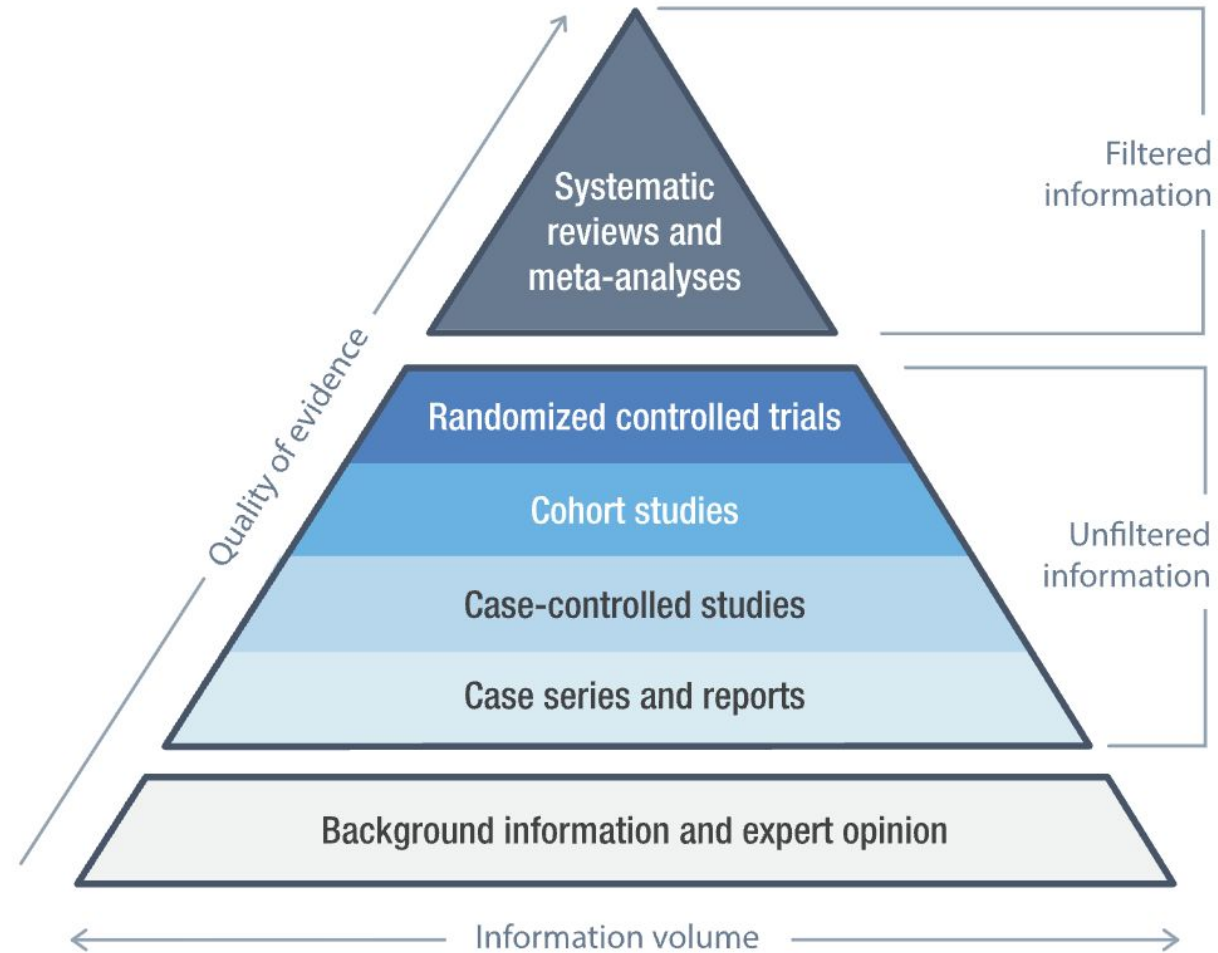


A Holistic Approach to Treating Trauma and Addiction & Other Mental Health Disorders

Dr. Carissa Muth

Registered Psychologist (AB & BC)

Clinical Director – SCHC/GSWC

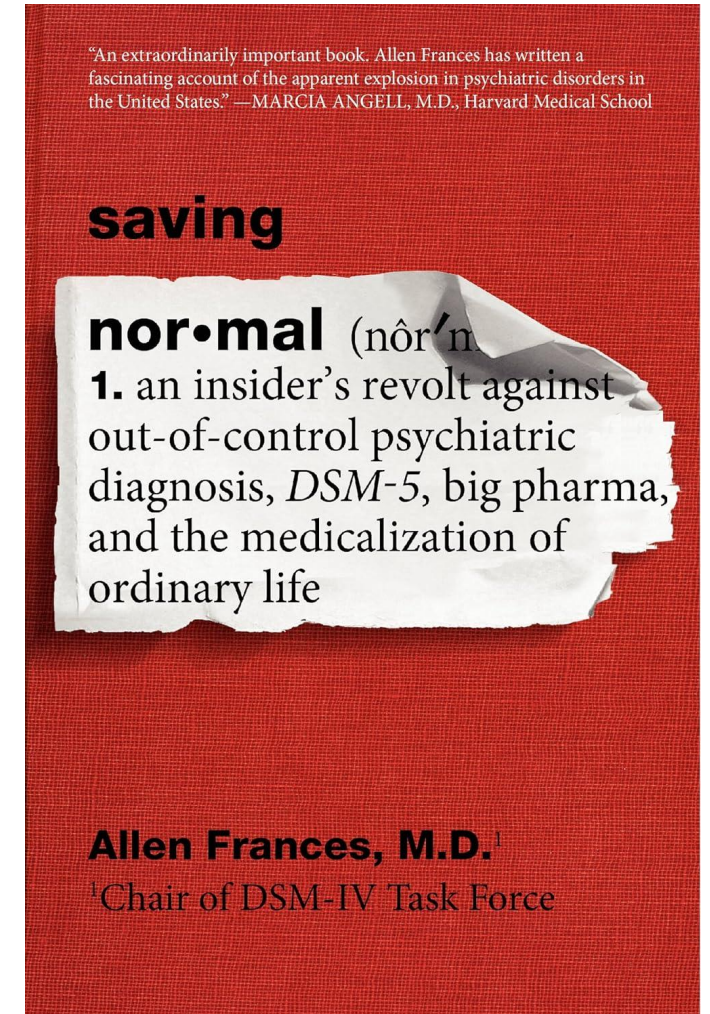


What is Mental Illness?

Mental health is a state of well-being, in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.

World Health Organization

Risk of Overdiagnosis



“Recovery is not about ‘getting rid’ of problems. It is about seeing people beyond their problems - their abilities, possibilities, interests and dreams - and recovering the social roles and relationships that give life value and meaning”

- Slade, 2010



SALUTOGENESIS

WHAT CAUSES HEALTH?

- What causes health?
- Assumes we are inherently flawed
- Reaching potential
- Treating gain or growth
- Proactive
- Realistic

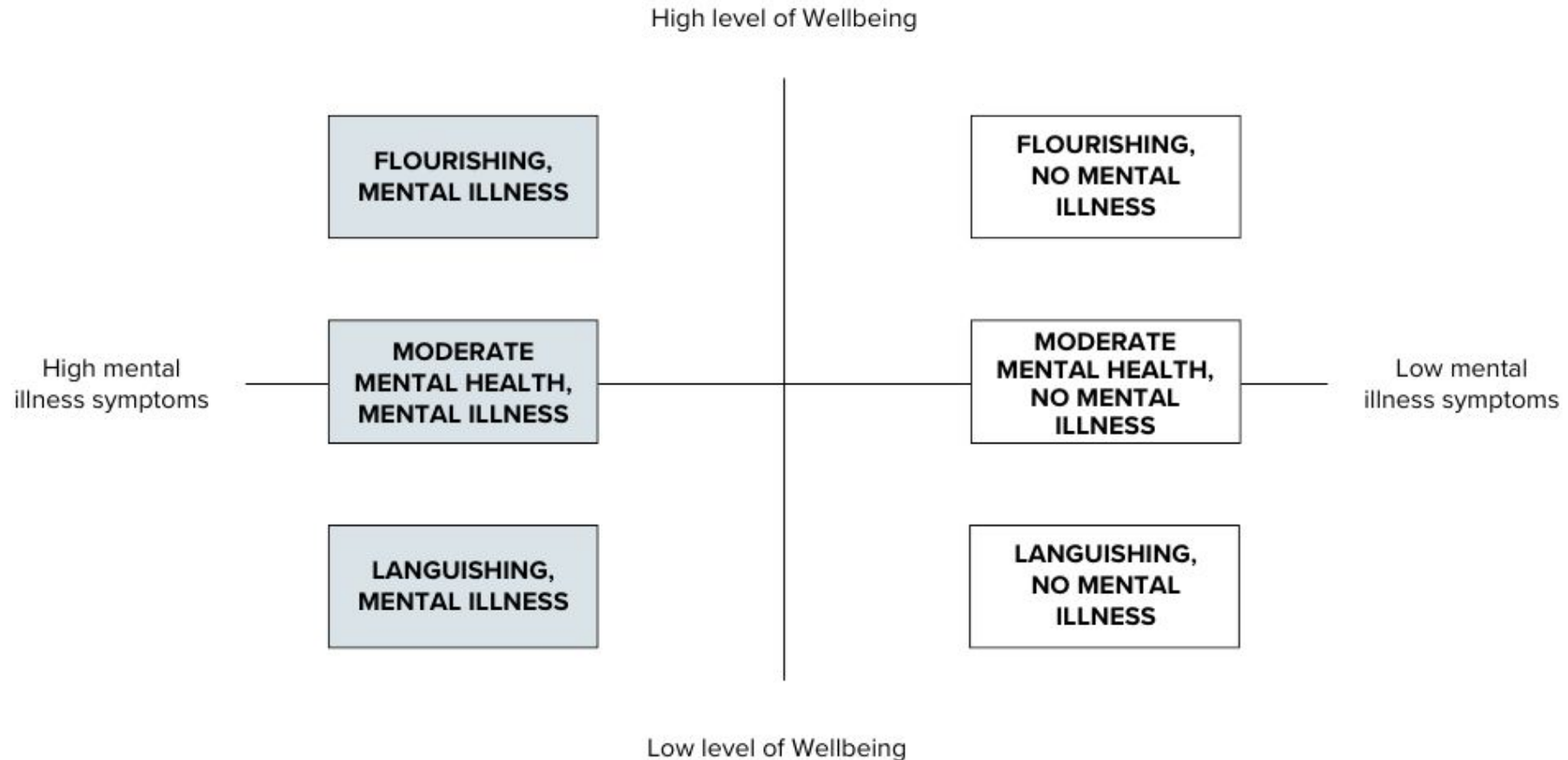


PATHOGENESIS

WHAT CAUSES DISEASES?

- What causes diseases?
- Assumes we are inherently healthy
- Avoiding problems
- Treating illness or disease
- Reactive
- Idealistic

Corey Keyes' Dual Continuum Model

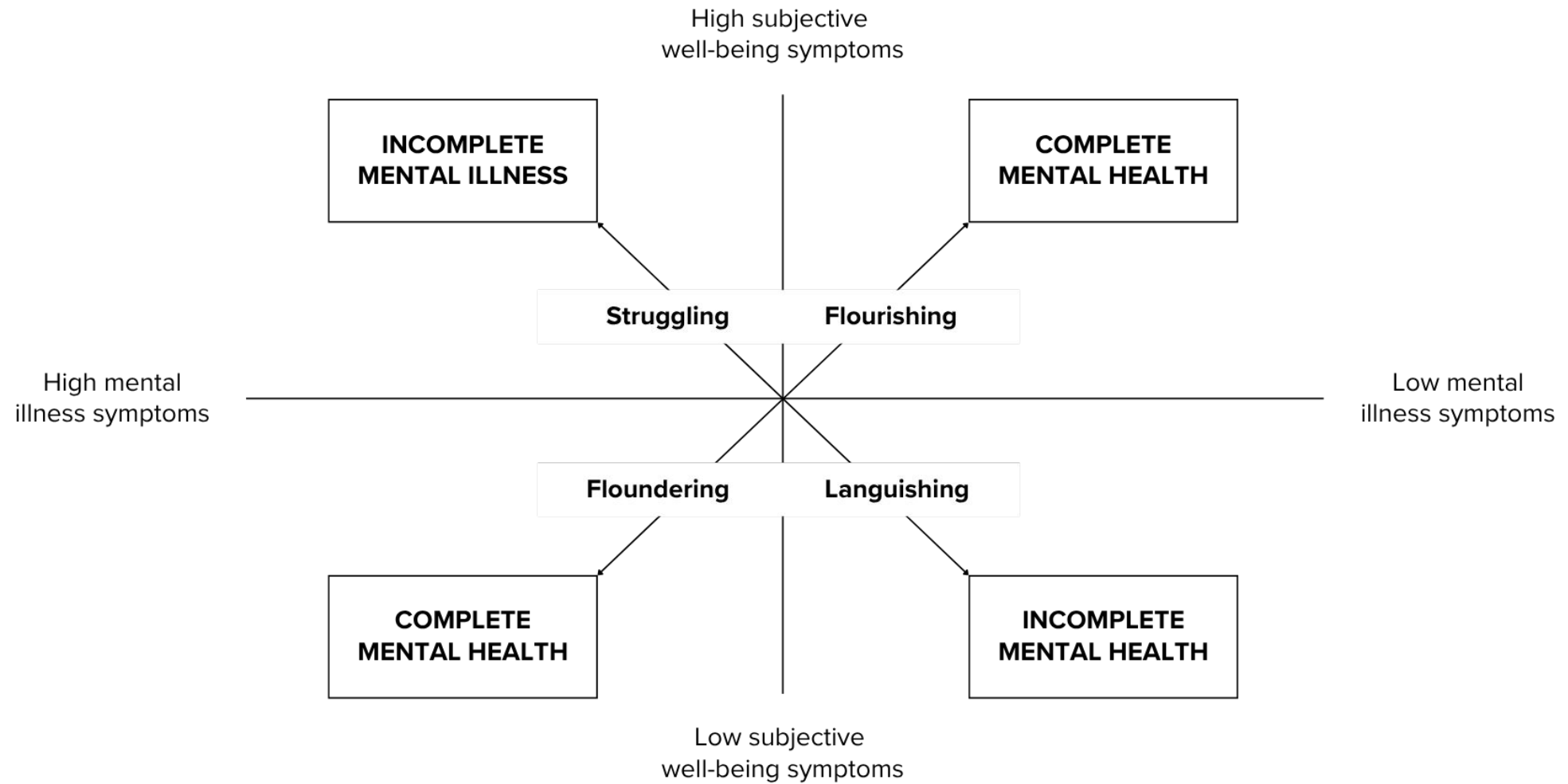


Languishing [13]

- Emotionally flattened - difficult to muster up excitement
- Life circumstances seem increasingly dictated by external forces
- Procrastinating on tasks as a “why-try-anyway” attitude
- More things strike you as irrelevant, superficial, or boring
- Unease that you are missing something that will make your life feel complete again but not sure what it is
- Feel disconnected from your own community and or/ a greater purpose or cause
- Brain fog
- Feel restless, even rootless
- Small setbacks leave you feeling defeated
- Hard to find motivation to reach out to friends and family
- Sense of self is “flickering or plummeting”

Table 1 Prevalence of mental health and mental illness

Condition	Prevalence (%)
Mental Illness and Languishing	7
Mental Illness and Moderately Mentally Healthy	15
Mental Illness and Flourishing	1
Languishing (and no mental illness)	10
Moderate Mental Health (and no mental illness)	51
Complete Mental Health (Flourishing, no mental illness)	17

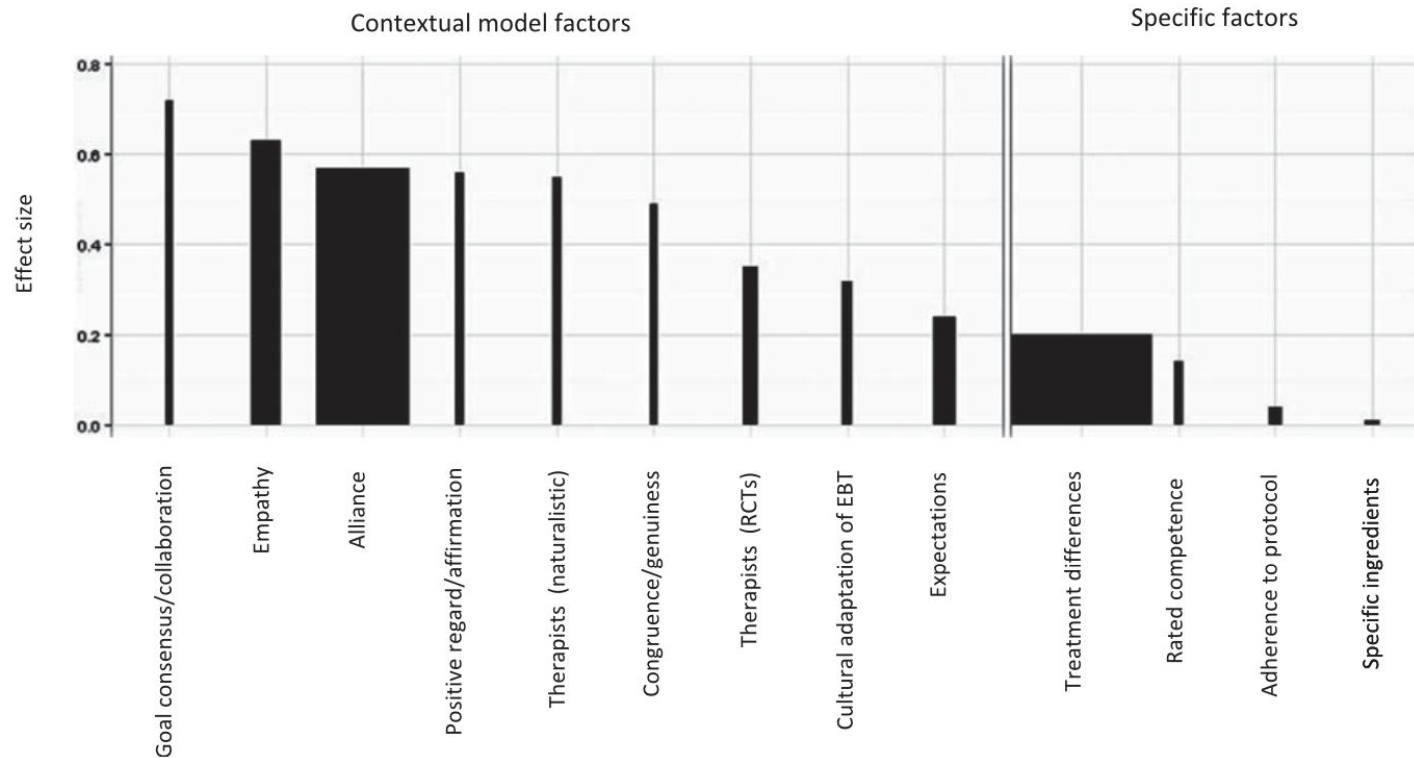




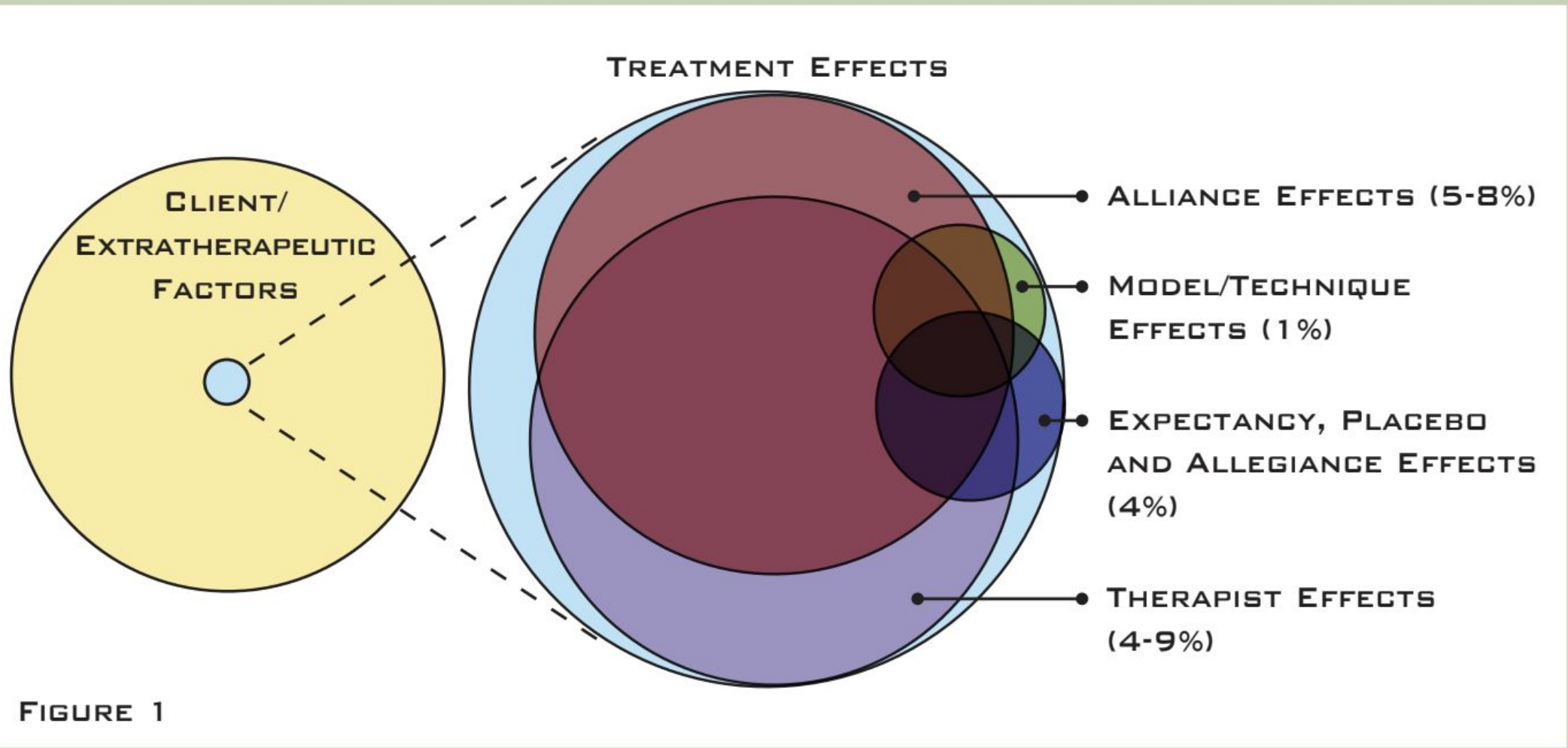
What makes an effective psychotherapist?

How one delivers a treatment is important,
delivering an evidenced based treatment is not sufficient

What makes an effective psychotherapist?



