Process Based Therapy (PBT): New Integrative Framework for Psychotherapy?

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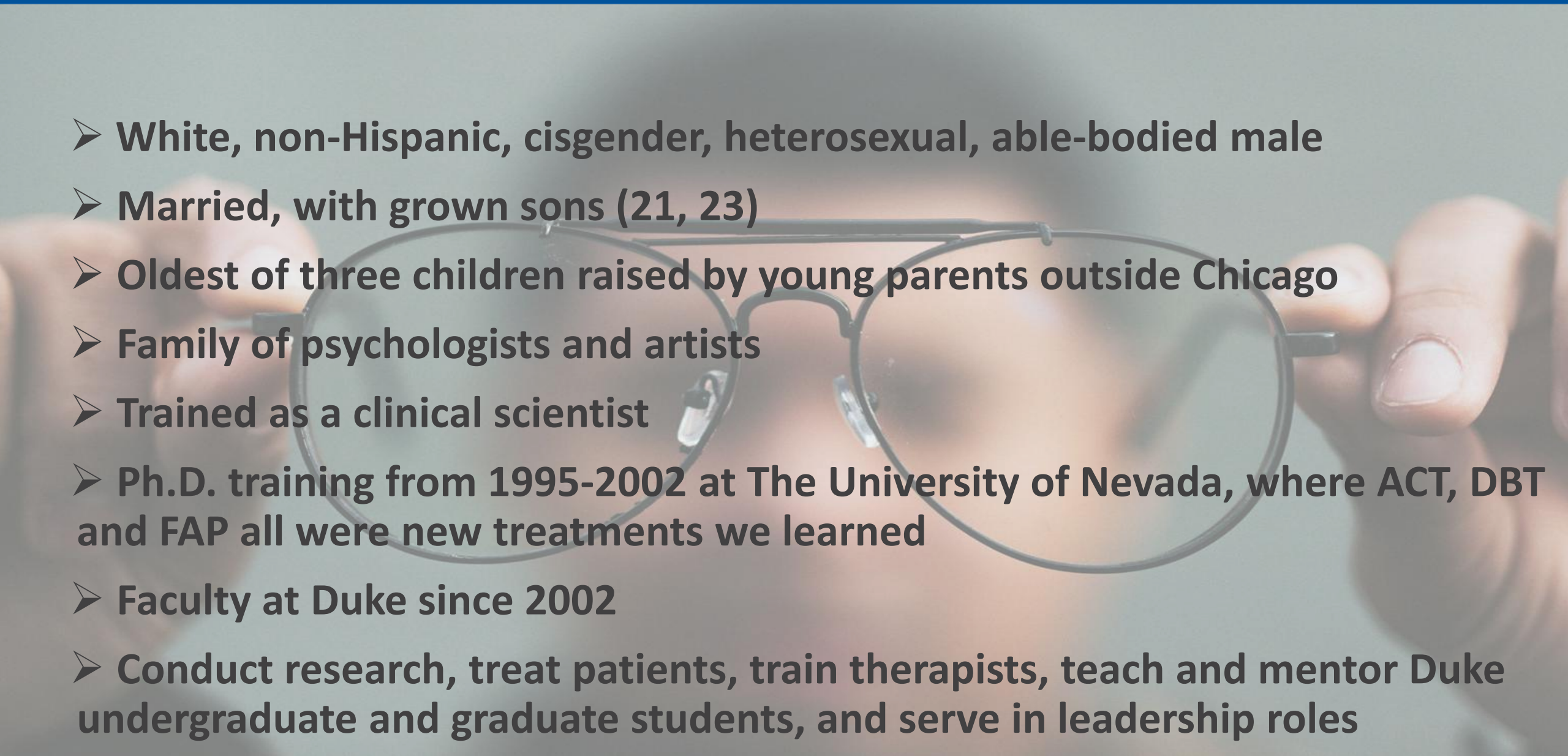
My Lenses



- White, non-Hispanic, cisgender, heterosexual, able-bodied male
- Married, with grown sons (21, 23)
- Oldest of three children raised by young parents outside Chicago
- Family of psychologists and artists
- Trained as a clinical scientist
- Ph.D. training from 1995-2002 at The University of Nevada, where ACT, DBT and FAP all were new treatments we learned
- Faculty at Duke since 2002
- Conduct research, treat patients, train therapists, teach and mentor Duke undergraduate and graduate students, and serve in leadership roles

Disclosures

- Stipend for Scientific Advisory Board Member role (The Misophonia Research Fund)
- Equity as a scientific advisor in digital health start-ups (Untold)
- Payment for clinical training and consultation related to misophonia and/or evidence-based psychotherapies (e.g., DBT) to organizations in the US and China
- Royalties from the American Psychological Association for a book about Dialectical Behavior Therapy

Evidence-Based Psychotherapies Have Made a Major Positive Impact Over the Last 50 years

- First wave of behavioral therapies in the 1960's
- Cognitive therapies
- The joining of cognitive and behavioral therapy protocols: CBT
- Continued development of CBTs for specific diagnoses, ages, cultures
- The rise of acceptance and mindfulness-based therapies in the 90's and 00's
- The rise of transdiagnostic therapies
- Expansion of evidence-based therapies beyond CBTs to other theoretical orientations (e.g., mentalization-based therapy, interpersonal therapy, brief psychodynamic therapy, somatic therapies, etc.)

