



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

54



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

55

ABCDE Intervention

Accept and confront reality – *the reality principle*

Believe that life is worth living – *the faith principle*

Commit to goals and actions – *the action principle*

Discover the meaning and significance of self and situations – *the Aha! Principle*

Evaluate the above – *the self-regulation principle*

Dr. Paul T. Wong

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

56

MT Goals

Develop a deeper understanding of cause- Not just symptoms

Develop a set of positive meanings as foundation upon which to build a fulfilling and productive life

Learn how to overcome internal and external obstacles to attain meaningful life goals

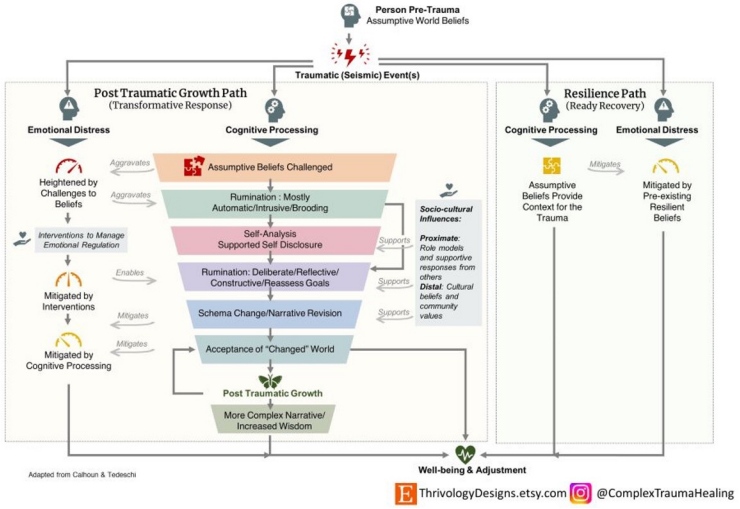
Learn to live productively in spite of certain unchangeable realities of life, such as suffering, aloneness, and anxiety

Improve relationship skills and connection with others

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

57

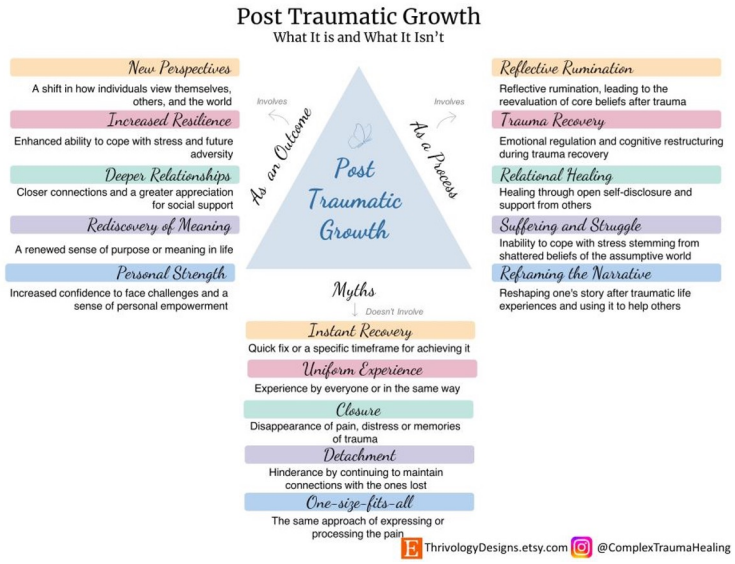
Theoretical Model of Post Traumatic Growth



ThrivologyDesigns.etsy.com @ComplexTraumaHealing

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

58



Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

59

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

60

References

1. Rubin et al (2016). Participant, rater, and computer measures of coherence in posttraumatic stress disorder. *Journal of Abnormal Psychology, 125*(1), 11-25.
2. McNally (2022). The return of repression? Evidence from cognitive psychology. *Topics in Cognitive Science, 00*, 1-14.
3. Kangaslampi, S. & Peltonen, K. (2022). Mechanisms of change in psychological interventions for posttraumatic stress symptoms: A systematic review with recommendations. *Current Psychology, 41*, 258-275.
4. Engel hard, I. M., McNally, R.J., & van Schie, K. (2019). Retrieving and modifying traumatic memories: Recent research relevant to the controversies. *Current Directions in Psychology Science, 28*(1), 91-96.
5. Patihi, L., Ho., L.Y., Tingen, I. W., Lilienfeld, S.O., & Loftus, E.F. (2014). Are the "memory wars" over? A scientist- practitioner gap in beliefs about repressed memory. *Psychological Sciences, 25*, 519-530.
6. Wang, M., Liu, J., Sun, Q., & Zhu, W. (2019). Mechanisms of the formation and involuntary repetition of trauma-related flashbacks: A review of major theories of PTSD. *International Journal of Mental Health Promotion, 21*(3), 81-97.

Sunshine Coast Health Centre — A Non-12 Step Mental Health Program | Georgia Strait | Womens Clinic

61

References

7. Craske, M.G. et al. (2008). Optimizing inhibitory learning during exposure therapy. *Behaviour Research and Therapy, 46*(1), 5-27
8. Karatzias, T., Murphy, P., Cloitre, M., & Bisson, J.I. (2019). Psychological interventions for ICD-11 Complex PTSD symptoms: Systematic review and meta-analysis. *Psychology Medicine*, 1-15.
9. Bryant RA, Felmingham KL, Malhi G, Andrew E, Korgaonkar MS. The distinctive neural circuitry of complex posttraumatic stress disorder during threat processing. *Psychological Medicine*. 2021;51(7):1121-1128.
10. Kredlow, M.A., Fenster, R.J., Laurent, E.S., Ressler, K.J., & Phelps, E.A. (2022). Prefrontal cortex, amygdala, and threat processing: implications for PTSD. *Neuropsychopharmacology, 47*, 247-259.
11. Ditzer, J. et al. (2023). Child maltreatment and alexithymia: a meta-analytic review. *Psychological Bulletin, 149*(5-6), 311-329.
12. Coventry, P.A. et al. (2020). Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following traumatic events: Systemic review and component network meta- analysis. *PLOS Medicine, 17*(8)

Sunshine Coast Health Centre — A Non-12 Step Mental Health Program | Georgia Strait | Womens Clinic

62

References

13. Bohus, M. et al. (2019). A research programme to evaluate DBT-PTSD, a modular treatment approach for Complex PTSD after childhood abuse. *Borderline Personality Disorder and Emotion Dysregulation*, *6*(7).
14. Murray, H. et al. (2022). Ten misconceptions about trauma- focused CBT for PTSD. *The Cognitive Behaviour Therapist*, *15*(33), 1-15.

Sunshine Coast Health Centre
A Non-12 Step Mental Health Program
Georgia Strait | Womens Clinic

63