The Therapeutic Factors



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

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

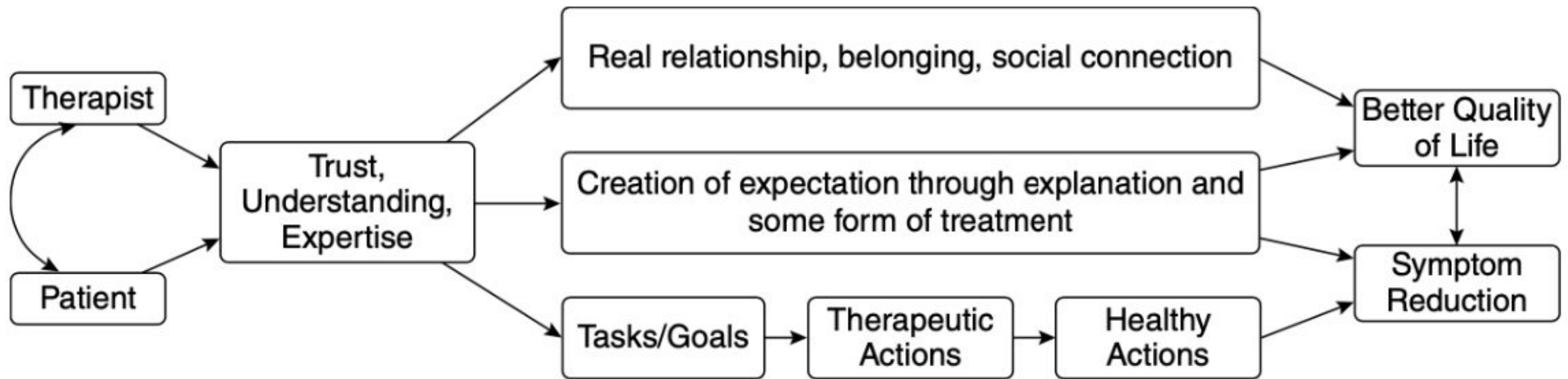
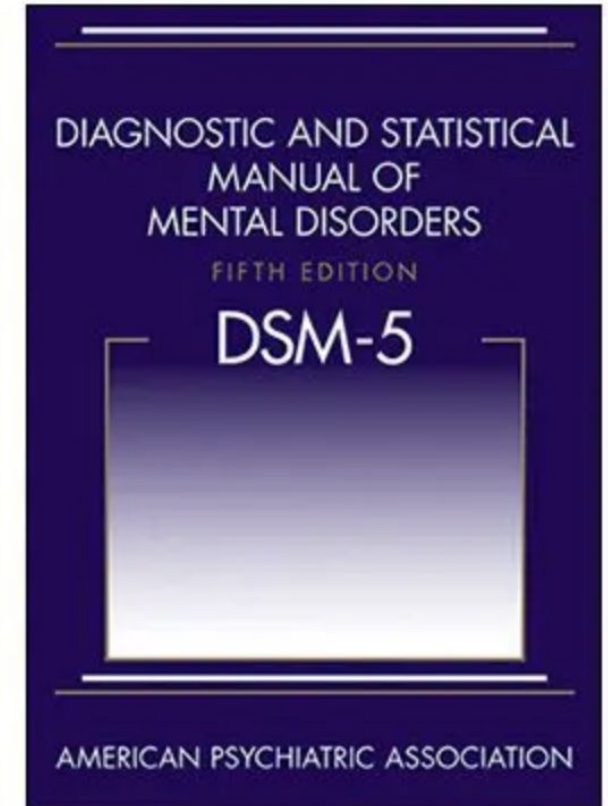
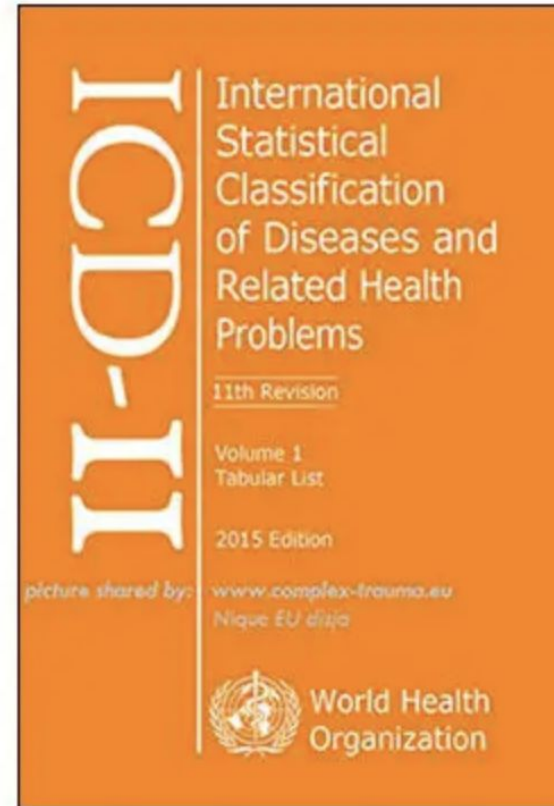


Figure 3.1 Contextual Model.

ICD-11 and DSM-5-TR

How Are Diseases Classified?



- In the previous International Classification of Diseases, version 10 (ICD-10) issued by the World Health Organization (WHO), this symptom constellation was termed ‘enduring personality change after catastrophic experience’. [14]
- A further milestone along the way to the current CPTSD formulation was the expert survey of the International Society for Traumatic Stress Studies on best practice treatment of Complex PTSD, in which 50 international experts were interviewed [15]
- Preference for sequential treatment, a primary focus on coping skills (including emotion regulation interventions), and on the narration of trauma memory (using various therapeutic techniques). Thus, despite the existence of very few randomized therapy studies, a basic consensus on the most important therapeutic goals was documented. [14]

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



**Sunshine Coast
Health Centre**

A Non-12 Step Mental Health Program

Georgia Strait | WOMEN'S
CLINIC

PTSD

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.

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

Core symptoms of PTSD



Complex PTSD (ICD-11)

Negative Self Concept

- Persistent beliefs about self as diminished, defeated or worthless
- Feelings of shame or guilt



Emotional dysregulation

- Heightened emotional reactivity
- Violent outbursts
- Reckless or self – destructive behaviour
- Dissociative states under stress



Interpersonal difficulties

- Persistent difficulties in sustaining relationships due to tendency to avoid, deride or have little interest in relationships
- Intense relationships but difficulty maintaining emotional engagement



DSM-5 - Substances and Gambling

Criteria (at least 2 in 12 months)

- Larger amounts or over longer period of time than intended
- Persistent desire or unsuccessful efforts to cut down or control use
- A great deal of time is spent in activities necessary to obtain substance
- Craving or strong urge to use
- Failure to fulfill major role obligations
- Continued use despite persistent social or interpersonal problems
- Important activities given up because of use
- Recurrent use in situations in which it is physically dangerous
- Continued use despite knowledge of having recurrent problems
- Tolerance
- Withdrawal

Internet, Phone, and Video Games

- Gaming Disorder - in ICD- 11 (need of more research for DSM-5-TR)
- Internet and Phone Addiction
 - Social Media – Helpful or harmful depending on meaning and use

Social

Social Disparity

- Poverty
- Lack of mental health resources
- Housing
- Increased stress

Social Learning Theory



Social Determinants on Mental Health [2]

- “The risk of developing any mental health condition is inextricably linked to our life circumstances” (p. 58)
- “Socioeconomic disadvantage is a fundamental determinant of mental health outcomes over the life course” (p. 60)
- “Early life exposure to socioeconomic disadvantage may increase risk of mental health problems through several different mechanisms, based on potential biological, psychological and social pathways” (p. 61)

Social Dislocation



Mohegan

Dislocation -
lack of attachment,
belonging, identity,
meaning, [and] purpose

Cultural Views of Addictions

It's the substance...

“The barbarous and beastly maners of the wilde,
godlesse,... especially is so vile and stinking a
custome”

-King James I on tobacco (1604)

“Drugs are not entities with fixed meaning:
our ideas about them are framed by the era we
live in.”





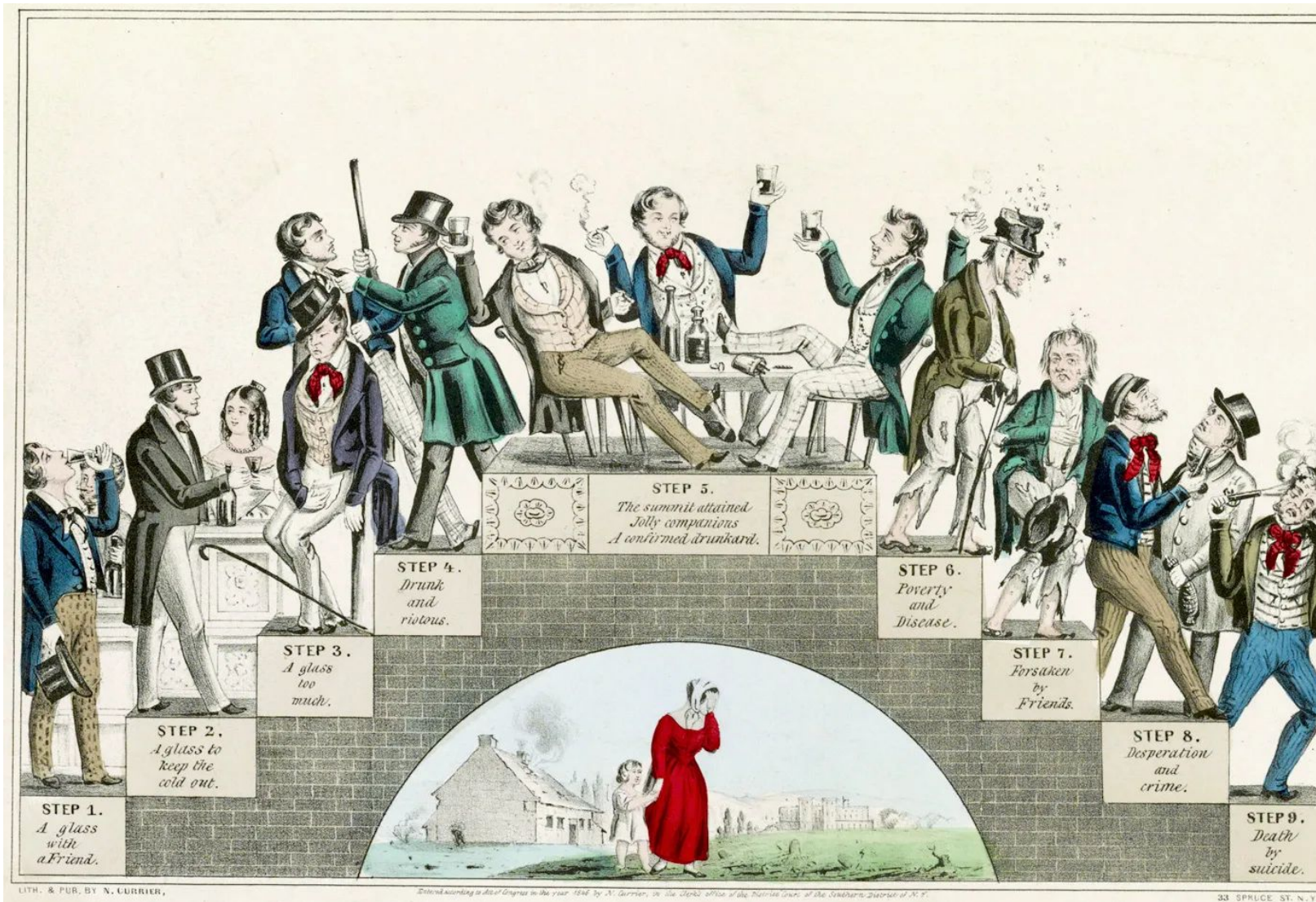
Racially-biased Evaluations

- “Firewater myths”
 - disguise the use of alcohol as a weapon and provide ideological support for colonization and supremacy
- “Cocaine Fiend”
- “Junkies”

It's the Person

“A strong habit of virtue, and a great degree of holiness, may cause a moral Inability to love wickedness in general, and may render a man unable to take complacence in wicked persons or things; or to choose a wicked in preference to a virtuous life.”

-Jonathan Edwards (1703-1758) , American Original.



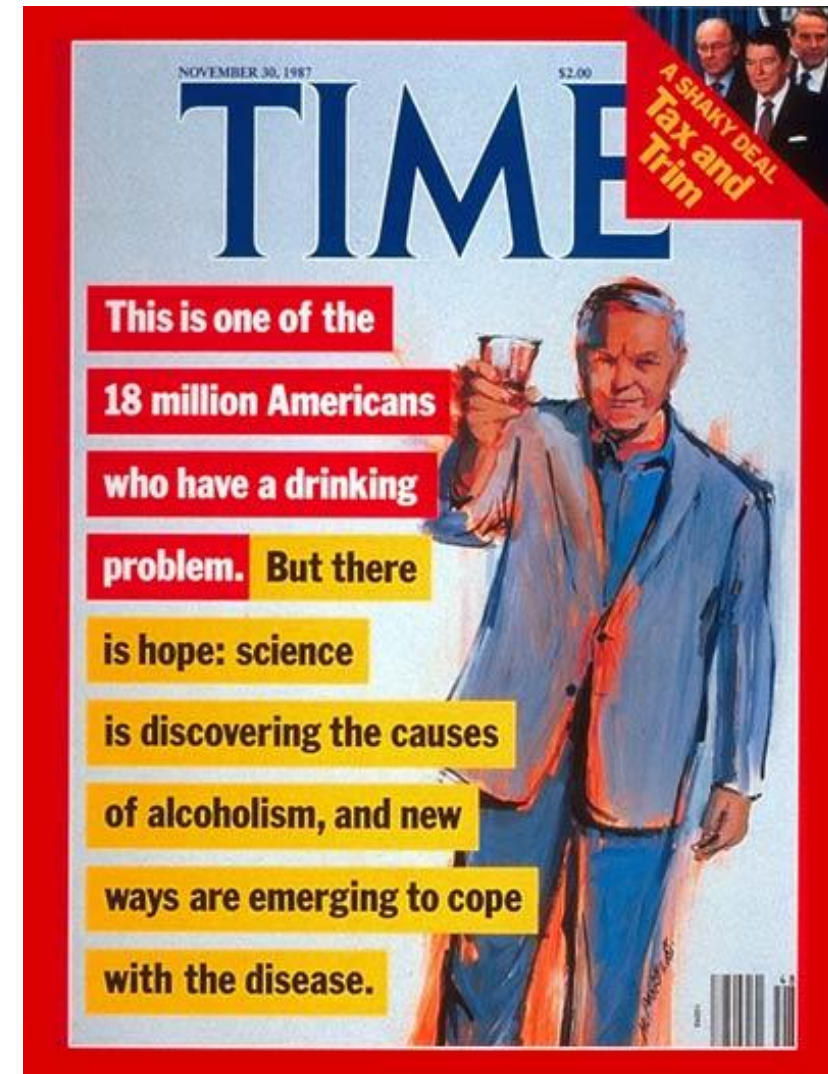


The Pioneer, Hamilton, 17 December 1915

Pursuit of Addictive Personality

- Weiss (1942)
 - Abnormal drinking as a symptom of inadequate personality
- Gray and Moore (1942)
 - Foundation of personal inadequacy, social maladjustment and psychological disturbances
- Moore (1943)
 - More immature than average and may have “paranoid tendencies”

It's a Disease



Disease Based Interventions

- Psychopharmaceuticals
 - Opioids- Methadone, Suboxone
 - Alcohol- Disulfiram, Naltrexone
- Rehabilitation
 - Hazelden, Minnesota

Minnesota Model (Hazelden Model)

- Abstinence off all psychoactive substances
- “This model drew heavily on the experience of AA members in its conceptualisation of alcoholism as a primary, progressive, disorder whose management required sustained abstinence and an active, continuing, programme of recovery” (White, 2001, p50).
 - Five rules to prevent “self-will run riots”- behave responsibly, attend lectures on the Twelve Steps of Alcoholics Anonymous, talk with the other patients, make your bed, and stay sober.

It's from Trauma

“If you look at why addicts are soothing themselves through chemicals, you have to look at why they have discomfort and you will see that they have all experienced childhood adversity—the pain and distress that they needed to escape.”

-Gabor Mate In the Realm of Hungry Ghosts

It's a Choice

“A person is addicted to a specified behavior if they have demonstrated repeated and continuing failures to refrain from or radically reduce the behavior despite prior resolutions to do so or if they would have demonstrated such failures under different personal or environmental circumstances.”

- Nick Heater, 2017

Spontaneous Remission

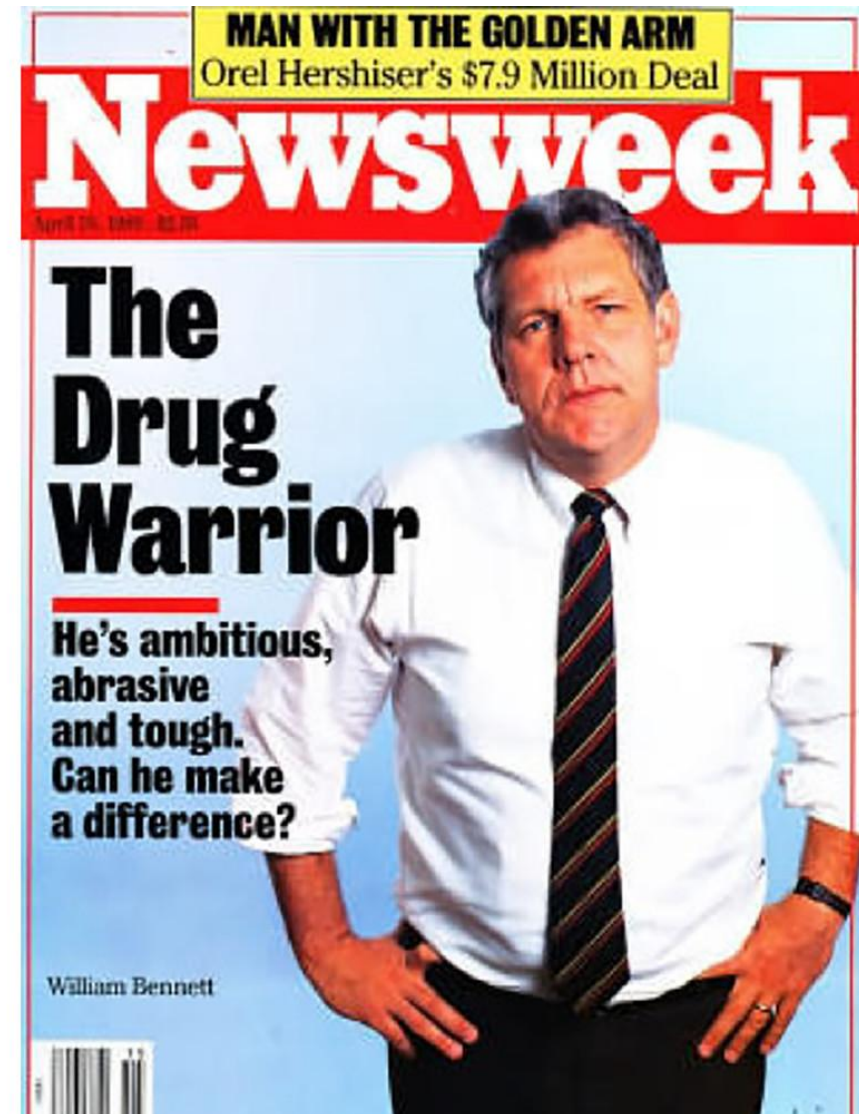
“The material and emotional costs and benefits of everyday life, including existential and value laden self-reflections, are the correlates of remission from addictions.”

-Gene H. Heyman and Verna Mims

But... A Choice not Like any Other

“Were a keg of rum in one corner of a room, and were a cannon constantly discharging balls between me and it, I could not refrain from passing before that cannon, in order to get at the rum.”

- Rush 1812 quoting a user of alcohol



The Rules Keep Changing

Newsweek

Addictive Personalities

Kitty Dukakis: Her private struggle

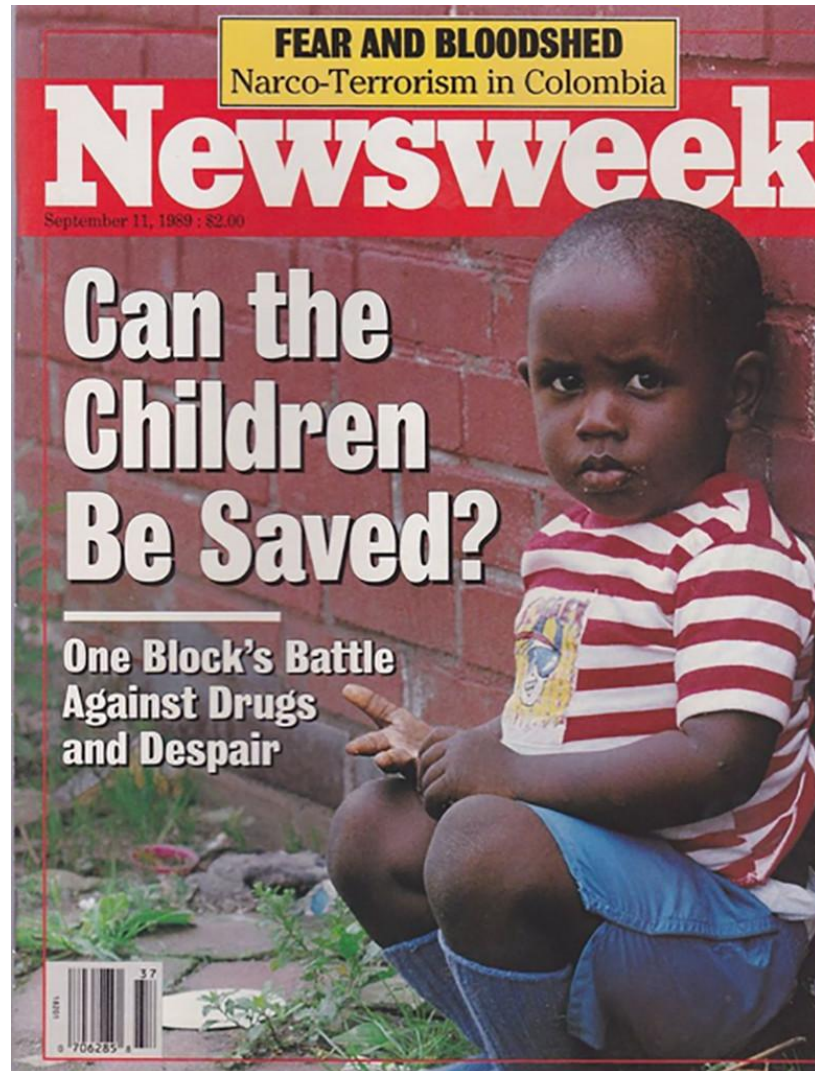


#19ZE000000XXXXX5-DIGIT 14619
#ESE19301GLD519SAP90 N1-F
MS DONNA ESSEGIAN
193 INGLEWOOD DRIVE P01879X
ROCHESTER NY 14619



Georgia Strait | WOMENS CLINIC

“Deadbeat Addict”



Social Policy

- Opium Act 1908
- Opium and Narcotics Drug Act 1920
- Narcotics Control Act 1961
- National Drug Strategy 1987
- Controlled Drug and Substance Act 1997
- National Anti-Drug Strategy 2006

Topic	Instead of	Use
<i>People who use drugs</i>	<ul style="list-style-type: none"> • Addicts • Junkies • Users • Drug/substance abusers • Recreational drug users 	<ul style="list-style-type: none"> • People who use drugs/substances • People with an addiction or substance use disorder • People with lived/living experience • People who occasionally use drugs
<i>People who have used drugs</i>	<ul style="list-style-type: none"> • Former drug addict • Referring to a person as being 'clean' 	<ul style="list-style-type: none"> • People who have used drugs/substances • People in recovery • People with lived/living experience
<i>Drug use</i>	<ul style="list-style-type: none"> • Drug/substance abuse • Drug/substance misuse • Problematic drug/substance use 	<ul style="list-style-type: none"> • Drug/substance use • Addiction/substance use disorder • Drug dependence • Higher-risk drug/substance use • Substance use harms



Health
Canada

Santé
Canada

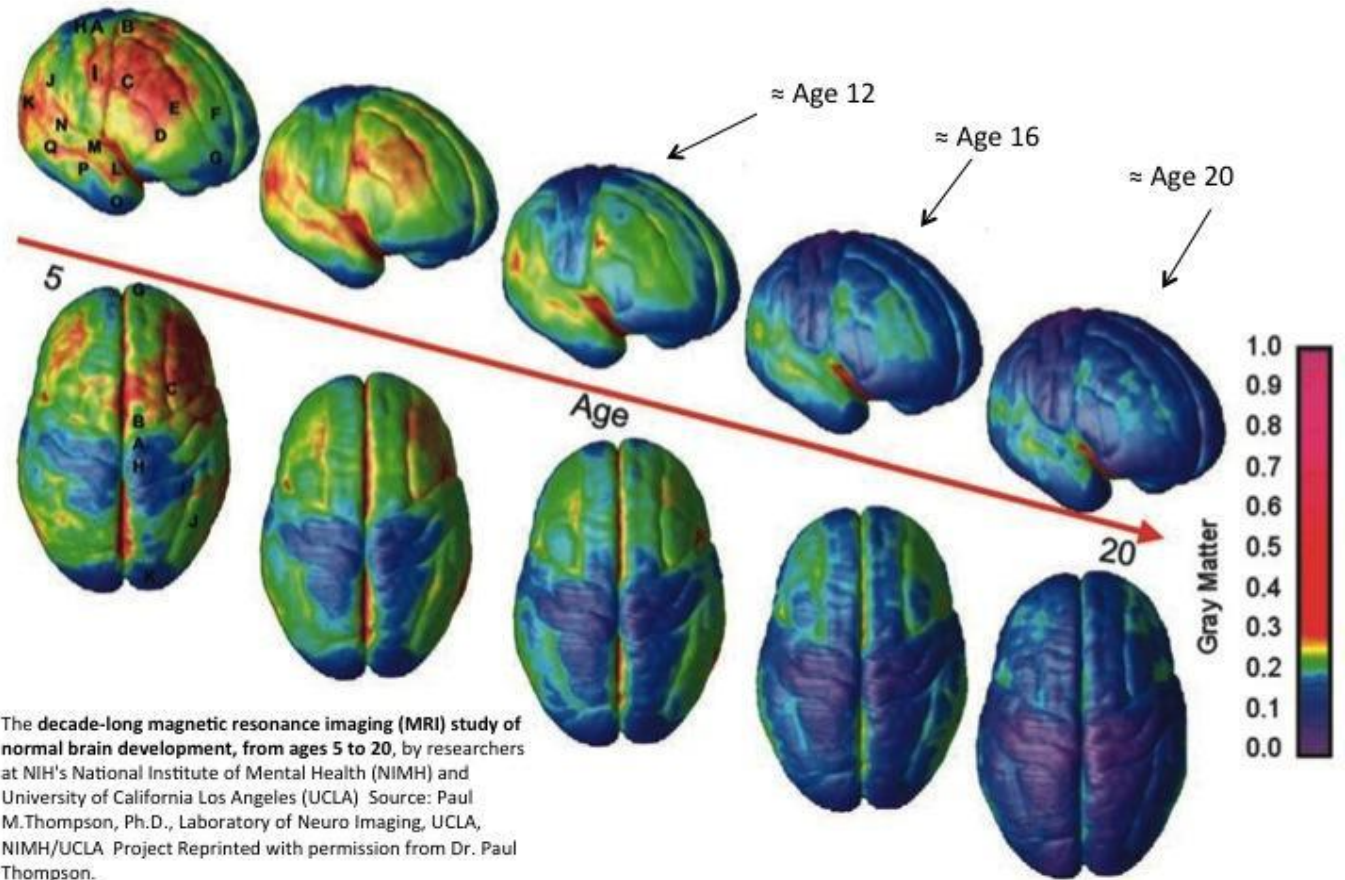
Canada

Attachment

Attachment

- Early childhood experiences and insecure attachments – Interrelated risk factors for addictions
- Bowlby's internal working model
- Self- Medication theory of addictions
- “Significant positive association between insecure attachment (anxious and avoidant) and a more intensive and dysfunctional use of the internet and social media”

Brain Development



Attachment

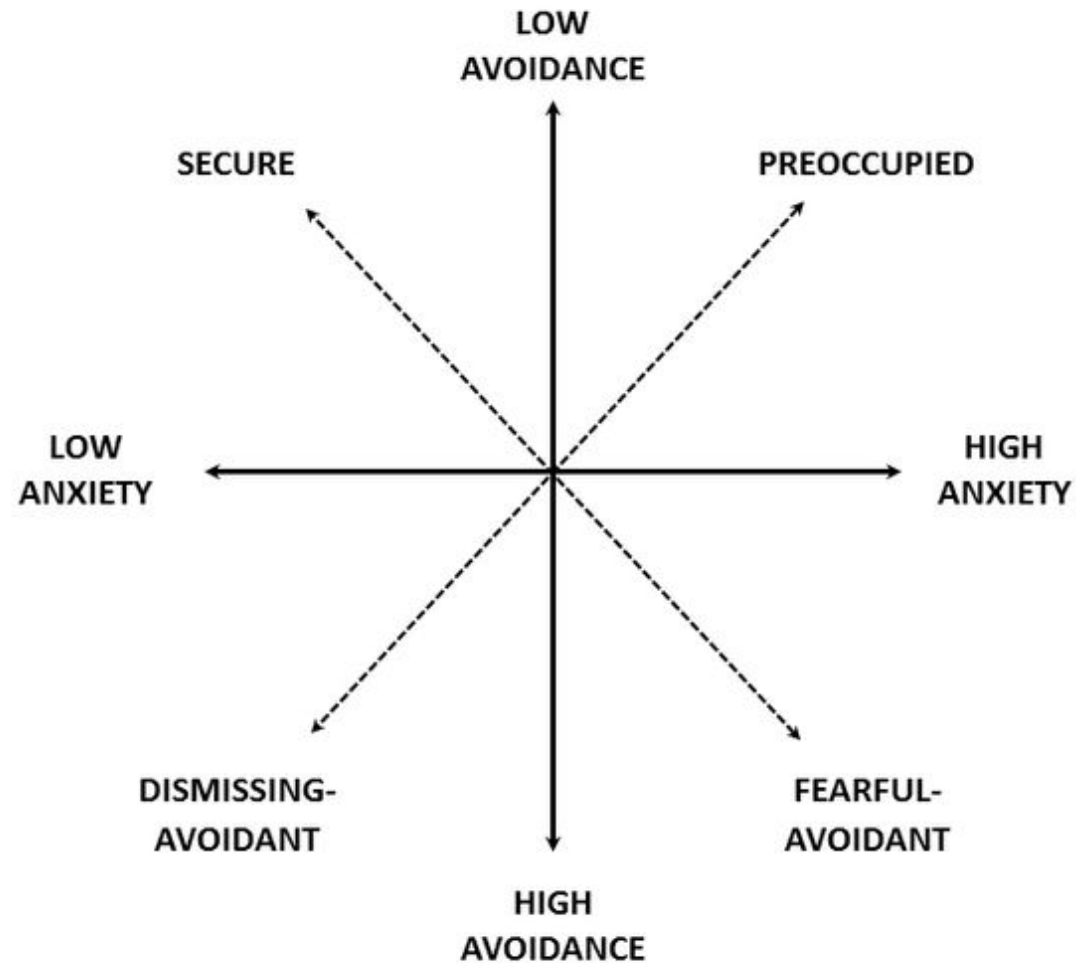
- Developed in early childhood
- Influences a child's capacity to form mature intimate relationships in adulthood
- Influence cognitive schemas

“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)

Secure Attachment

Have adaptive emotional regulation abilities through sustained problem-solving efforts



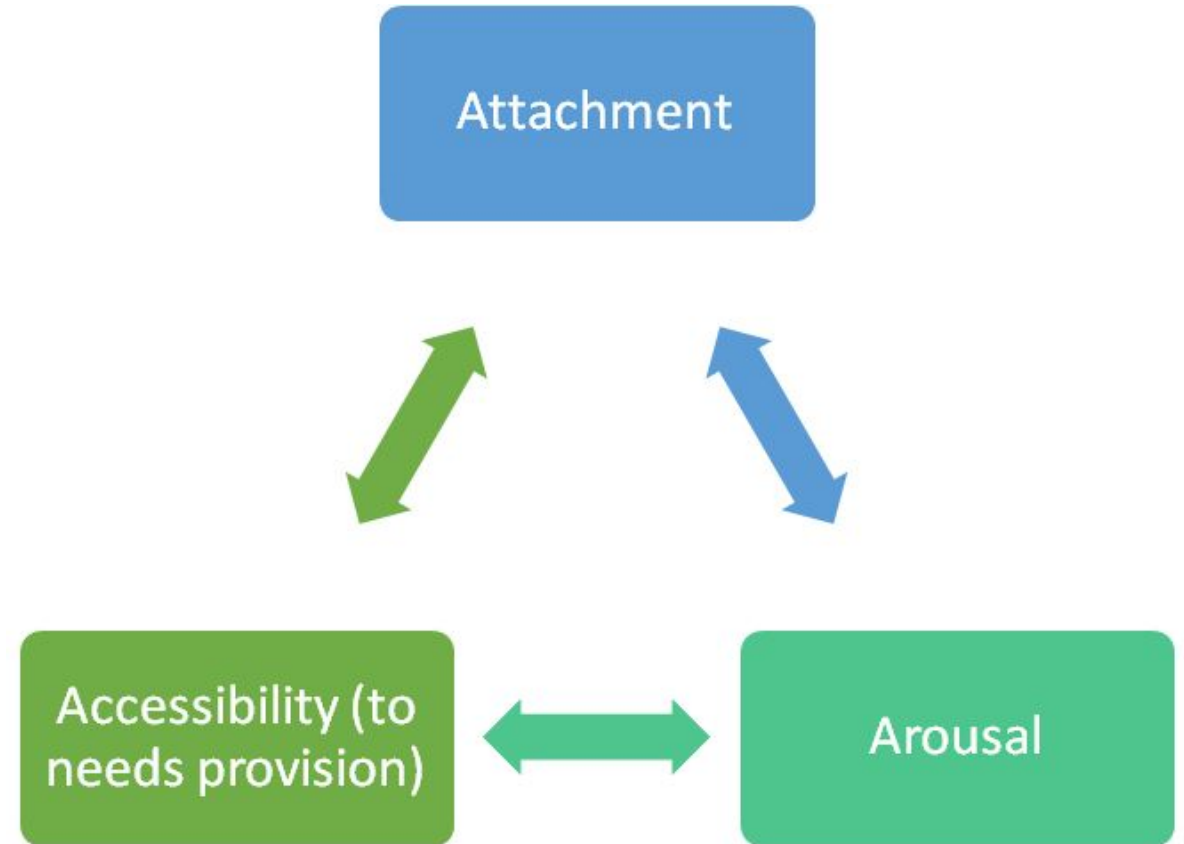
Anxious Attachment

- 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

Lost Attachment



Biological Factors

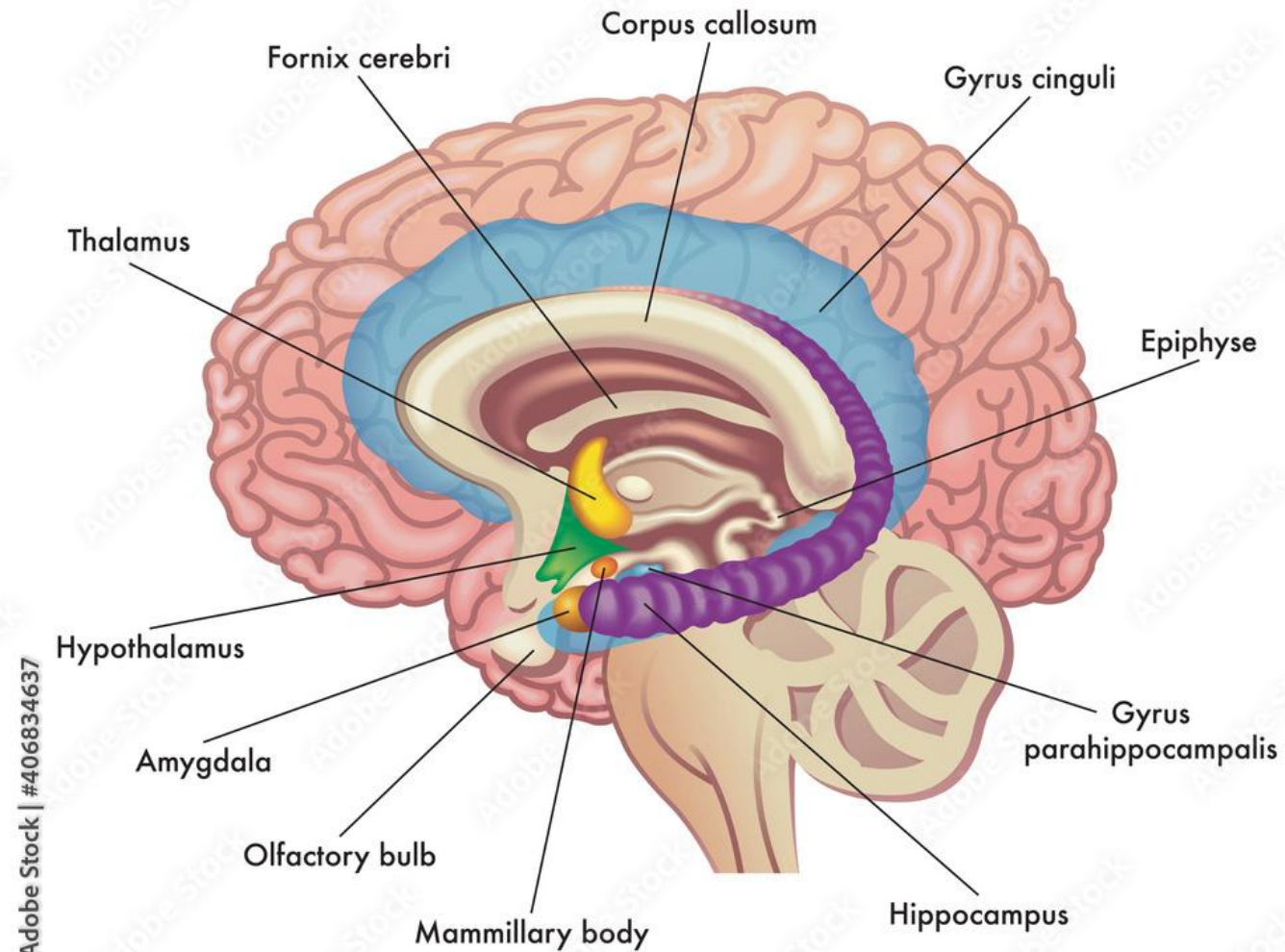
Psychopharmaceuticals

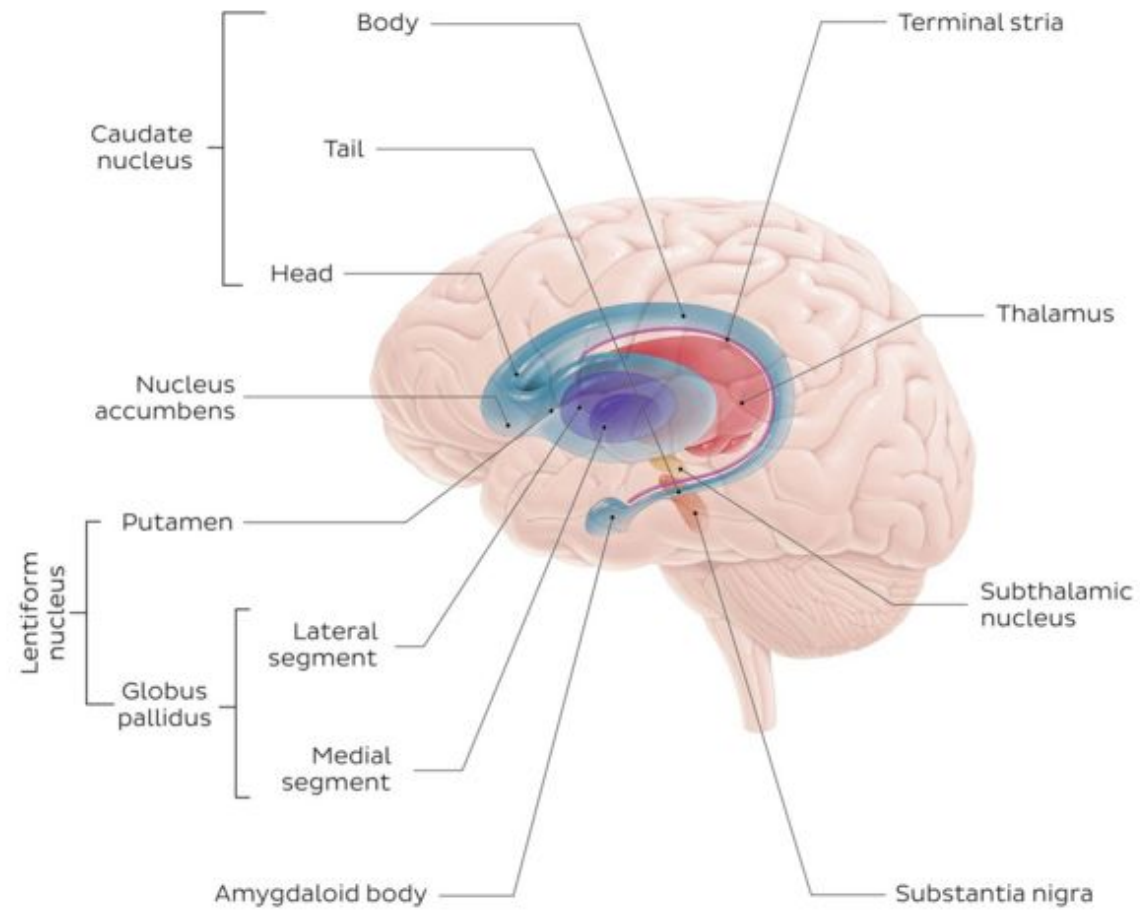


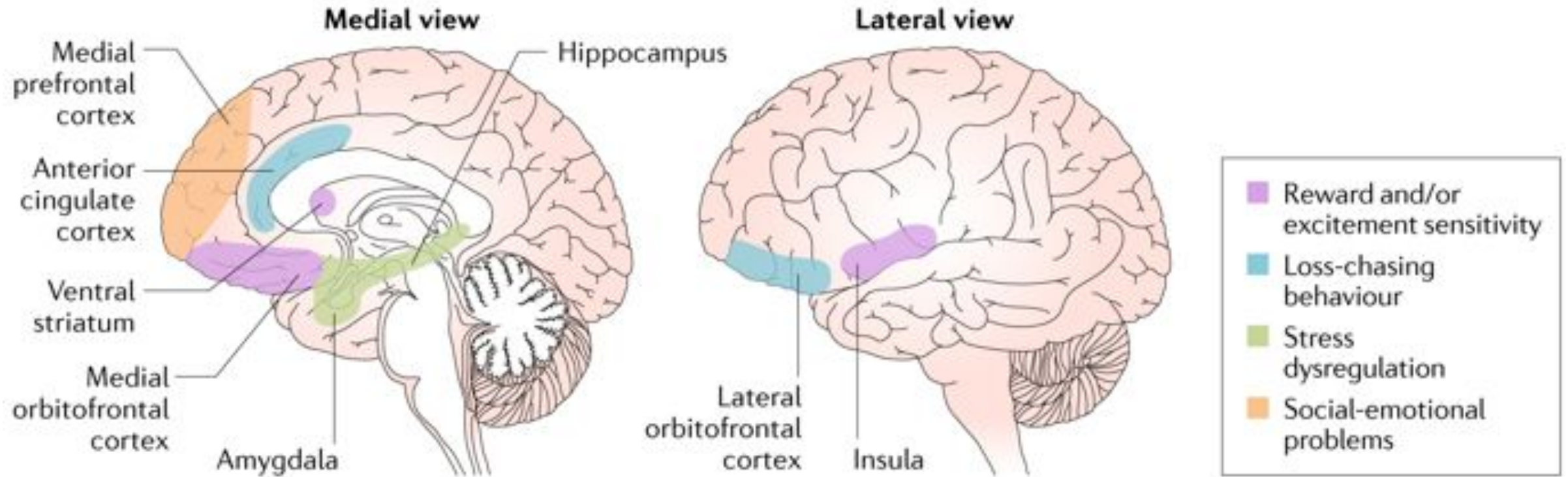
Neuroscience of Addiction

- Addiction develops from chronic intermittent exposure
- Progressive and functional disruptions to brain regions that underlie motivation, reward, and inhibitory control
- Includes a transition from impulsive drug intake to compulsive intake
- Mediated by positive and negative reinforcement
- Inhibitory control diminished due to impairment in executive functioning from substance use

THE LIMBIC SYSTEM







Dopamine

- Increase extracellular dopamine concentrations in limbic region
- Stimulants directly increase dopamine in synaptic space
- Other substances work directly or indirectly to modulate dopamine cell firing
- Increases motivation to seek substance

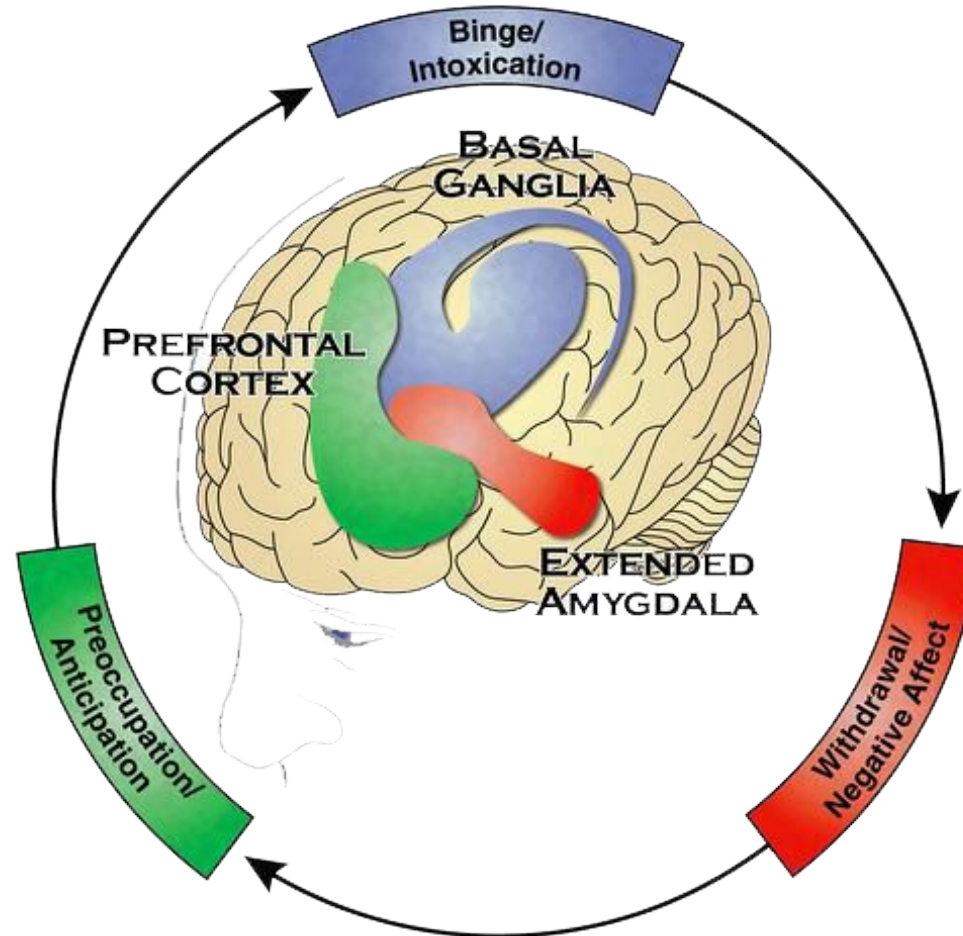
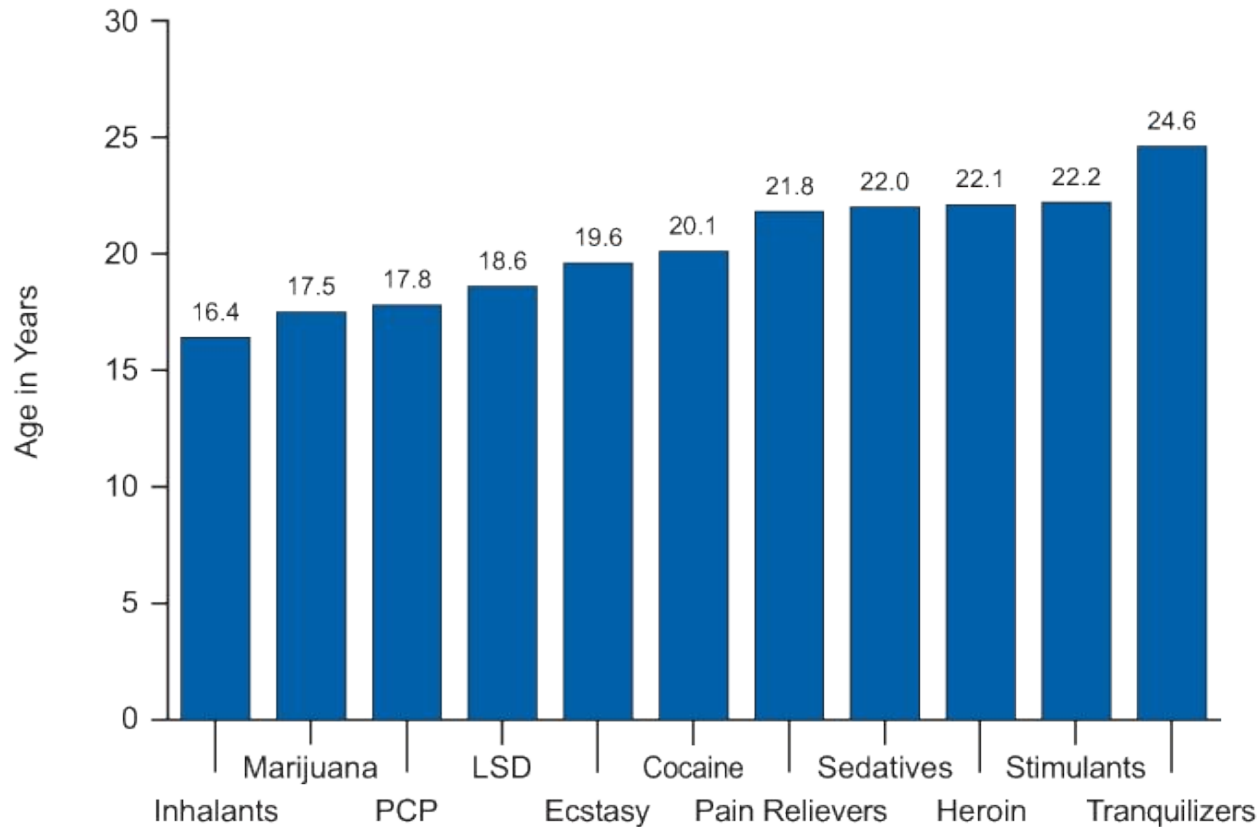


Photo Credit: National Institute of Health

Genetics

40 to 60% of vulnerability to addictions linked to genetic factors

Developmental Disorder



Average age of first use

Alcohol

- **Central nervous system depressant**
 - Initial: Relief of anxiety, increased talkativeness, feelings of confidence and euphoria, and enhanced assertiveness
- **Medical complications**
 - Skeletal fragility and damage to tissue such as brain, liver, and heart



Alcohol

- Alcohol is a neurotoxin
- Associated with atrophy of the cerebral cortex, reduced white matter volume, enlarged ventricles, and atrophy of subcortical structures
- Cognitive deficiencies with both white and grey matter abnormalities
- Frontal lobes, limbic system, and cerebellum particularly vulnerable to chronic alcohol abuse
- Alcoholic dementia
- Korsakoff's syndrome

Cannabis

- Acute effects: hallucinatory and reactive emotional states, some pleasant, some unpleasant and even terrifying; time disorientation; and recent-transient- memory loss
- Likely no permanent neurotoxic effects
- Impact on neurodevelopment: changes in adult brain circuits after heavy cannabis consumption during adolescence, leading to impaired emotional and cognitive performance and potentially representing a risk factor for developing schizophrenia

Cocaine

- Disrupts the functional integrity of the brain's reward centres
- Abnormal metabolism and hypoperfusion even after sustained abstinence-slowed mental processing, memory impairments, reduced mental flexibility

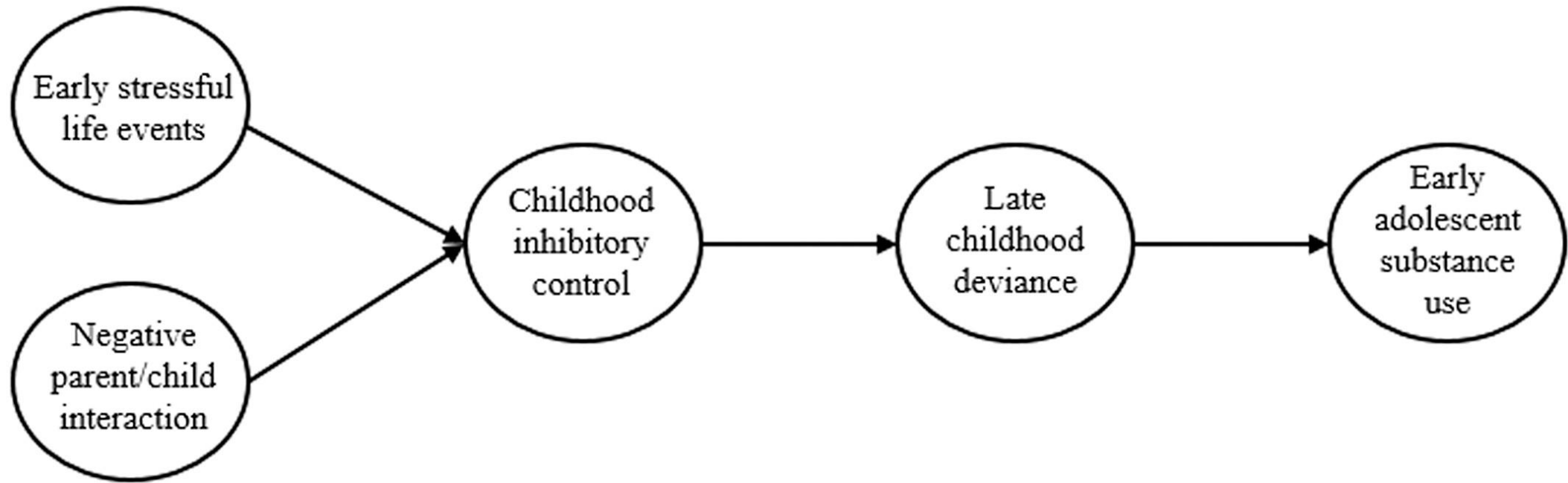
Opiates

Long-term uses can sustain permanent cognitive impairments- attention, concentration, various aspects of memory and learning, and visuospatial and visuomotor activities

Methamphetamine

- Paranoid psychotic episodes with vivid hallucinations, both auditory and visual, and vulnerability to psychotic relapses
- Damage to dopaminergic and serotonergic terminals
- Cognitive impairments- attention, memory, executive functions

Cascade Model



Epigenetics

- While other factors do contribute to the manifestation of particular traits, the foundation in the DNA must be present for that trait to be exhibited [16]
- Epigenetics is the study of how your behaviors and environment can cause changes that affect the way your genes work. Unlike genetic changes, epigenetic changes are reversible and do not change your DNA sequence, but they can change how your body reads a DNA sequence.

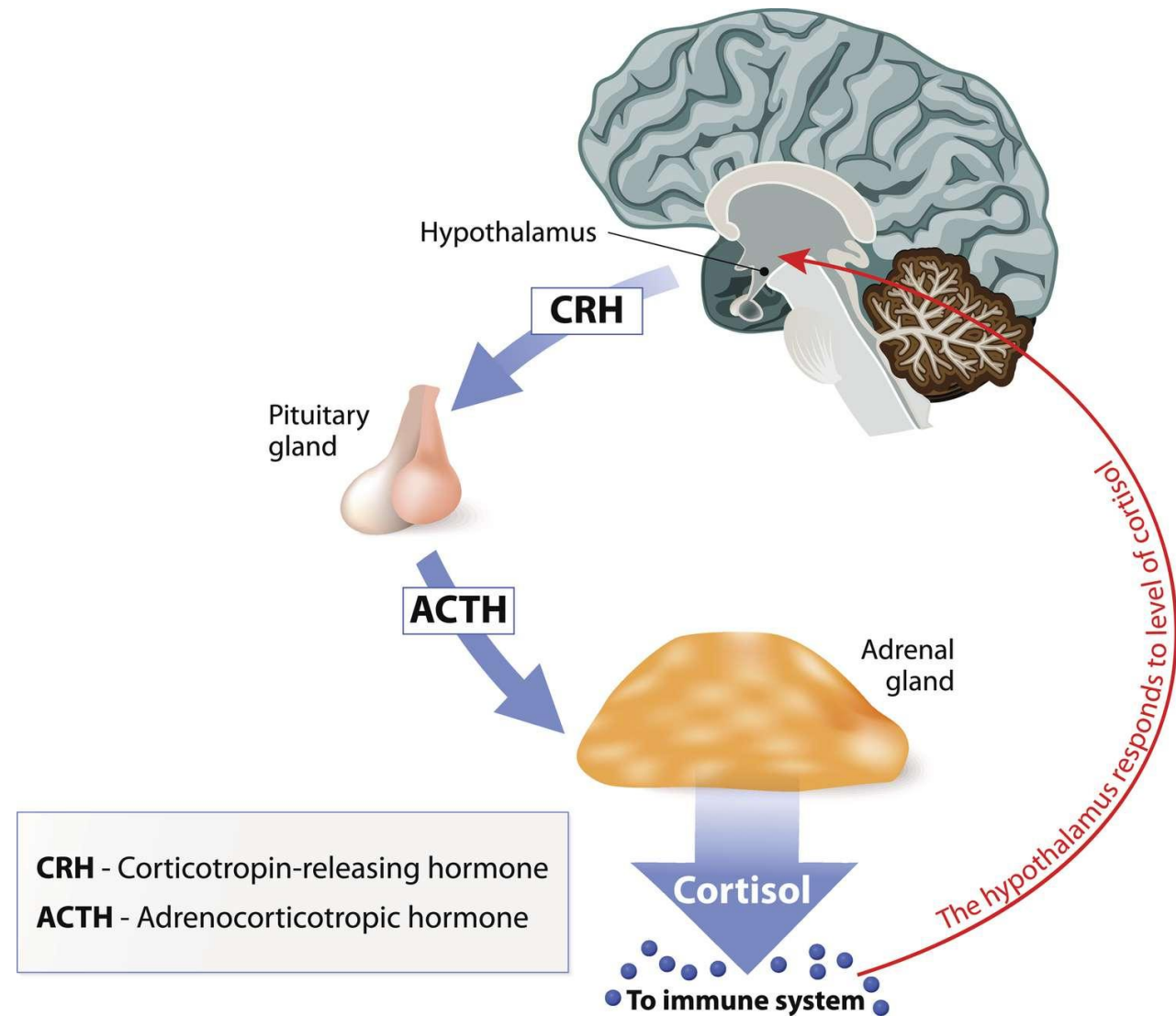
Stress

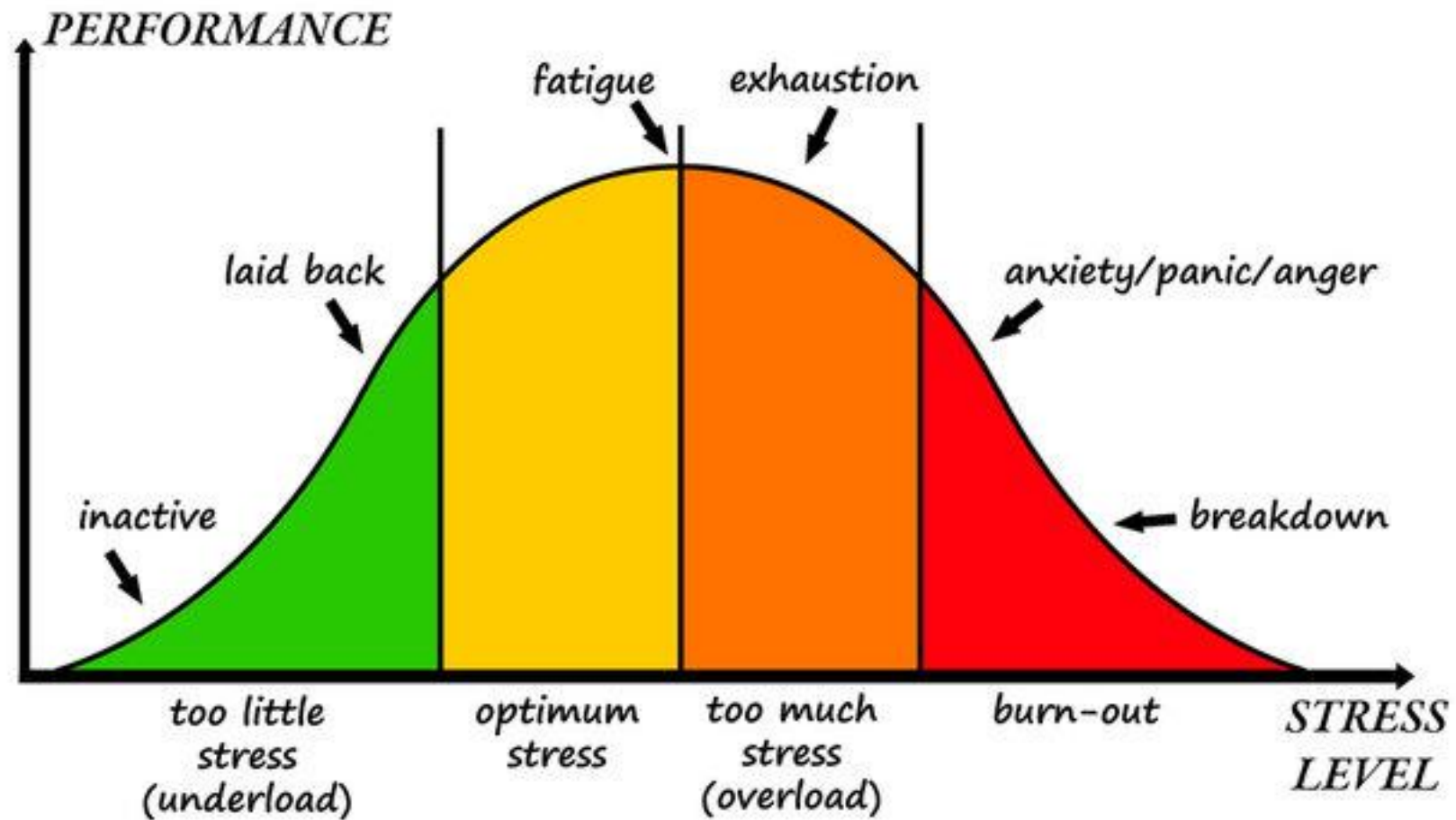
“Anything which causes an alteration of psychological homeostatic processes”

Brain responses to chronic stress

Stress management and learned behaviour

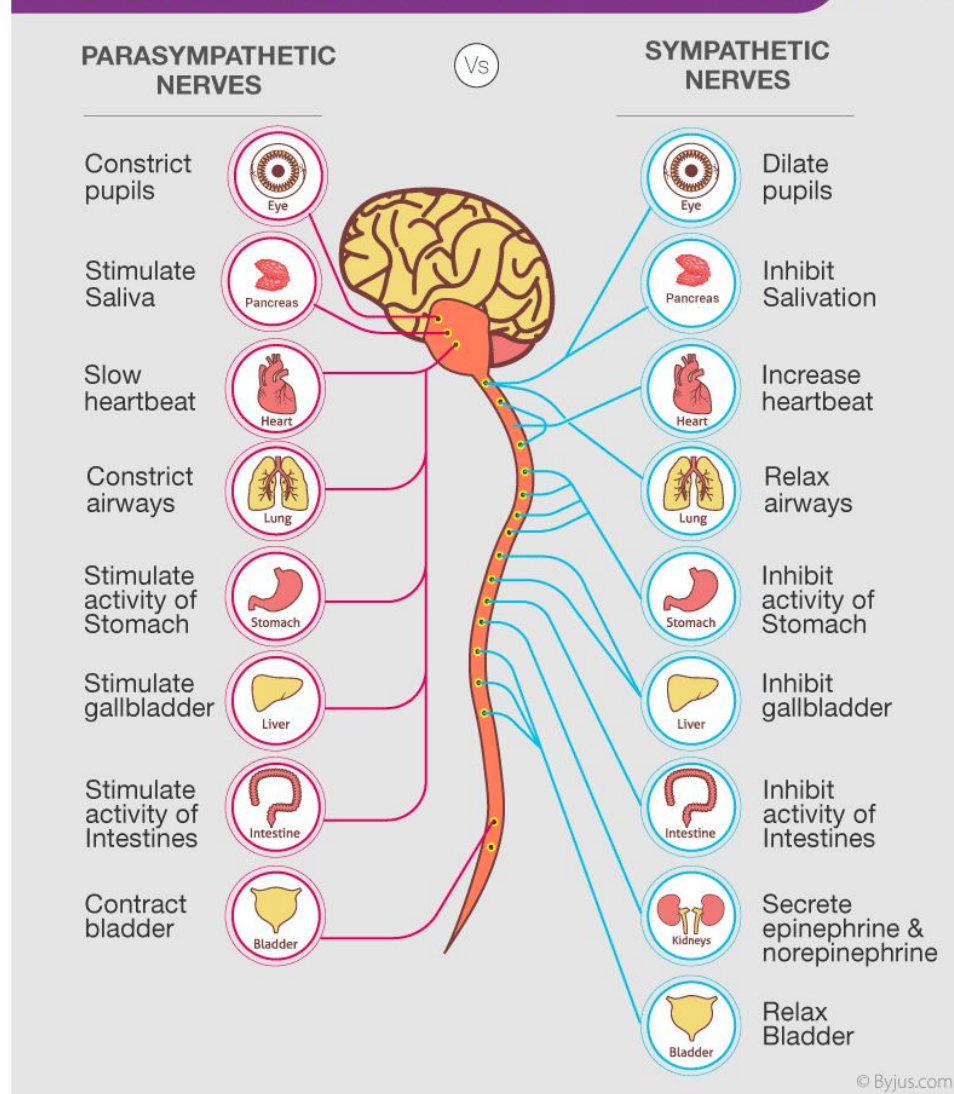
Stress Response System





DIFFERENCE BETWEEN SYMPATHETIC AND PARASYMPATHETIC

BYJU'S
The Learning App



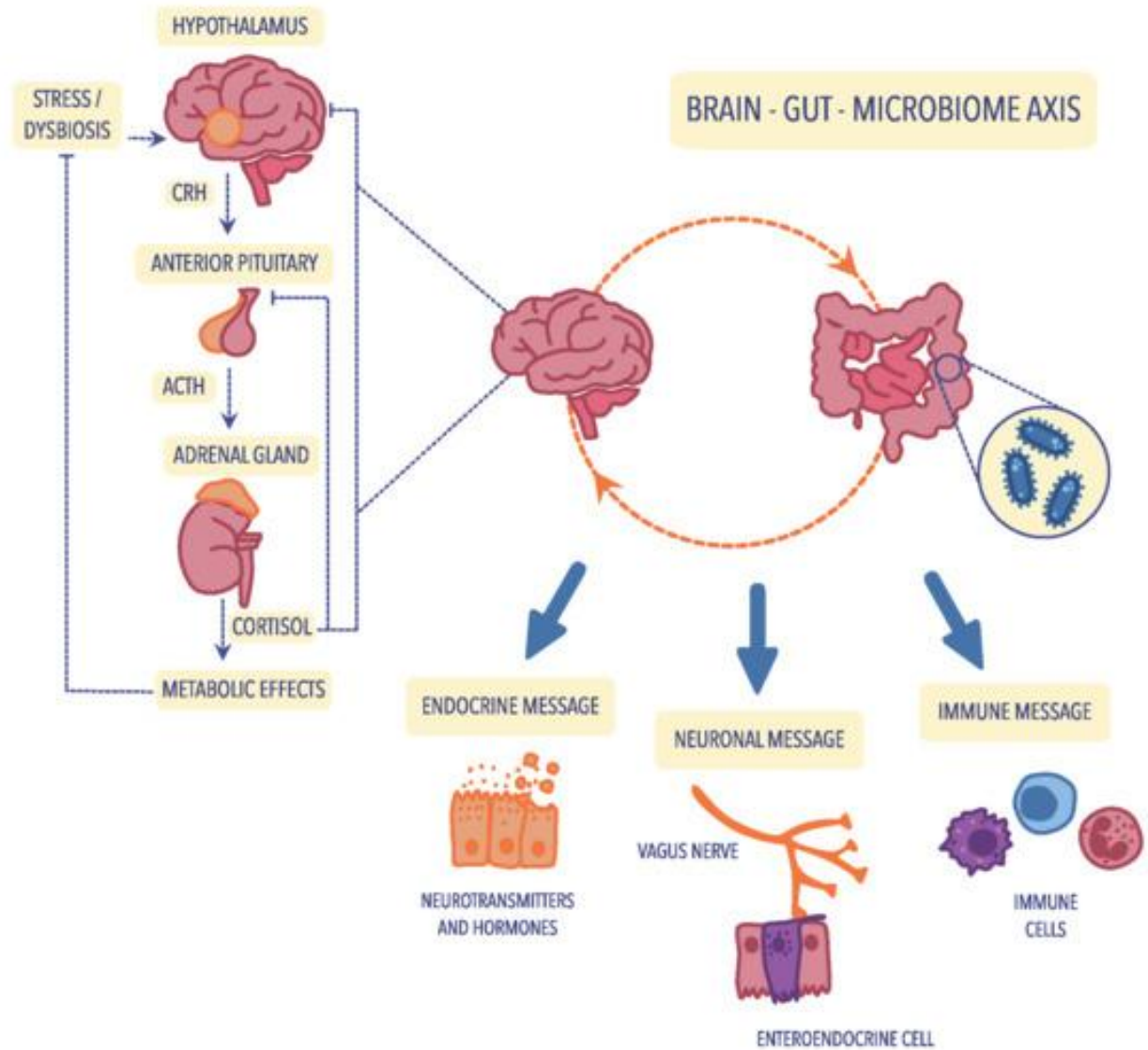
The Microbiome–Gut–Brain Axis

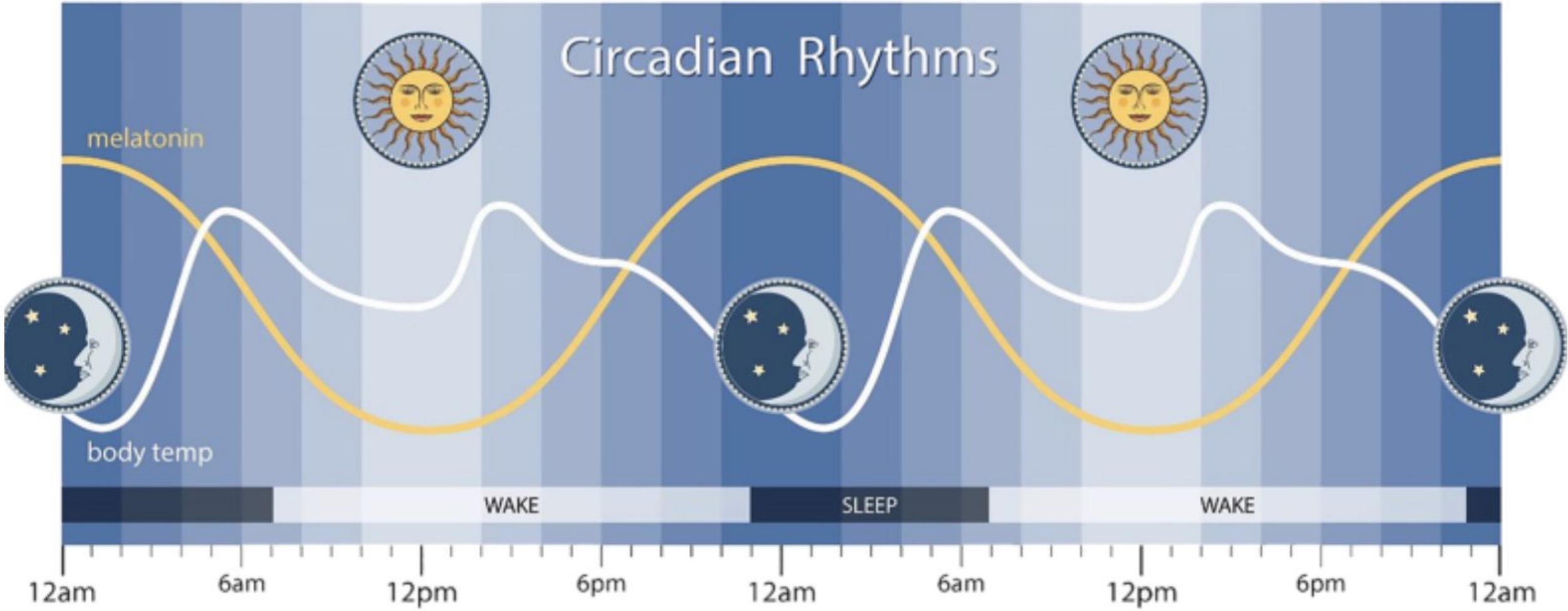
- “Currently, the growing number of data indicate probiotics as the form of treatment of mental disorders/neurological and developmental disorders in which increased intestinal permeability has been demonstrated, i.e., depression, anxiety, autism, schizophrenia, or bipolar disorder [[50](#)]. The mode of action of probiotic microorganisms includes, among others, regulation of the immune system, production of SCAFs, or support of the gut barrier integrity” [17]
- Probiotics found to have small but significant impact on decreasing symptoms of depression and anxiety [18]
- Stress has been shown to cause a radical decrease in the number of *Lactobacillus* spp. and *Bifidobacterium* spp [17]

Probiotics are the bacteria that you ingest to increase the good population of bacteria.

Dairy	Yogurt, kefir, cottage cheese, aged cheeses such as cheddar, mozzarella, gouda, parmesan, and swiss
Drinks	Kefir, kombucha, non-alcoholic ginger beer, Indian lassi, Russian beet kvass, apple cider vinegar
Fermented foods	Pickles brined in salt water, olives, sauerkraut, tempeh, kimchi, miso, natto, poi
Probiotic supplements	Many brands available including: Align® Probiotic, Culturelle® Probiotics Digestive Health, Dr. Mercola® Complete Probiotics, Garden of Life® RAW Probiotics Ultimate Care

Source: ConsumerLabs.com





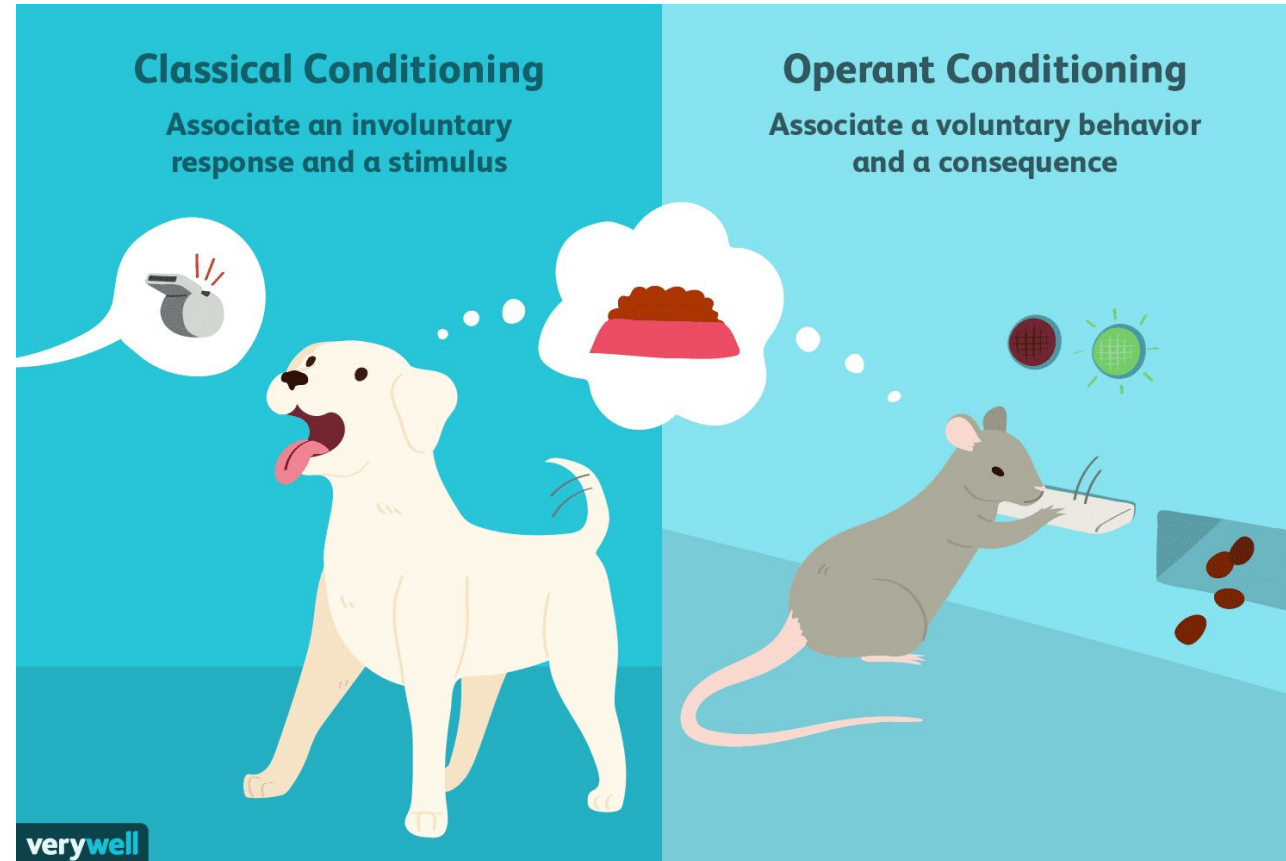
Psychological Factors

Behavioral Economics

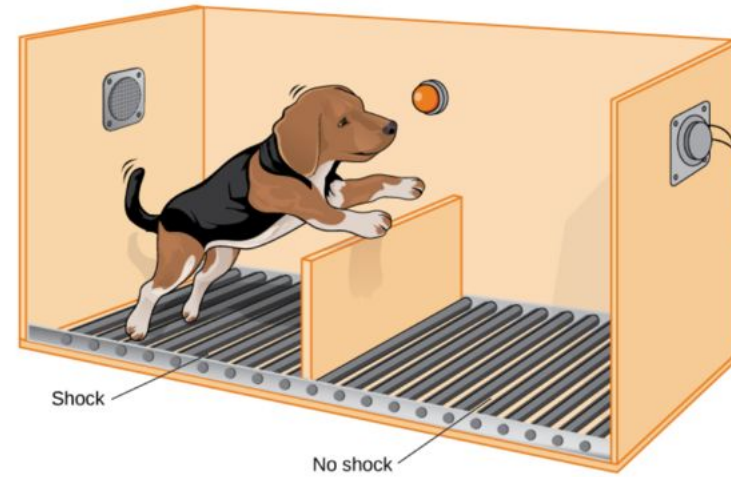
“Behavioral economic theory predicts that the primary contextual influences on drug use are both constraints on access to drugs and the availability and value of alternative substance-free sources of reinforcement”

- Correia et al., 2010

Conditioned Response



Learned Helplessness



ACES - Major Findings

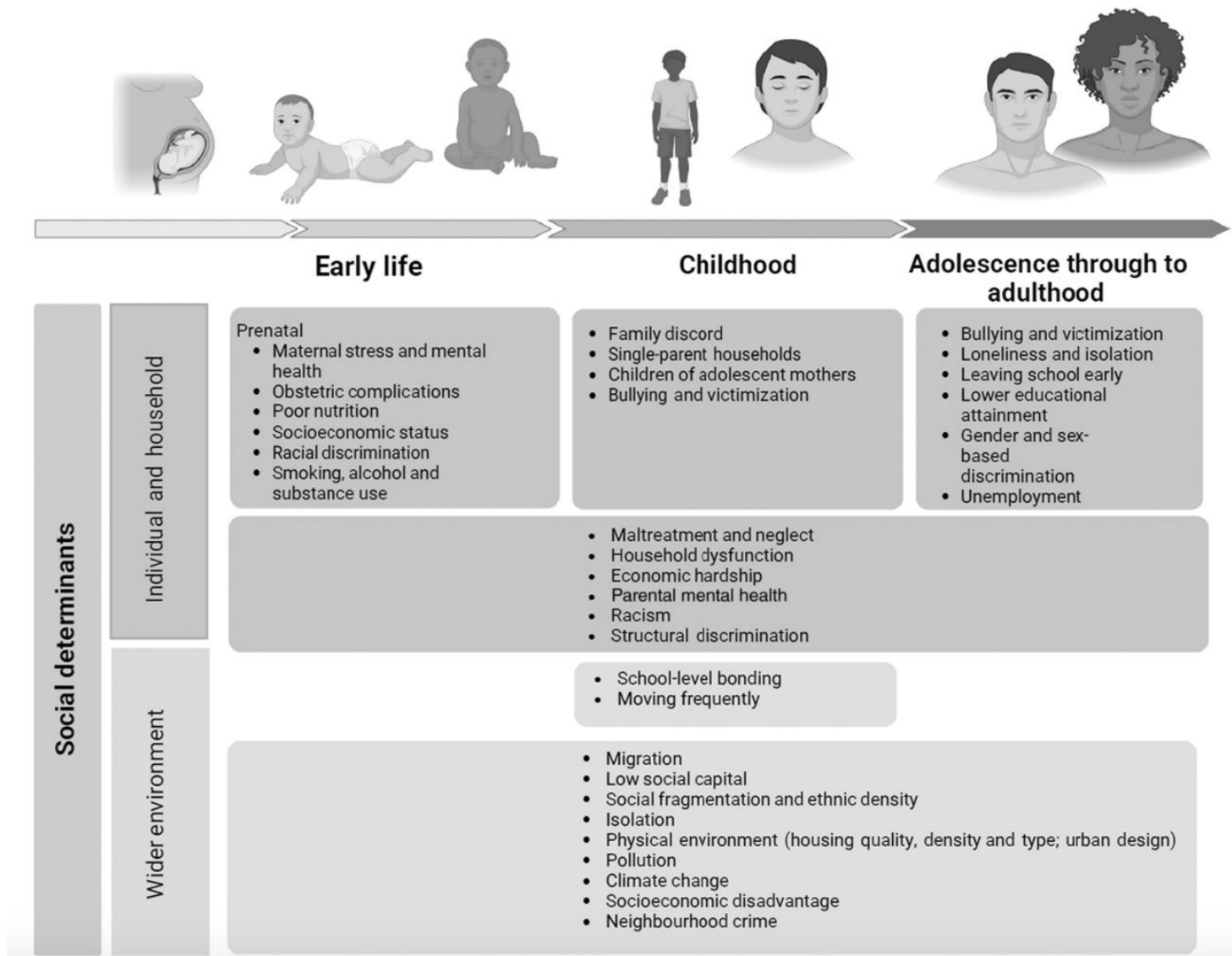
- ACEs are common across all populations
- Some populations are more vulnerable to experiencing ACEs
- Graded dose-response relationship between ACEs and negative health and well-being outcomes
- As the number of ACEs increases so does the risk for negative outcomes

Findings [1]

- “The findings suggest that the impact of these adverse childhood experiences on adult health status is strong and cumulative” p.251
- “However, the analysis we present illustrates the need for an overview of the net effects of a group of complex interactions on a wide range of health risk behaviors and diseases.” p. 251
- “An essential question posed by our observations is, ‘Exactly how are adverse childhood experiences linked to health risk behaviors and adult diseases?’” p.252

Linking ACE and Risk

- “The linking mechanisms appear to center on behaviors such as smoking, alcohol or drug abuse, overeating, or sexual behaviors that may be consciously or unconsciously used because they have immediate pharmacological or psychological benefit as coping devices in the face of the stress of abuse, domestic violence, or other forms of family and household dysfunction.” [1] p. 253
- “High levels of exposure to adverse childhood experiences would expectedly produce anxiety, anger, and depression in children. To the degree that behaviors such as smoking, alcohol, or drug use are found to be effective as coping devices, they would tend to be used chronically.” [1] p. 253
- “Understanding the causal mechanisms through which any prenatal exposure may affect offspring mental health remains a critical objective for psychiatric epidemiology” [2] p.61



THE KEY COMPONENTS OF ERIKSON'S MODEL OF HUMAN DEVELOPMENT



Infancy:
Trust vs. Mistrust



Preschool Years:
Initiative vs. Guilt



Adolescence:
Identity vs. Role
Confusion



Middle Adulthood:
Generativity
vs. Stagnation



Toddlerhood:
Autonomy vs.
Shame and
Doubt

**Early
School Years:**
Industry vs.
Inferiority

Young Adulthood:
Intimacy
vs. Isolation

Late Adulthood:
Integrity vs.
Despair

Source: Financial Express

Schemas

- Patterns of thinking and behavior that are used to interpret
- Maximum neurons at 3 years old
- Pruning for efficiency
- Chronic stress causes excess pruning
- Self-protection and survival
- Narrative therapy and challenging schemas

COGNITIVE SCHEMA

A cognitive schema is a cognitive framework that organizes information about the world around us. It is a packet of information in our brain that categorizes objects and concepts into groups.

EXPLANATION

Our brains like to group things based on common features. We call this a schema.

Having schema in our mind makes it easier for us to identify new objects and try to define them based on our existing knowledge of similar objects and concepts.

For example, you might see a raspberry and know it's a berry due to its similarities to strawberries and mulberries. Here, you're using your berry schema.

EXAMPLES

- 1 **Object Schema:** Learning the difference between car and bus.
- 2 **Role schema:** Learned gender roles
- 3 **Event Schema:** Differentiating between seasons
- 4 **Self-Schema:** Learning about personal aptitudes
- 5 **Person Schema:** Learning about other people's personalities, roles, and preferences

HELPFULPROFESSOR.COM

Early Maladaptive Schemas (EMS)

- incorporate our limiting beliefs about ourselves, our relationships, and the world around us
- operate in the background of our awareness; yet they can have a strong influence on our self-image, our expectations about life, and the quality of our relationships
- can be thought of as frameworks, or structures, through the lens of which we organize and make sense of our life experiences
- develop in early childhood and throughout adolescence but persist over time
- are triggered (in adulthood) in situations, which we perceive as similar to the childhood/adolescence experiences that created these schemas

AttachmentProject.com

Strategy	Definition
MALADAPTIVE	
Self-blame	Blaming oneself for the negative event
Rumination	Repetitive thinking about the thoughts and feelings about the event
Catastrophizing	Focusing on how terrible the event was
Other-blame	Blaming others for what happened
ADAPTIVE	
Acceptance	Resigning to what happened
Positive refocusing	Directing thoughts to pleasant matters
Refocus on planning	Thinking about actions that can help deal with the negative event
Putting into perspective	Diminishing the meaning of the event
Positive reappraisal	Finding a positive side of the negative event

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 [23]
- Children coping through dissociative avoidance coding style - mixed to limited evidence
- Fragmented memories – scarce peer reviewed evidence of fragmented or dissociated memories [19,20,22]

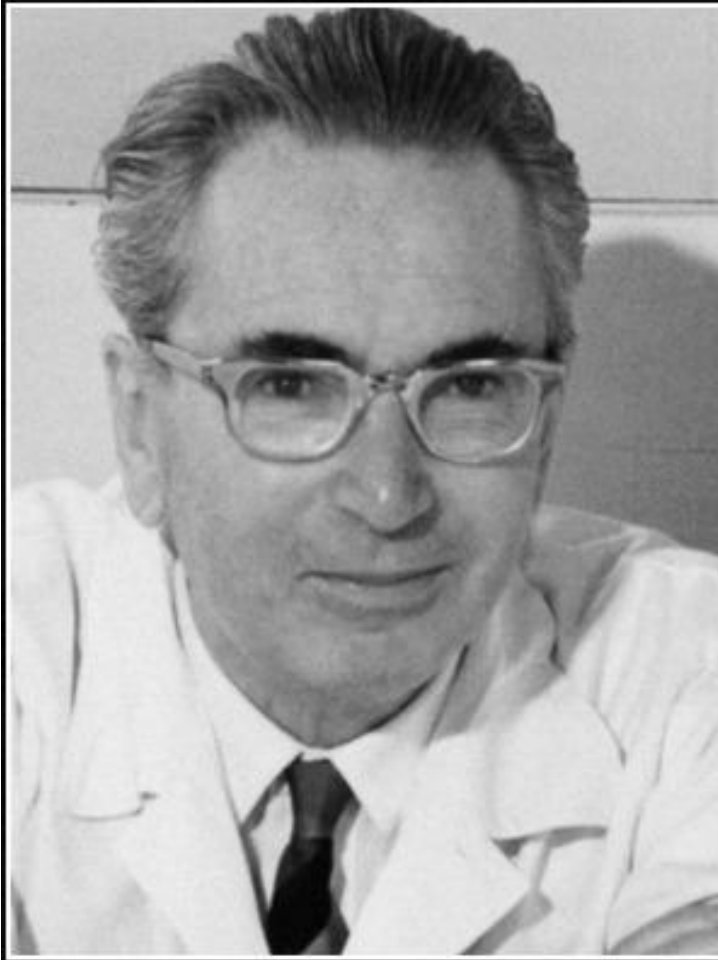
Spiritual Factors



Developing Meaning

- Acceptance of suffering
- Self-awareness
- Relationships
- Intrinsic goals





There is nothing in the world, I venture to say, that would so effectively help one to survive even the worst conditions as the knowledge that there is a meaning in one's life.

— Viktor E. Frankl —

AZ QUOTES

People have two basic concerns:

One is to survive; one is to exist. The former only asks to go on living; the latter asks for meaning. The former concerns itself with how to live, the latter with why to live, the meaning of living.

- Xuefu Wang, 2019, The Symbol of the Iron House: From Survivalism to Existentialism. In Existential Psychology East-West (Vol. 2), p. 7.

“Personal meaning is defined as feelings of satisfaction and fulfillment that flow from the pursuit of worthwhile activities and life goals”

- Dr. Paul Wong

Treatment

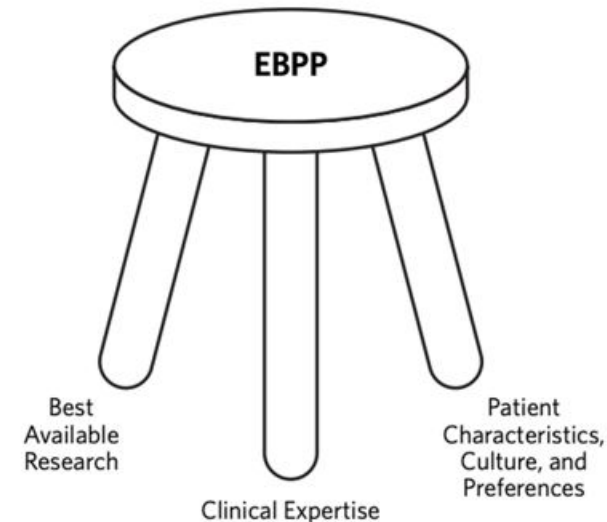
Therapeutic Modalities

- Over 400 different modalities
- Evidenced based
 - Evidence-based practice in psychology (EBPP) is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences.

Components of Evidence-Based Practice in Psychology (EBPP)

APA's EBPP policy clearly identifies each of the three components of the tripartite model. The current professional practice guidelines illustrate *how* psychologists can apply these components to professional practice in health care. They provide a framework for integrating research evidence with clinical skill and patient identities and preferences. These guidelines seek to clarify and extend APA's EBPP policy by articulating practical considerations and providing illustrative examples of evidence-based psychological practice in health care.

Figure 1. Components of Evidence-Based Practice in Psychology (EBPP)



Theories of Therapy

TABLE 3.9 The four forces of therapy, the relationship and traditional position of therapist

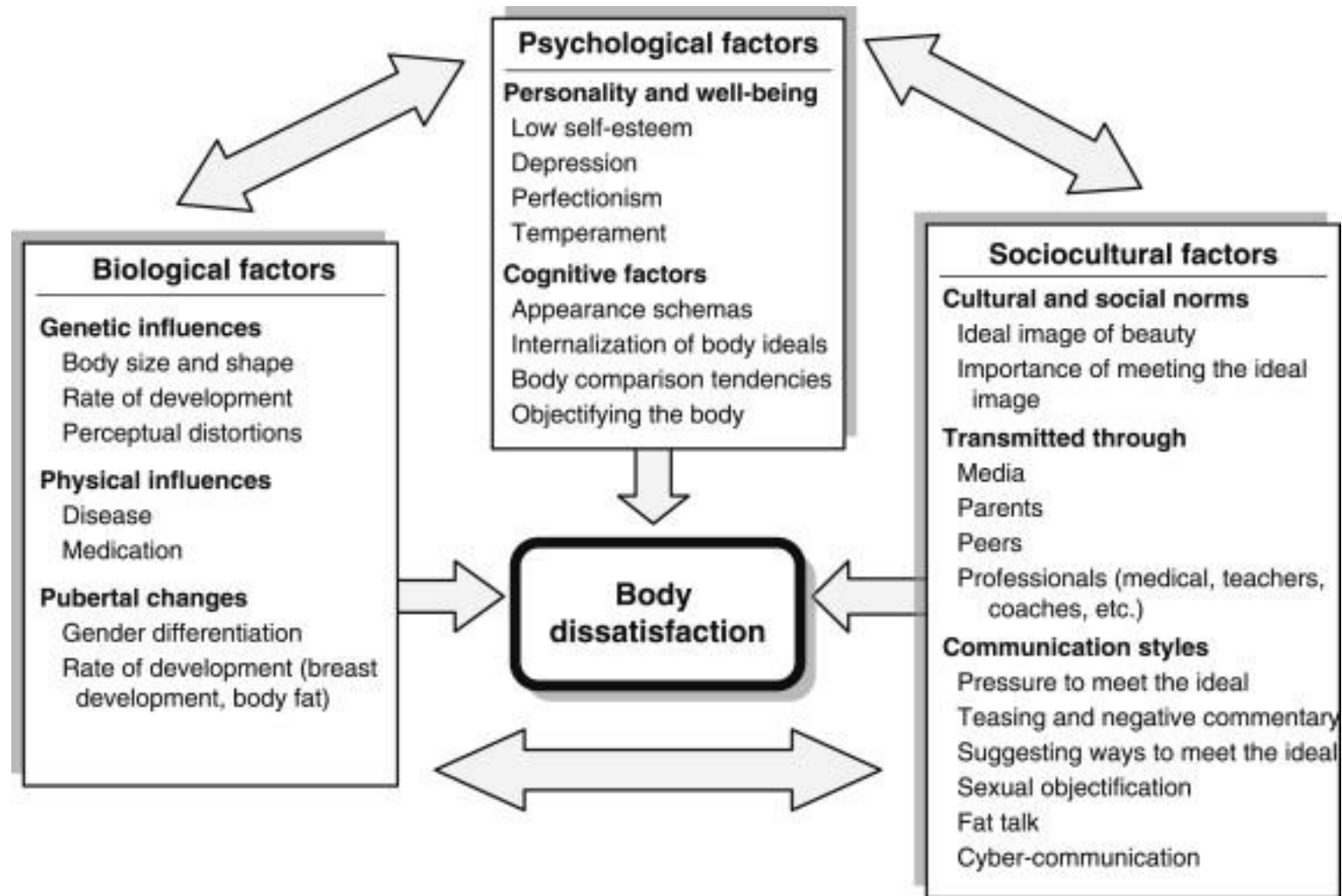
	Methods	Position of therapist	Place of the relationship in therapy	Aim of therapy
Psychoanalysis	Interpretation of transference, countertransference and resistance	Expert 'Blank Screen' Works with transference and interpretation	Working with the relationship in the here-and-now to resolve past issues	To adjust To live more fully in the present reality based on the past
Behaviourism and later Cognitive	Deciding goals Action plans New ways of behaving and thinking	Expert Educator Trainer	Focus on practical, goal-based working alliance	To change maladaptive thoughts, feelings and behaviours
Existential-humanistic	Human encounter In some cases particular techniques may be used	Facilitator or catalyst	Central Focus on working in the here-and-now	To live a full life Realization of potential To live an authentic life
Transpersonal Dialogue, Imagery,	Dialogue Imagery Creative visualization	Guide Facilitator Educator	To facilitate holistic change	To achieve spiritual growth To become integrated in mind, body and spirit

Therapeutic Interventions

“Action on the part of a psychotherapist to deal with the issues and problems of a client. The selection of the intervention is guided by the nature of the problem, the orientation of the therapist, the setting, and the willingness and ability of the client to proceed with the treatment. Also called **psychological intervention**.” (APA)

Be Integrative, Not Eclectic [19, p. 2]

- Theoretical integration- aims to bring together theoretical concepts from several different psychotherapeutic approaches and to develop a “Grand Unified Theory” of psychotherapy
- Assimilative integration- involves working primarily from one theoretical approach (e.g., cognitive behavioral therapy) but also incorporating techniques from other psychotherapeutic approaches as needed for any given client or context
- “An eclectic therapist chooses a technique because it may work or may be efficient, without concern for its theoretical basis or research evidence.”



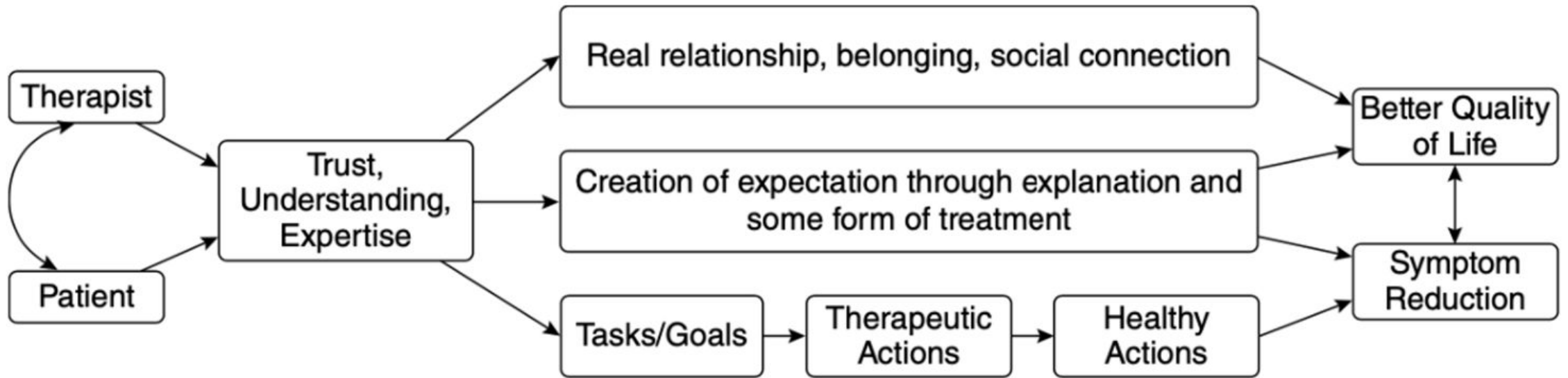
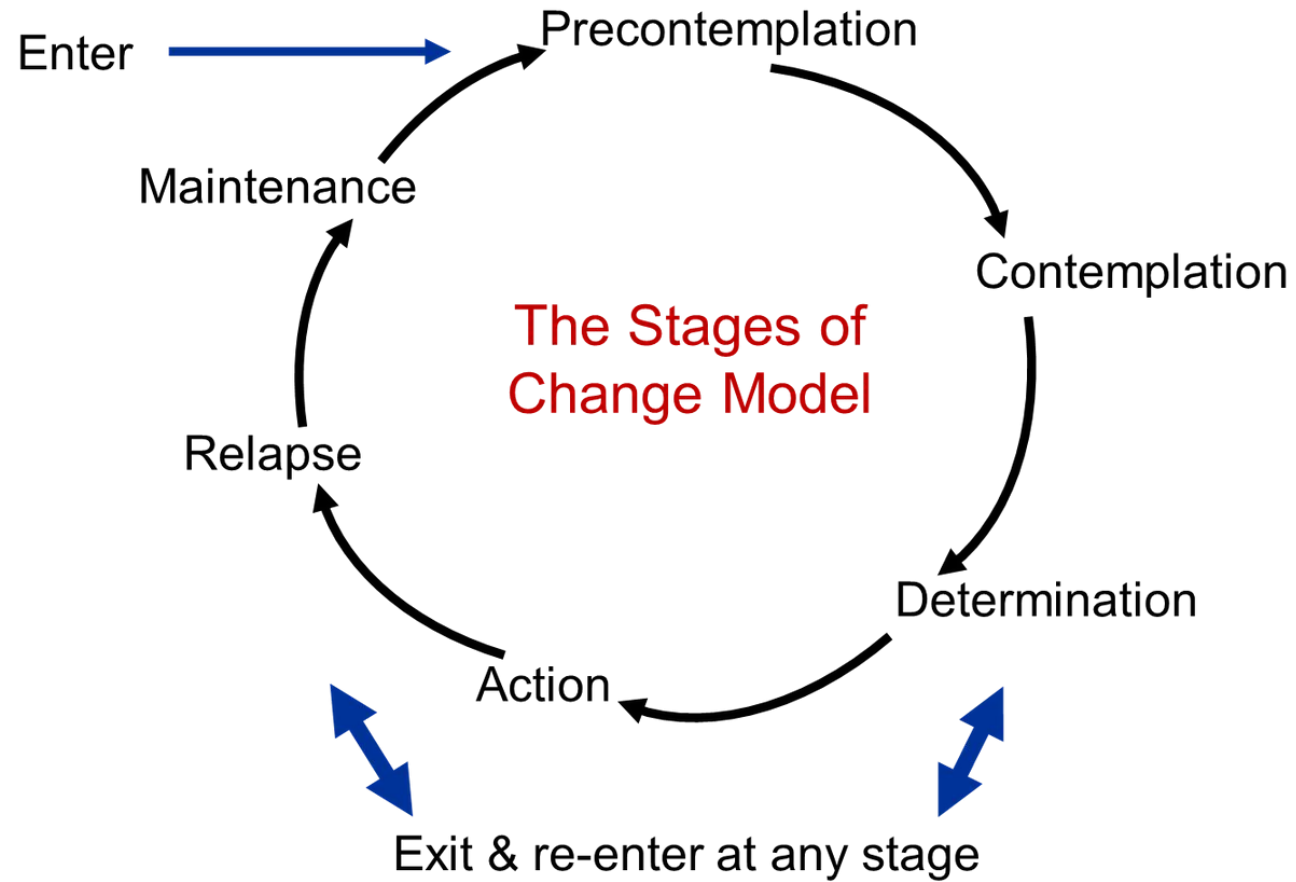
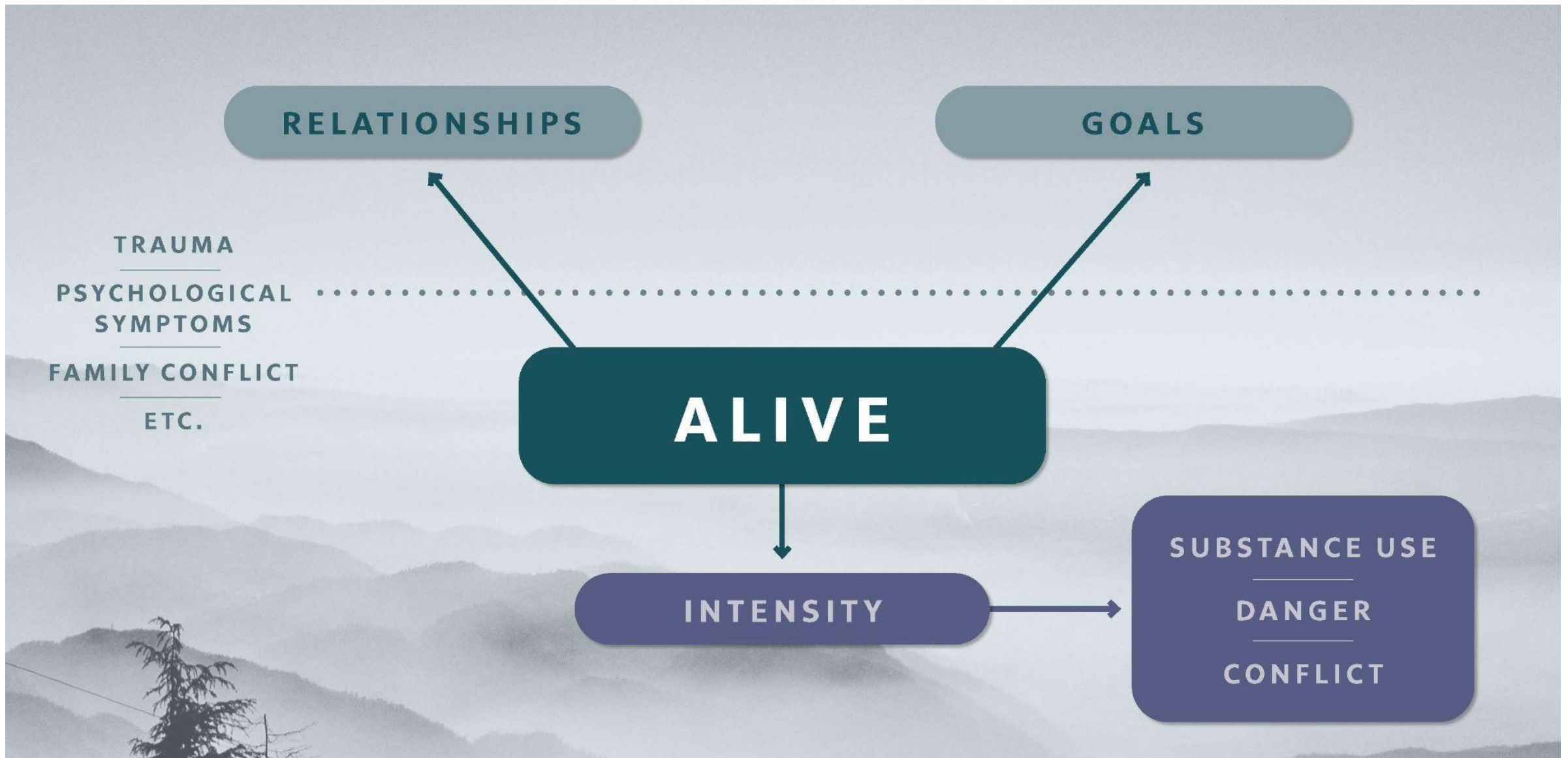


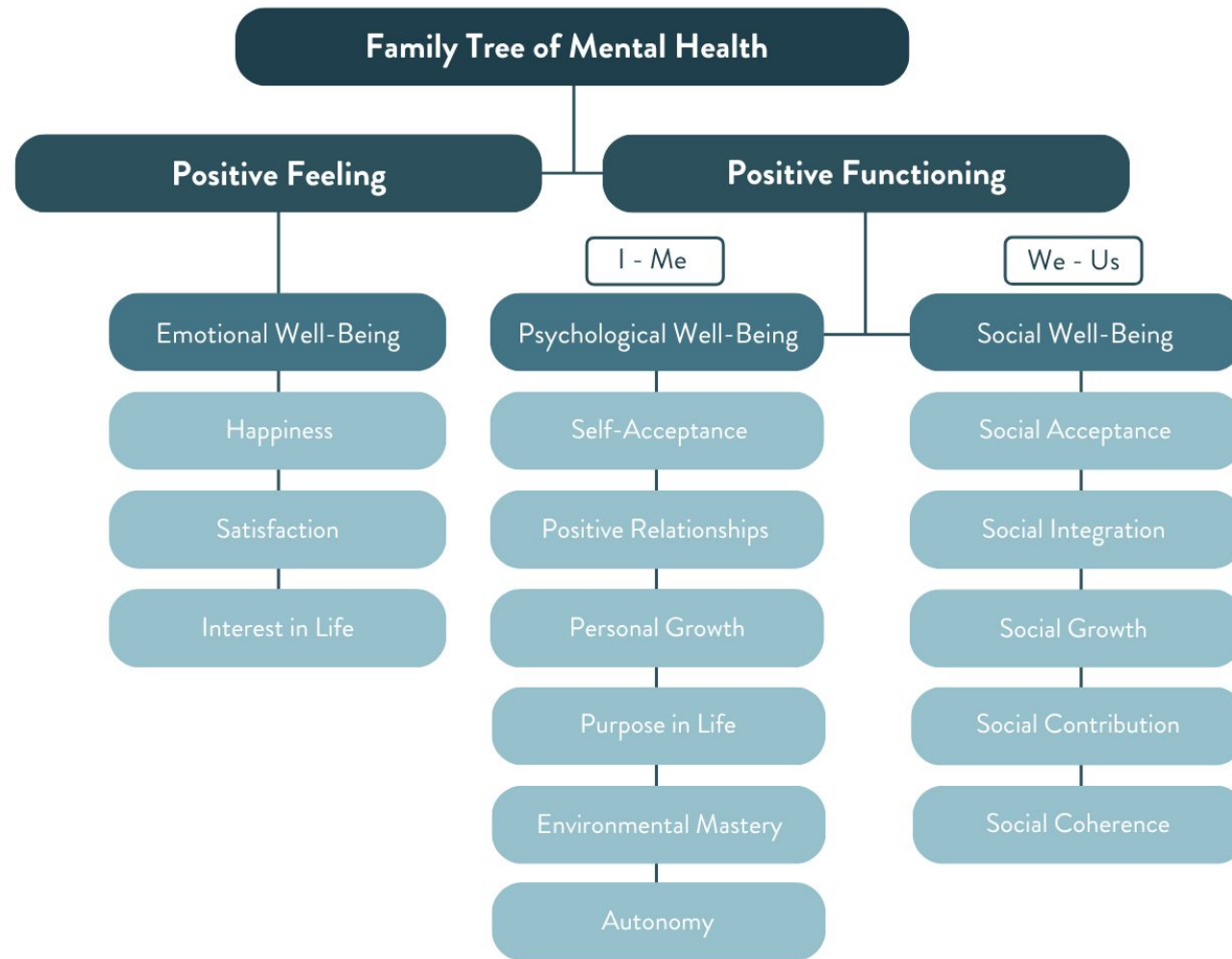
Figure 3.1 Contextual Model.

Wampold & Budge, 2013; Wampold & Imel, 2015

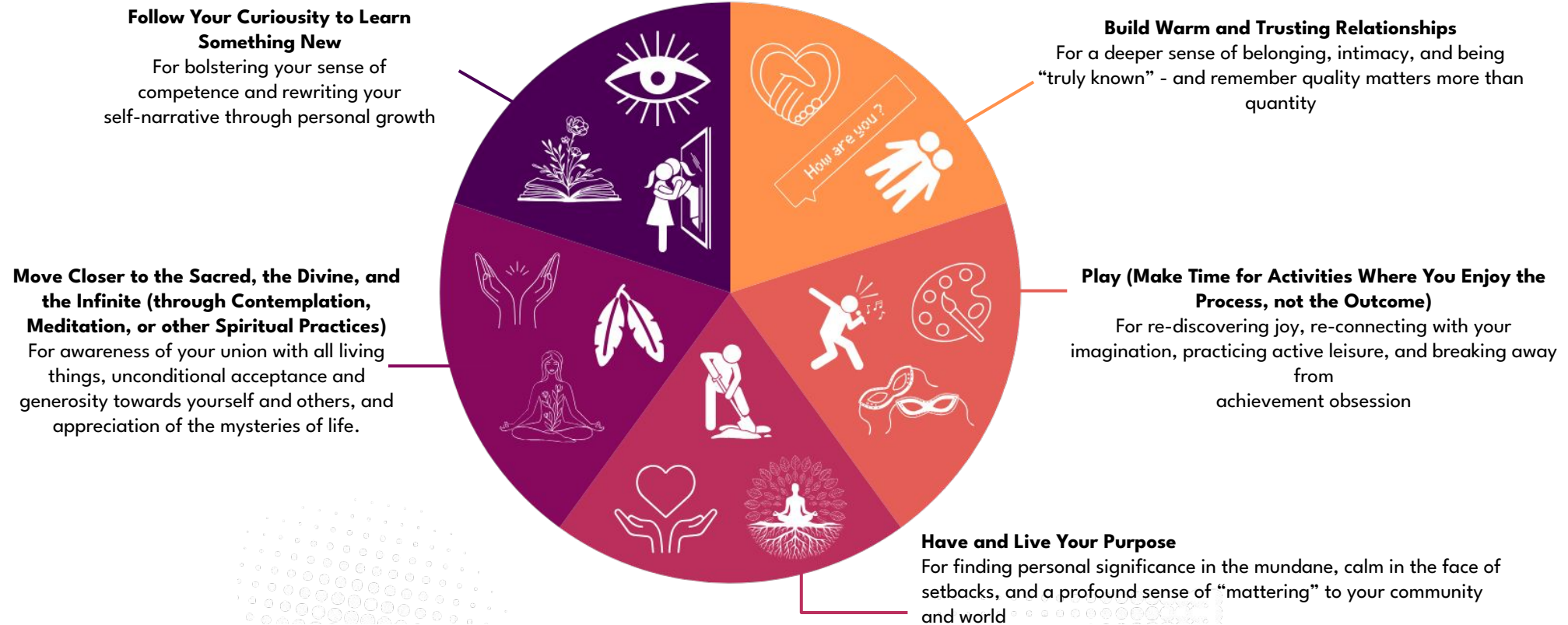


Prochaska and DiClemente, 1983





The Five Vitamins for Flourishing



Emotional Regulation Skills

- Create emotionally safe environments
- Non-judgmental approach
- Teach skills
 - Self-talk, taking a break, catharsis, breathing
- Normalize

Building Self Awareness

Mindfulness

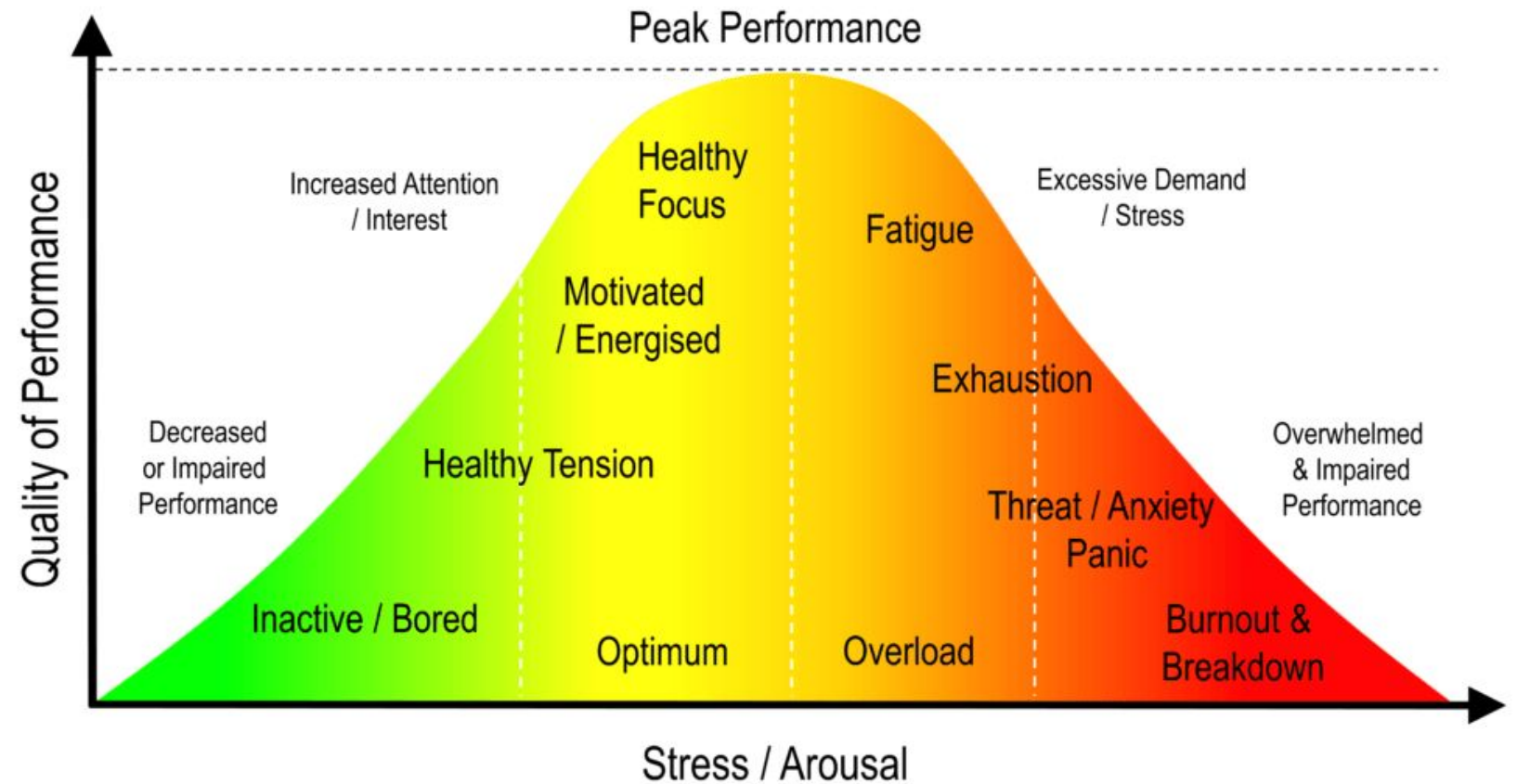
HANDOUT 5

LABELING EMOTIONS

- Start by sitting comfortably, eyes either closed or partially open. Take a few deep breaths, or if you prefer, bring your attention to the sounds around you.
 - Spend a few moments connecting with your anchor. When you are taken away by an emotion, note what the emotion is. With an attitude of warmth and acceptance, label the emotion. For example, note, “worry, worry, worry.” Don’t obsess about getting the label exactly right. It doesn’t need to be precise to be effective.
 - See where you find this emotion in your body. Allow yourself to simply be with it.
 - Notice the attitude you bring to this practice. Are you yelling at yourself when you notice “anger, anger, anger”? Are you telling yourself that you’re a bad person for having this emotion? See if you can label with kindness, warmth, and acceptance.
 - If the emotion becomes too intense and you start to get overwhelmed or lost in it, simply return to your anchor.
 - There is no need to hold on to or analyze the emotion. Let it rise and fall away. No need to go into the history or story behind the emotion either. Label it and let it go.
 - Label the emotions with as much warmth and kindness as possible. If you feel that negative emotions don’t deserve kindness, label this as well. Be open to pleasant emotions and label them too.
 - Continue to alternate between labeling the emotions and grounding with your anchor. When you’re ready, take a few deep breaths, wiggle your fingers and toes, stretch, and open your eyes if they have been closed. Try to continue to be aware of your emotional reactions as you move into your next activity.
-

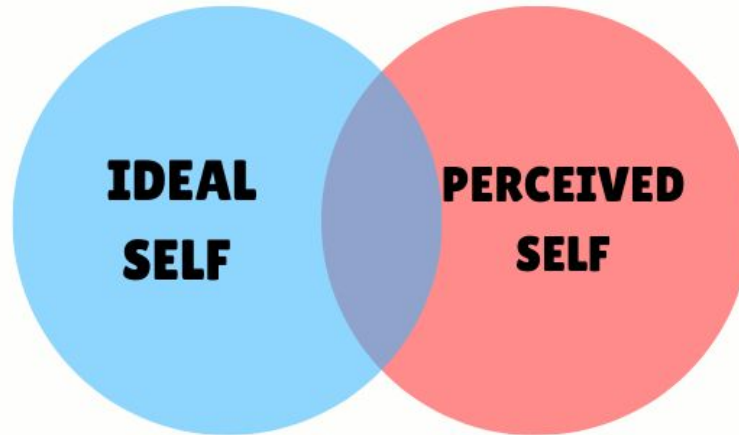
Building Self Awareness

Stress Curve

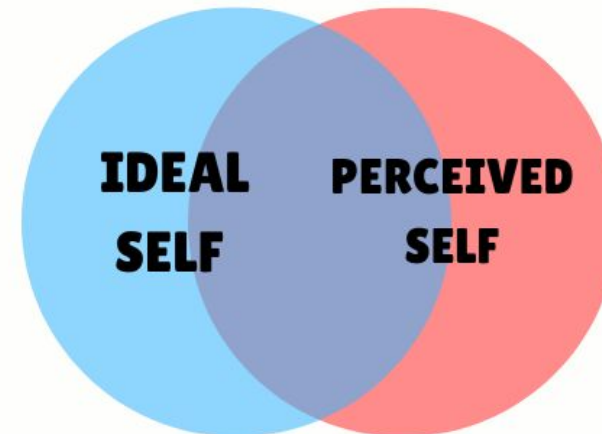


CARL ROGERS

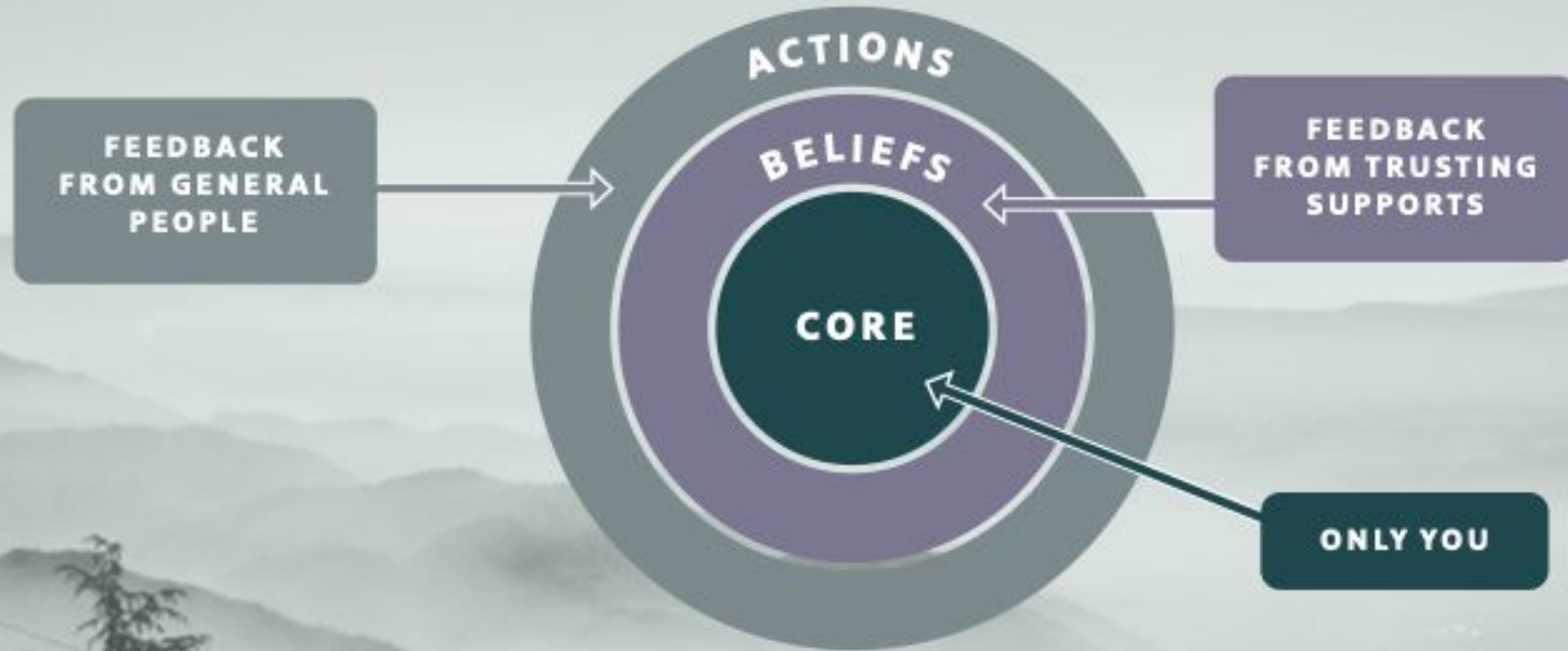
INCONGRUENCE



CONGRUENCE



CORE, BELIEFS, AND ACTIONS



Self-efficacy, stress, and symptoms of depression and anxiety in adolescents: An epidemiological cohort study with ecological momentary assessment

Sophia Fürtjes ^{a 1}  , Catharina Voss ^{a 2}, Frank Rückert ^a, Stephanie K.V. Peschel ^{a 3}, Hanna Kische ^{a 4}, Theresa M. Ollmann ^{a 5}, Johanna Berwanger ^{b 6}, Katja Beesdo-Baum ^{a 7}

[Show more](#) 

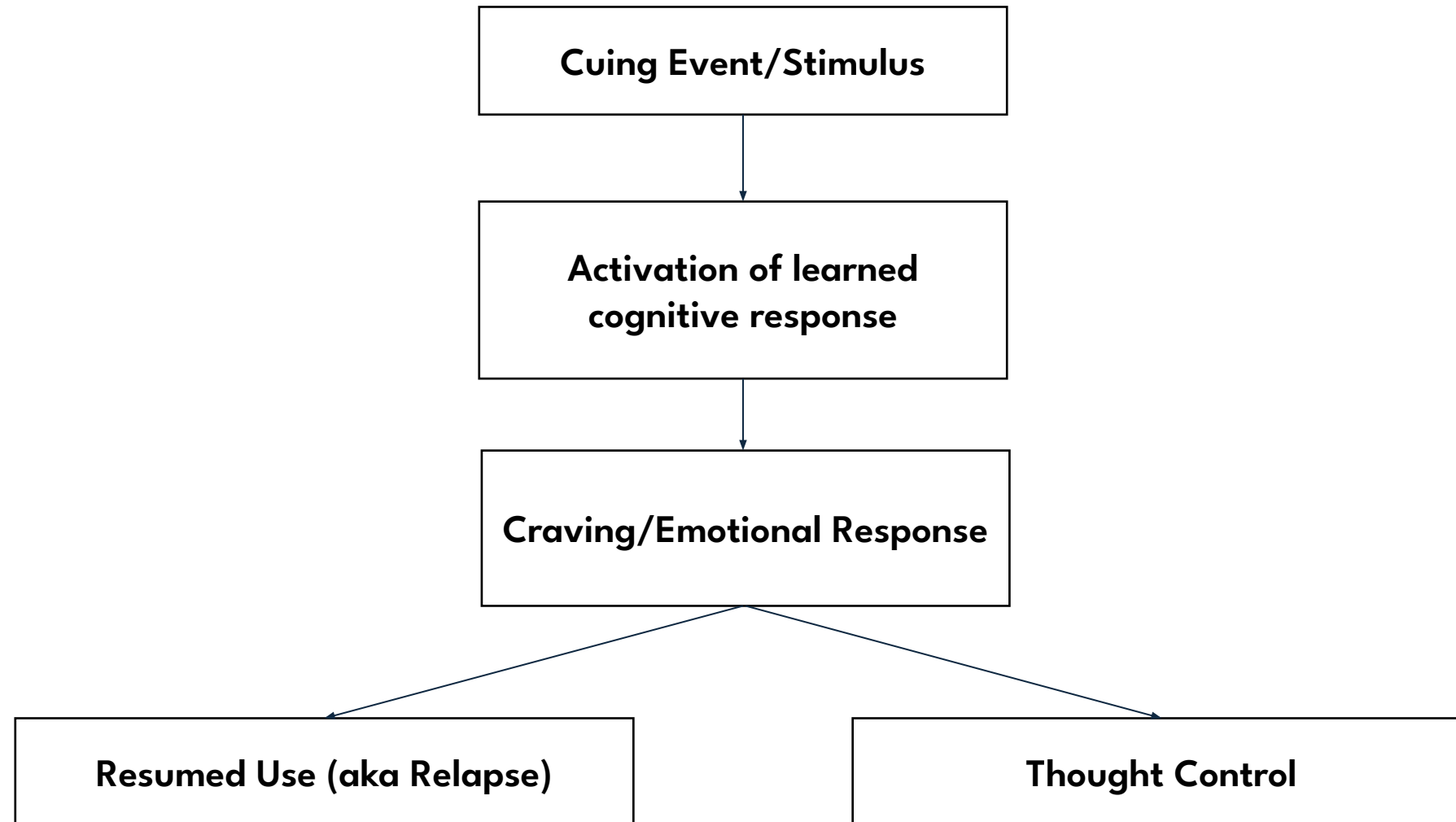
 Add to Mendeley  Share  Cite

<https://doi.org/10.1016/j.xjmad.2023.100039> 

[Get rights and content](#) 

Highlights

- Self-efficacy “buffers” the impact of stress on depression in daily life.
- Self-efficacy “buffers” the impact of stress on anxiety on a larger scale.
- Stress has a longitudinal impact on depression, self-efficacy on anxiety.
- Self-efficacy plays a different role for depression vs. anxiety.
- Targeted interventions should take this into consideration.



Thought Record Sheet – 7 column

Situation / Trigger	Feelings Emotions – (Rate 0 – 100%) Body sensations	Unhelpful Thoughts / Images	Facts that <u>support</u> the unhelpful thought	Facts that provide evidence <u>against</u> the unhelpful thought	Alternative, more realistic and balanced perspective	Outcome Re-rate emotion
<p>What happened? Where? When? Who with? How?</p>	<p>What emotion did I feel at that time? What else? How intense was it?</p> <p>What did I notice in my body? Where did I feel it?</p>	<p>What went through my mind? What disturbed me? What did those thoughts/images/memories mean to me, or say about me or the situation? What am I responding to? What 'button' is this pressing for me? What would be the worst thing about that, or that could happen?</p>	<p>What are the facts? What facts do I have that the unhelpful thought/s are totally true?</p>	<p>What facts do I have that the unhelpful thought/s are NOT totally true? Is it possible that this is opinion, rather than fact? What have others said about this?</p>	<p>STOPP! Take a breath....</p> <p>What would someone else say about this situation? What's the bigger picture? Is there another way of seeing it? What advice would I give someone else? Is my reaction in proportion to the actual event? Is this really as important as it seems?</p>	<p>What am I feeling now? (0-100%)</p> <p>What could I do differently? What would be more effective?</p> <p>Do what works! Act wisely. What will be most helpful for me or the situation? What will the consequences be?</p>

www.getselfhelp.co.uk

© Carol Vivyan 2010, permission to use for therapy purposes

www.get.gg

THE IMPORTANCE OF HOW WE MAKE SENSE OF THINGS (AND THAT WE DO!)

BRAINSTORM ON WHAT CAN INFLUENCE OUR PERCEPTION, INTERPRETATION, OR BELIEF:

EXAMPLES IDENTIFIED IN PSYCHOLOGY OF WAYS WE DISTORT REALITY:

- State dependant memory
- Euphoric recall
- Availability heuristic
- Confirmation bias
- What-is-beautiful-is-good
- Others?

WHY IT IS IMPORTANT TO MAKE SENSE OF THINGS:

Discuss: Aaron Antonovsky's research on stress and its inverse relationship to our sense of coherence (1979) regardless of number of stressors.

Complicated grief, Adjustment disorder, PTSD, others with this influence?

HOW WE MAKE SENSE OF THINGS:

Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom (Frankl, 1959).

Upsetting Event Exercise.

Deconstruction the Narrative **EXERCISE**

PURPOSE

We are the stories we tell ourselves. This concept, taken from narrative therapy and the work of Dr. Dan McAdams, summarizes the importance in understanding a client's narrative. Take Viktor Frankl's view that addictions are a response to a life that lacks meaning. To understand how a client makes sense of themselves, how they relate to the world, and thus the role of addictions in their life, the client's narrative or story must be understood.

Dr. Paul T. P. Wong, on whose work much of the SCHC and GSWC programs are based, said this: ***"Humans have two primary motivations: (a) to survive, and (b) to find the reason and meaning for survival."*** These themes will be evident in a client's narrative about their life, and understanding their story is the first step toward reconstructing it in a manner that will allow them to live a life of purpose. Put another way, essential to living a life of meaning is self-awareness. Becoming aware of the stories we tell ourselves is key in developing self-awareness.

In this exercise, reflect on the aspects of your internal narrative or life story that have shaped your view of self and how you belong in the world. The change that occurs during this exercise should be from your own reflection as much if not more than their sharing of your story during group therapy. While catharsis may be a secondary benefit to the exercise, the main purpose is the deconstruction of the your narrative to help your gain insight into why you engage in activities such as substance use and what they need for recovery.

INSTRUCTIONS

Introduction to the Group

Every time a new client enters group therapy, they are to be introduced to the Deconstructing the Narrative Exercise. When introducing the exercise, the counsellor explains the importance of stories, the connection between narrative and self-awareness, and the link to Meaning Therapy. The more you understand the purpose and the impact of the exercise, the more you will benefit from the activity. Counsellors will not provide examples of what a life story looks like or what the listeners will want to hear. The aim is to provide you with an understanding of the purpose of the exercise while having freedom to express their story without outside influence. The stories that shape us are not only difficult or traumatic, but also can be positive. Focus should be on the key stories that shaped how you view yourself and make sense of the world. While you are welcome to mentioned traumatic stories, describing them in detail is not beneficial in this context and often will elicit distress.

Specific instructions include:

1. Choose a day within the first two weeks of your arrival at SCHC/GSWC to complete the exercise. The facilitator will note this on the room whiteboard.
2. Divide your life into four “chapters.” The different chapters indicate turning points in your life. Give each chapter a title that expresses what the chapter is about. Since you are going to tell the group your story, you don’t have to do a lot of writing. You can simply jot down a word or two to remind yourself of what you are going to tell the group. Keep the entire story to within 30-45 minutes. REMEMBER: You are the author. You decide what is and is not important for you. The story works best if you are as honest as you can be. But if you don’t feel comfortable talking about something, you don’t have to. You are the author; you make the decisions.
3. Present your story to the group on the previously chose date.

Feedback

After you present your life story, it is useful to spend a few minutes filling in gaps, clarifying facts, and so on. Allow your peers to ask clarification questions if needed while keeping the focus on the intention of the feedback. Ultimately feedback focuses on the questions, “*Who am I?*” and “*How do I fit in the world around me?*” The first question is essential in the discovery of agency and the second in the discovery of community. Typically, your story will lack substantial meaning and purpose, will have little sense of agency, and will have little sense of belonging.

Prompting questions for peers elicit feedback can include:

- What themes did you hear in the story?
- What tone did you notice in the story?
- What did you notice in terms of how the storyteller understands themselves and their place in the world?
- What type of plot did this story resemble (overcoming the monster, rags to riches, the quest, voyage and return, comedy, tragedy, rebirth, etc.)?
- How could this story be reframed?

Trauma informed interventions: A systematic review

Hae-Ra Han^{1,2*}, **Hailey N. Miller³**, **Manka Nkimbeng⁴**, **Chakra Budhathoki¹**, **Tanya Mikhael¹**, **Emerald Rivers¹**, **Ja'Lynn Gray¹**, **Kristen Trimble⁵**, **Sotera Chow⁶**, **Patty Wilson¹**

1 School of Nursing, The Johns Hopkins University, Baltimore, Maryland, United States of America, **2** Bloomberg School of Public Health, The Johns Hopkins University, Baltimore, Maryland, United States of America, **3** School of Nursing, Duke University, Durham, North Carolina, United States of America, **4** School of Public Health, University of Minnesota, Minneapolis, Minnesota, United States of America, **5** School of Nursing, Vanderbilt University, Nashville, Tennessee, United States of America, **6** Medstar Good Samaritan Hospital, Baltimore, Maryland, United States of America

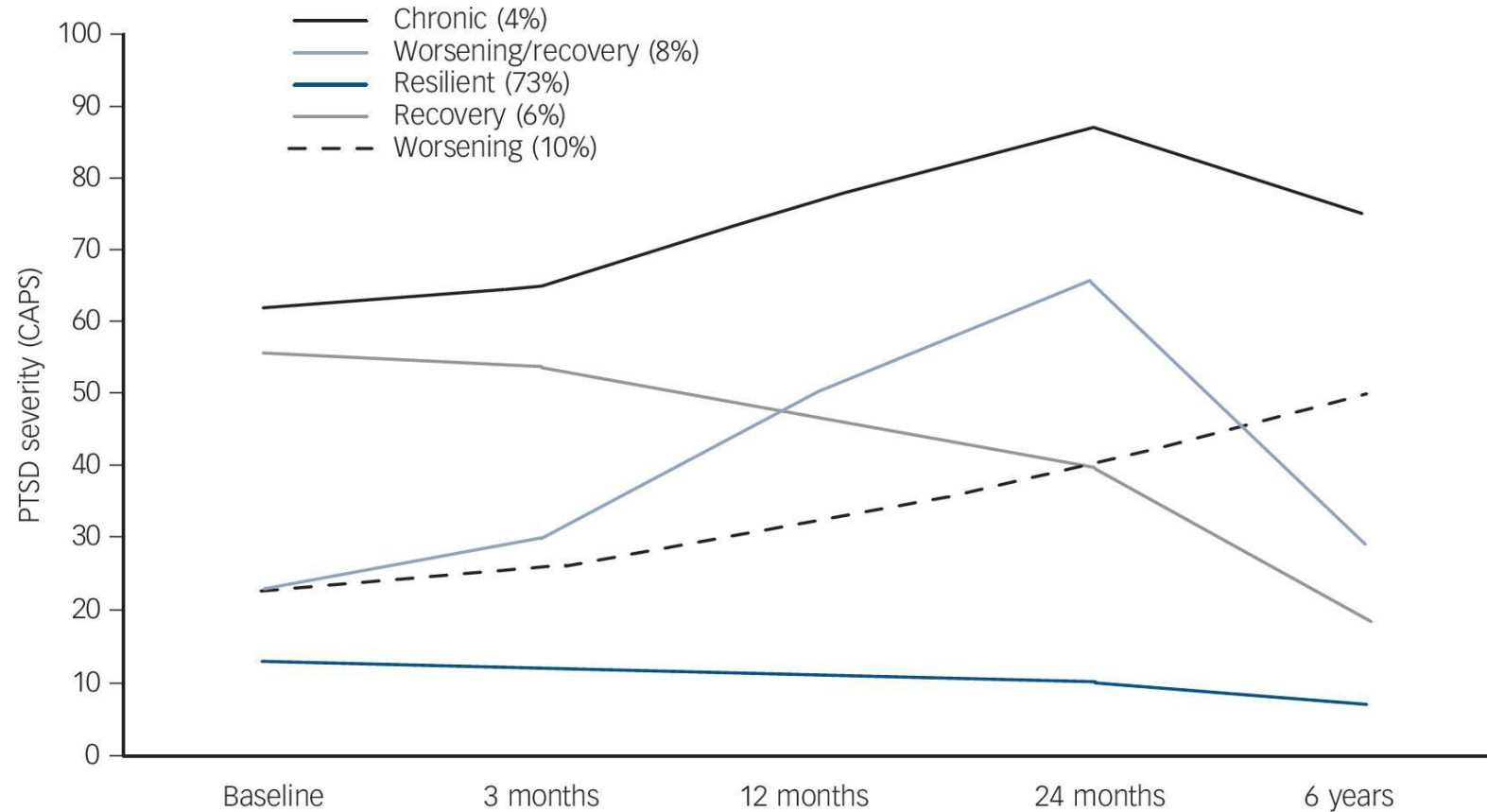
Conclusions

There is inconsistent evidence to support trauma informed interventions as an effective approach for psychological outcomes. Future trauma informed intervention should be expanded in scope to address a wide range of trauma types such as racism and discrimination. Additionally, a wider range of trauma outcomes should be studied.

Trauma Recovery Trajectory [3]

- Resilience – 65.7%
- Recovery – 20.8%
- Chronic - 10.6%
- Delayed onset- 8.9%
- Among patients assessed in clinical settings, 18-50% experienced recovery within 3-7 years, while the remainder had a recurrent or more chronic course [5]
- Most RCTs to date have excluded people with more complex presentations of PTSD and, given their prevalence and the morbidity associated with such presentations, a research focus on them is required. [4]

Treatment Resistance



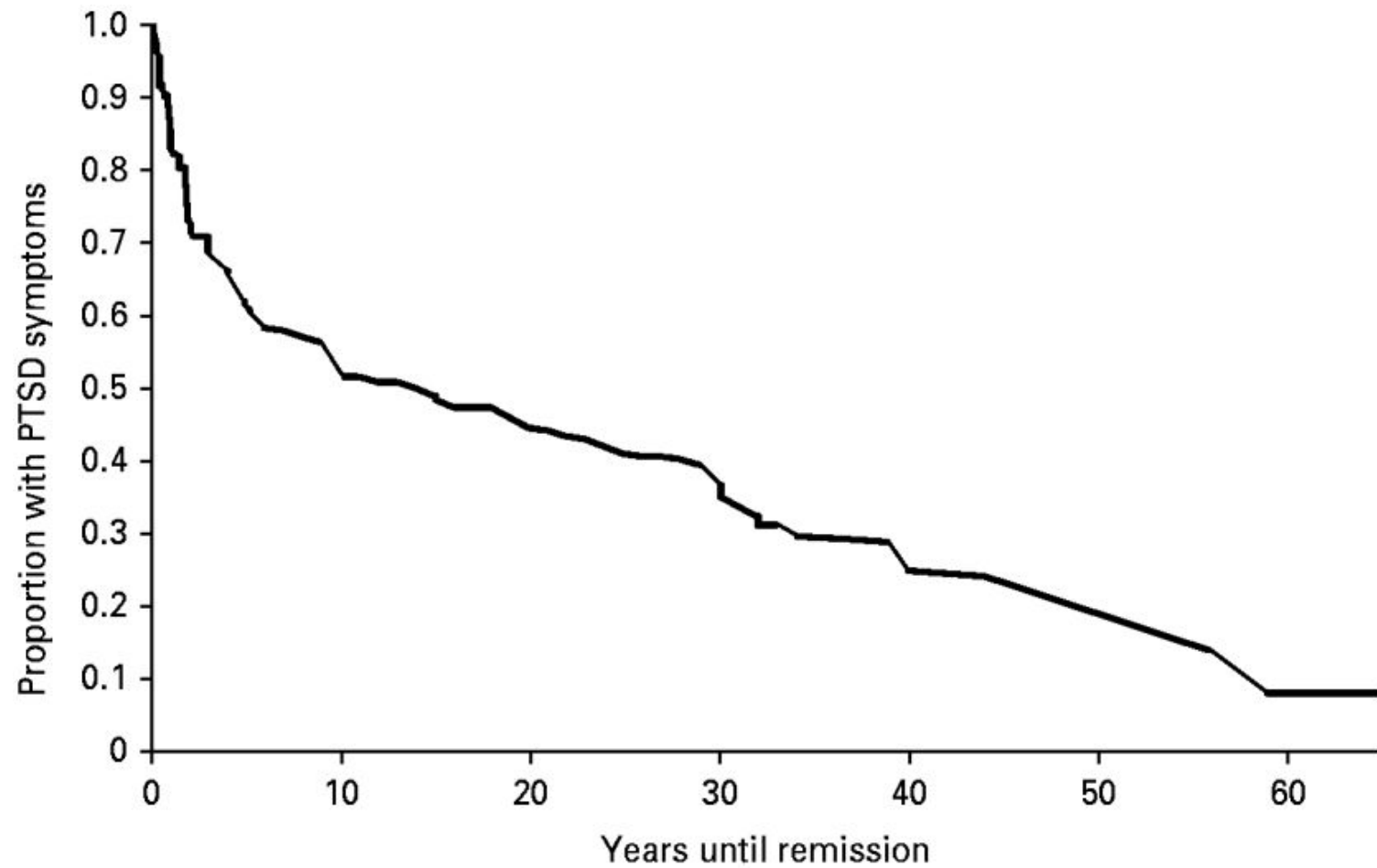


Fig. 1. Survival curve indicating years after onset until remission from post-traumatic stress disorder (PTSD) in the population.

Treatment Resistant Depression

Table 1. Cross-Comparison of Neurotherapeutic Interventions for Treatment-Resistant Depression

	Good	Better	Best
Efficacy	rTMS/dTMS	Esketamine/ ketamine	ECT
Risk	ECT	Esketamine/ ketamine	rTMS/dTMS
Speed	rTMS/dTMS	ECT	Esketamine/ ketamine
Durability	Esketamine/ ketamine	ECT	rTMS/dTMS

Abbreviations: ECT = electroconvulsive therapy, dTMS = deep transcranial magnetic stimulation, rTMS = repetitive transcranial magnetic stimulation.

Resilience

“The capacity of a dynamic system to adapt successfully through multisystem processes to challenges that threaten the function, survival, or development of the system.”
[7, P.524]

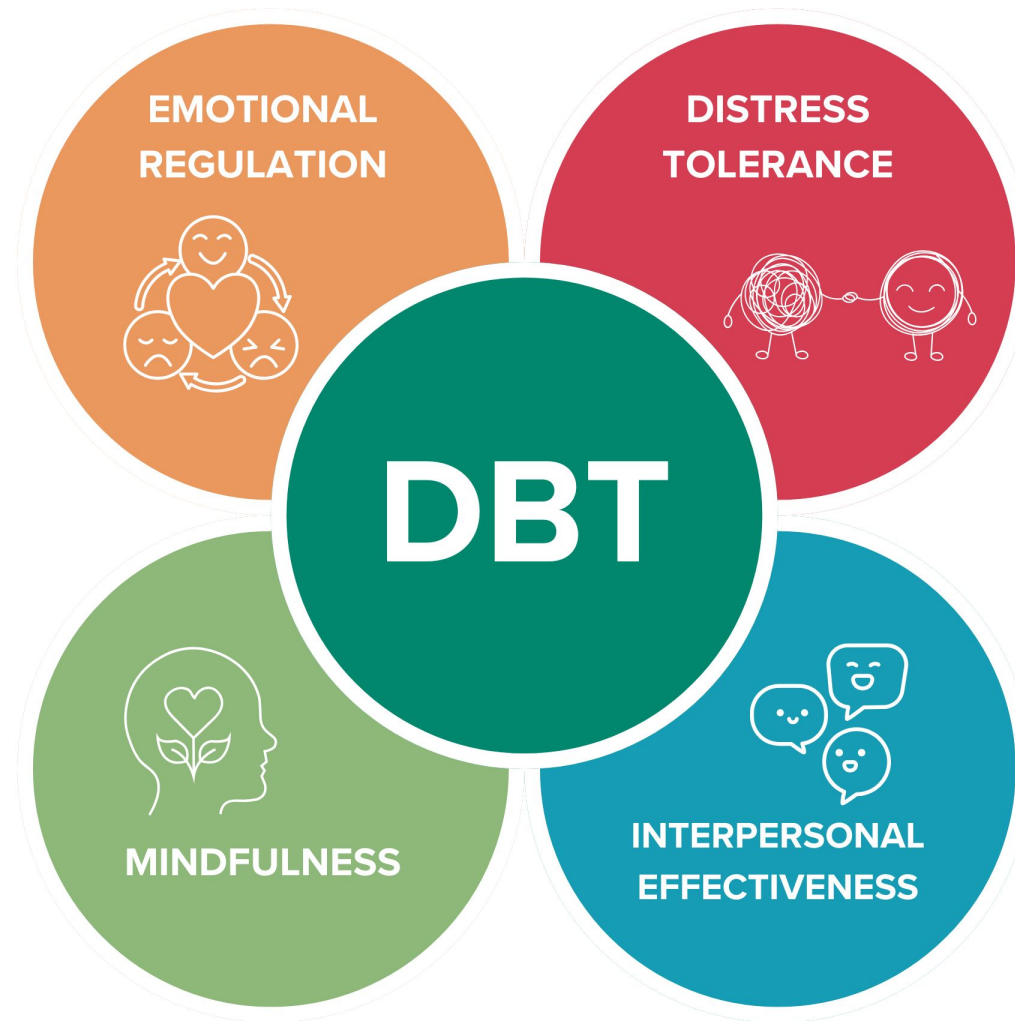
- Resilience research began in the 1970s in the same context that gave rise to developmental psychopathology [7]
- Looked at positive and negative pathways leading from psychopathology
- Considers the system and development of the individual
- “Study of individuals ‘off the risk gradient’ who manifest positive adjustment and development despite risk or adversity exposures [7,p.526]
- In addressing how trauma “gets into the brain and body” - Positive experiences have also been found to influence the biology and development of adaptation at multiple neurobiological levels [7]

Interventions to Build Resilience [8]

- Face fear
- Realistic optimism and positive emotions
- Social support
- Active and flexible coping
- Acceptance and positive reappraisal
- Religious and spiritual practices
- Meaning and purpose

Stage (phased)-Based Treatment

- Debated as to the merit
 - Phase-based treatment recommended for Complex PTSD by the International Society for Traumatic Stress Studies (ISTSS)
- Phase 1 - Safety and Stabilization [14]
 - Not needed for every client (don't encourage avoidance)
 - Focused on creating coping skills
 - Emotional regulation
 - Sobriety
 - Goals
 - Ensure client safety
 - Improve expression of emotion
 - Increase positive beliefs about self
 - Address feelings of guilt shame
 - Improve interpersonal functioning





TEMPERATURE

Change your body temperature. Splash your face with cold water, hold an ice cube, let car AC blow on your face, take a cold shower.



INTENSE EXERCISE

Do intense exercise to match your intense emotion. Sprint to the end of the street, do jumping jacks, push ups, intense dancing.



PACED BREATHING

Try Box Breathing: Breathe in for 4 seconds, hold it for 4 seconds, breathe out for 4, and hold for 4. Start again and continue until you feel calmer.



PAIRED MUSCLE RELAXATION

Focus on one muscle group at a time. Tighten your muscles as much as possible for 5 seconds. Then release and relax. Repeat with other muscle groups.

S.T.O.P SKILL

DISTRESS TOLERANCE

Helps us to react in a less impulsive way when we're upset or in need of support.

S

STOP! Don't react impulsively!

T

Take a step back from the situation and breathe.

O

Observe your internal bodily sensations, thoughts, and feelings. Connect with your 5 senses and the present. What are others saying or doing?

P

Proceed mindfully by acting with awareness. Think about your long-term goals. Which actions will make the situation better or worse?

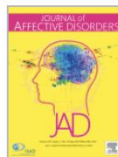
Stage (phased)-Based Treatment

- **Phase 2 - Exposure**



- Focuses on review of trauma
- Aim is re-experiencing traumatic events in which the client feels safe
- Evidenced based protocol ([APA Guidelines](#))
 - [TF-CBT](#)
 - [CPT](#)
 - Prolonged Exposure Therapy

Stage (phased)-Based Treatment

- **Phase 3 - Transition back to everyday life**
 - Goal is to reinforce the emotional, social, and relationship skills of the client
 - Positive psychology is the science of what is needed for a good life.
 - Assessment (Slade, 2010)
 - 1. Deficiencies and undermining characteristics of the person
 - 2. Strengths and assets of the person
 - 3. Lacks and destructive factors in the environment
 - 4. Resource and opportunities in the environment



Positive mental health as a predictor of recovery from mental illness

Matthew Iasiello ^{a b}  , Joseph van Agteren ^{a c}, Corey L.M. Keyes ^d, Eimear Muir Cochrane ^b

Show more 

 Add to Mendeley  Share  Cite

<https://doi.org/10.1016/j.jad.2019.03.065> 

[Get rights and content](#) 

Highlights

- Individuals who gain or maintain high levels of positive mental health are much more likely to recover from an affective disorder than those with low positive mental health.
- Positive mental health and mental illness are separate constructs, and both should be included in the assessment of patients interacting with mental health care systems.
- Improving and maintaining positive mental health may be an important strategic focus for reducing the burden of mental illness.
- Mental health care systems should explore offering of services designed to improve positive mental health in addition to reducing mental distress.

DEBATE

Open Access

Mental illness and well-being: the central importance of positive psychology and recovery approaches

Mike Slade*

Summary: If health services are to give primacy to increasing well-being, rather than to treating illness, then health workers need new approaches to working with individuals. For mental health services, this will involve the incorporation of emerging knowledge from recovery and from positive psychology into education and training for all mental health professionals, and changes to some long-established working practices.

Post-traumatic Growth

- PTG refers to the positive psychological changes that may occur after experiencing a traumatic event
- Manifestations of these posttraumatic benefits include greater appreciation for life, more meaningful interpersonal relationships, enhanced spiritual beliefs, a new-found purpose in life, and an increased sense of personal strength [9]
- “Current research indicates that psychological distress following trauma may be necessary to initiate the cognitive processes that may help facilitate PTG.” [9, p. 2]
- Higher levels of PTG correspond with higher levels of quality of life [9]

**PTG helps individuals live a fuller and more meaningful life,
it does not allow a return to normality.**



it would appear that PTG and psychological comfort may be distinct constructs.
Indeed, the literature mostly suggests that “growth will not necessarily
decrease pain or increase happiness, but on the contrary, significant growth
may only occur when it is preceded by, or when it occurs together with
significant amounts of subjective distress”

(Tedeschi, Park & Calhoun, 1998, p.217)



Research paper

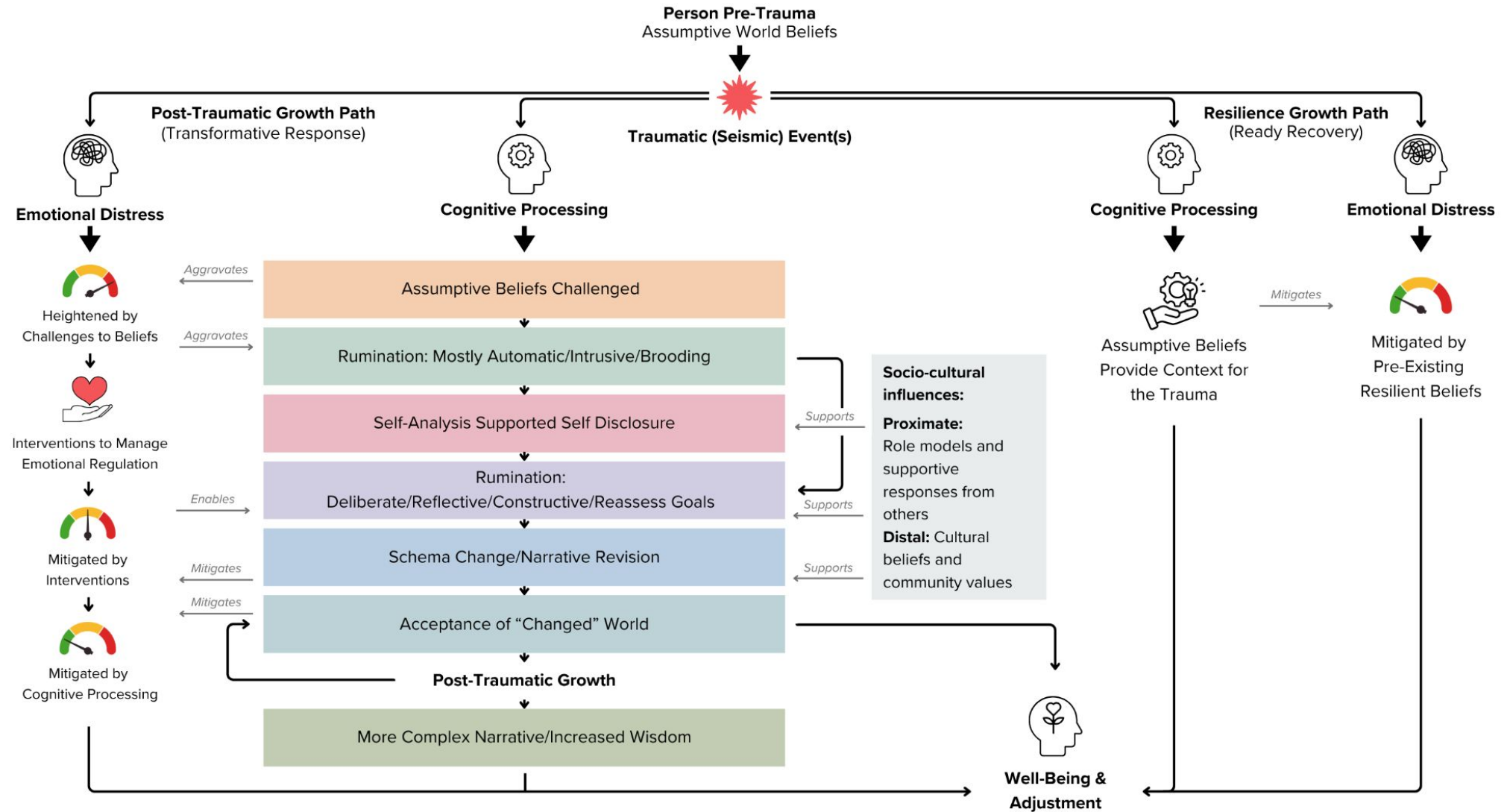
Dynamic interplay between PTSD symptoms and posttraumatic growth in older military veterans

Julia M. Whealin ^{a b}  , Barbara Pitts ^{a c}, Jack Tsai ^{d e}, Caleb Rivera ^f, Brienna M. Fogle ^e, Steven M. Southwick ^{e g}, Robert H. Pietrzak ^{e g}

Highlights

- This study examined posttraumatic stress disorder symptoms and posttraumatic growth in a nationally representative cohort of 2006 older U.S. veterans over a four-year period.
- Autoregressive cross-lagged panel regression analyses revealed that posttraumatic stress disorder symptoms had strong associations with both current and subsequent posttraumatic growth.
- Results of this study suggest that greater severity of posttraumatic stress disorder symptoms, particularly avoidance and hyperarousal symptoms, may contribute to and maintain posttraumatic growth over time in older veterans.
- Deliberate, constructive attempts to manage chronic posttraumatic stress disorder symptoms via active coping and religious coping may help promote greater posttraumatic growth over time in this population.

Theoretical Model of Post-Traumatic Growth



Refining our Understanding of Traumatic Growth in the Face of Terrorism: Moving from Meaning Cognitions to Doing what is Meaningful

Stevan E. Hobfoll* and Brian J. Hall

Kent State University, USA

Daphna Canetti-Nisim

University of Haifa, Israel

Sandro Galea

University of Michigan, USA

Robert J. Johnson

University of Miami, USA

Patrick A. Palmieri

*Summa Health Systems/KSU, Center for the Treatment and Study of
Traumatic Stress, Akron, and Kent State University, USA*

PTG Actions

- “Indeed, while Calhoun and Tedeschi (2014) tend to describe the growth process as a search for meaning (e.g. cognitive engagement), Hobfoll et al. (2007) make a distinction between growth actions and growth cognitions, stating that cognitive change alone is not sufficient for growth to occur. Indeed, they show in one of their studies that PTG may only be beneficial if it includes taking action.” [9]
- Posttraumatic Growth Actions play an important role in the reduction of posttraumatic stress reduction [9]

PTG Actions

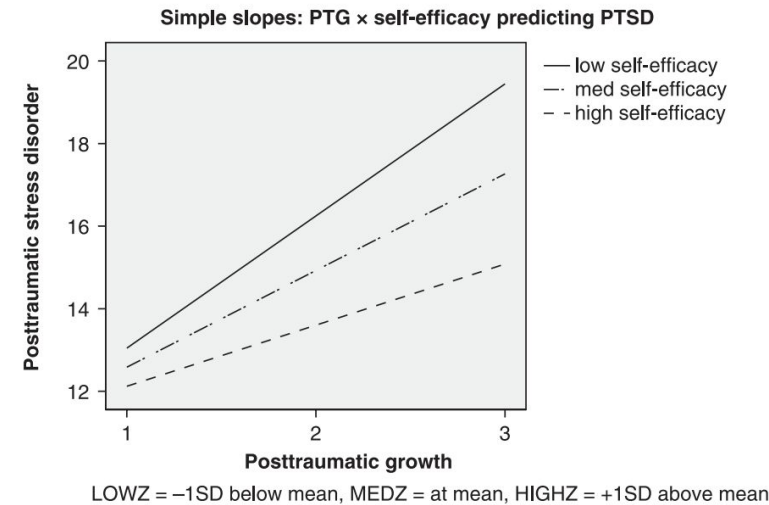


FIGURE 2 The impact of self-efficacy and post-traumatic growth on PTSD symptoms.

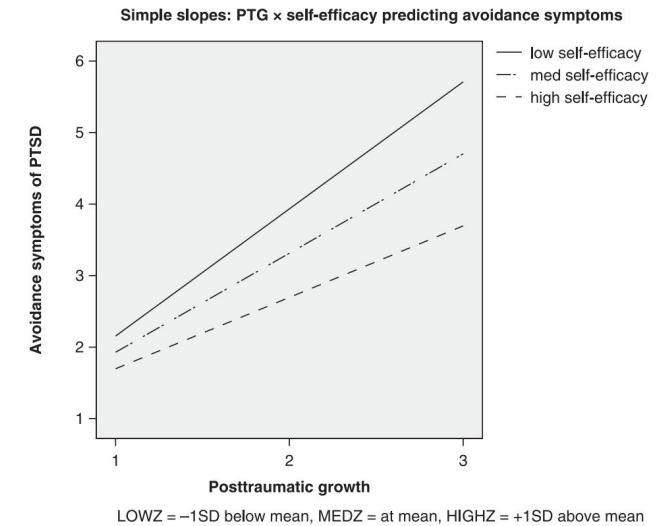


FIGURE 3 The impact of self-efficacy and post-traumatic growth on avoidance symptoms.

“In line with Victor Frankl’s (1959) existential discourse and the weighty evidence of behavioral activation in the behavioral and cognitive behavioral tradition (Jacobson, Martell, & Dimidjian, 2001; Martell, Addis, & Dimidjian, 2004), we now conceptualise true posttraumatic growth not simply as cognitive process, or intellectual exercise in reframing, but salutogenesis through action growth whereby an individual actualises their benefit-finding cognitions—or reifies their illusions through action.” [10]

Self-Determination

- Self-determination theory (SDT) is a macro-theory of human motivation, personality development, and well-being [12]
- Universal psychological needs
 - Autonomy
 - Competency
 - Relatedness
- Posits that psychological health involves the fulfillment of all three needs

References

1. Budd, R., & Hughes, I. (2009). The Dodo Bird Verdict--controversial, inevitable and important: a commentary on 30 years of meta-analyses. *Clinical psychology & psychotherapy*, 16(6), 510-522. <https://doi.org/10.1002/cpp.648>
2. Kirkbride, J. B., Anglin, D. M., Colman, I., Dykxhoorn, J., Jones, P. B., Patalay, P., ... & Griffiths, S. L. (2024). The social determinants of mental health and disorder: evidence, prevention and recommendations. *World psychiatry*, 23(1), 58-90.
3. Han, H. R., Miller, H. N., Nkimbeng, M., Budhathoki, C., Mikhael, T., Rivers, E., ... & Wilson, P. (2021). Trauma informed interventions: A systematic review. *PloS one*, 16(6), e0252747.
4. Brewin, C. R., Atwoli, L., Bisson, J. I., Galea, S., Koenen, K., & Lewis-Fernández, R. (2025). Post-traumatic stress disorder: evolving conceptualization and evidence, and future research directions. *World Psychiatry*, 24(1), 52-80.
5. Steinert C, Hofmann M, Leichsenring F et al. The course of PTSD in naturalistic long- term studies: high variability of outcomes. A systematic review. *Nord J Psychiatry* 2015;69:483-96.
6. Weinberg M, Gil S. Trauma as an objective or subjective experience: the association between types of traumatic events, personality traits, subjective experience of the event, and posttraumatic symptoms. *J Loss Trauma* 2016;21:137-46
7. Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual review of clinical psychology*, 17(1), 521-549.

References

8. Southwick, S. M., & Charney, D. S. (2021). Resilience for Frontline Health Care Workers: Evidence-Based Recommendations. *The American journal of medicine*, 134(7), 829–830. <https://doi.org/10.1016/j.amjmed.2021.02.010>
9. Kautz MM, Collins A, Schechter CB, et al. Longitudinal Trajectories of PTSD Symptoms Predict Levels of Posttraumatic Growth in World Trade Center Responders. *Chronic Stress*. 2022;6. doi:[10.1177/24705470221122898](https://doi.org/10.1177/24705470221122898)
10. Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., Johnson, R. J., & Palmieri, P. A. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology*, 56(3), 345-366.
11. Darby, R. J., Taylor, E. P., & Cadavid, M. S. (2023). Phase-based psychological interventions for complex post-traumatic stress disorder: A systematic review. *Journal of Affective Disorders Reports*, 14, 100628.
12. Ryan, R. (2009). Self determination theory and well being. *Social Psychology*, 84(822), 848.
13. Keyes, C. (2025). *Languishing: How to feel alive again in a world that wears us down*. Random House.
14. Maercker, A. Development of the new CPTSD diagnosis for ICD-11. *bord personal disord emot dysregul* 8, 7 (2021). <https://doi.org/10.1186/s40479-021-00148-8>

References

15. Maercker, A., Brewin, C. R., Bryant, R. A., Cloitre, M., Reed, G. M., Van Ommeren, M., ... & Saxena, S. (2013). Proposals for mental disorders specifically associated with stress in the International Classification of Diseases-11. *The Lancet*, 381(9878), 1683-1685.
16. Deak, J. D., Miller, A. P., & Gizer, I. R. (2019). Genetics of alcohol use disorder: a review. *Current opinion in psychology*, 27, 56–61. <https://doi.org/10.1016/j.copsy.2018.07.012>
17. Góralczyk-Bińkowska, A., Szmajda-Krygier, D., & Kozłowska, E. (2022). The microbiota–gut–brain axis in psychiatric disorders. *International journal of molecular sciences*, 23(19), 11245
18. Liu, R. T., Walsh, R. F., & Sheehan, A. E. (2019). Prebiotics and probiotics for depression and anxiety: A systematic review and meta-analysis of controlled clinical trials. *Neuroscience & Biobehavioral Reviews*, 102, 13-23.
19. Rubin et al (2016). Participant, rater, and computer measures of coherence in posttraumatic stress disorder. *Journal of Abnormal Psychology*, 125(1), 11-25.

References

20. McNally (2022). The return of repression? Evidence from cognitive psychology. *Topics in Cognitive Science*, 00, 1-14.
21. 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.
22. Engelhard, 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.
23. 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.