****In a relatively short period of time, psychotherapy has advanced significantly and positively impacted countless lives around the world**

But There are Major Problems with Evidence Based Psychotherapies

Most evidence-based psychotherapies were developed:

1. based on false medical model assumptions about mental health (e.g., disease model, disorders as distinct from each other)
2. to reduce symptoms of DSM diagnoses (i.e., not underlying processes or impairment in functioning)
3. using nomothetic assumptions (i.e., people with diagnosis X are the same based on a shared diagnosis)
4. with non-representative samples (i.e., excluding marginalized, minoritized, and complicated co-morbidities)
5. in studies paid for by flawed funding systems privileging certain people and ideas
6. resulting in the proliferation of distinct brands of protocols for disorders (e.g., BA, DBT, CT, CPT, PE, ERP, etc.)
7. and highly prohibitive barriers to clinician implementation (e.g., cost, time to become certified)
8. leading to failures in dissemination and implementation of the best available therapies (i.e., few clinicians are trained in them)
9. and clinicians commonly individualizing these protocols in an ad hoc manner
10. all suggesting that *the* ***field needs a new more flexible evidence-based framework for therapy that helps overcome these limitations*** as best as possible without waiting for the federal government to fund many large expensive clinical trials for the next 10-20 years

Psychotherapy Now Has a Brand Problem

- Many schools of therapy and 100's of trademarked brands
- Brands of therapies were mostly created for DSM diagnoses (e.g., cognitive therapy or behavioral activation for depression, CPT or PE for PTSD, CBT-E for eating disorders, etc.)
- But people commonly have multiple co-occurring diagnoses
- Co-occurring diagnoses may share underlying *processes*
- Processes are change targets for therapies, not diagnoses
- We don't treat diagnoses, we treat people with problematic patterns maintained by longstanding and impairing biopsychosocial processes

Question: Why do we match diagnoses to brands of treatment protocols?

The Rise of Transdiagnostic Psychotherapy Brands

- In the last 25 years, “transdiagnostic” protocols have gained popularity
  - Transdiagnostic CBTs: e.g., DBT, ACT, Behavioral Activation, Unified Protocol
  - Non-CBTs: e.g., Sensorimotor therapy, AEDP, Motivational Interviewing

- Like diagnostically-driven treatments, transdiagnostic protocols are constrained by prescriptions/proscriptions about: (1) which procedures to use, when (e.g., required sequence of interventions), and how (e.g., certain concepts or worksheets must be used)

Common Psychotherapy Processes Account for Outcomes

- Non-directive supportive therapy avoids the brand problem
- Common factors across branded and non-branded psychotherapies account for much of the outcomes for many problems
- Therapeutic *relationship* processes
  - Empathy, listening, support, validation, warmth, etc.
- Therapeutic *alliance* processes are not limited to the relational bond
  - Collaborative agreement on planned therapeutic processes and outcomes
  - We have alignment when we share expectations about what to change and how we will try to make changes

The Problem

- The field continues to develop more brands of psychotherapy for specific diagnoses, problems, and demographics
- But more brands ≠ better outcomes
- Therapists need a model to help that is neither too rigid nor too loose

- Therapists need a framework to use across diagnoses, problems, and demographics that is grounded in a scientific/biological foundation and can be flexibly tailored to each patient

Examples of Past Efforts to Integrate Psychotherapies

Type of Integration	Therapy
Technical Eclecticism *Use diverse therapeutic procedures across theoretical models with an emphasis on techniques that work*	Multimodal Therapy (Lazarus, 1976)
Theoretical Integration *Intentional blend of >1 theoretical model*	Dialectical Behavior Therapy (Linehan, 1993)
Common Factors *Emphasis on common therapeutic processes associated with improvement* (e.g., supportive listening, therapeutic relationship and alliance)	Transtheoretical Model (Prochaska & Norcross, 2002)
Assimilative Integration Use of *one theoretical frame for eclectic use of therapeutic procedures*	Sensorimotor Psychotherapy (Ogden & Minton, 2000)

Past Efforts to Integrate Psychotherapies

1900s-1950s: Psychoanalytic and psychodynamic therapies are dominant approaches

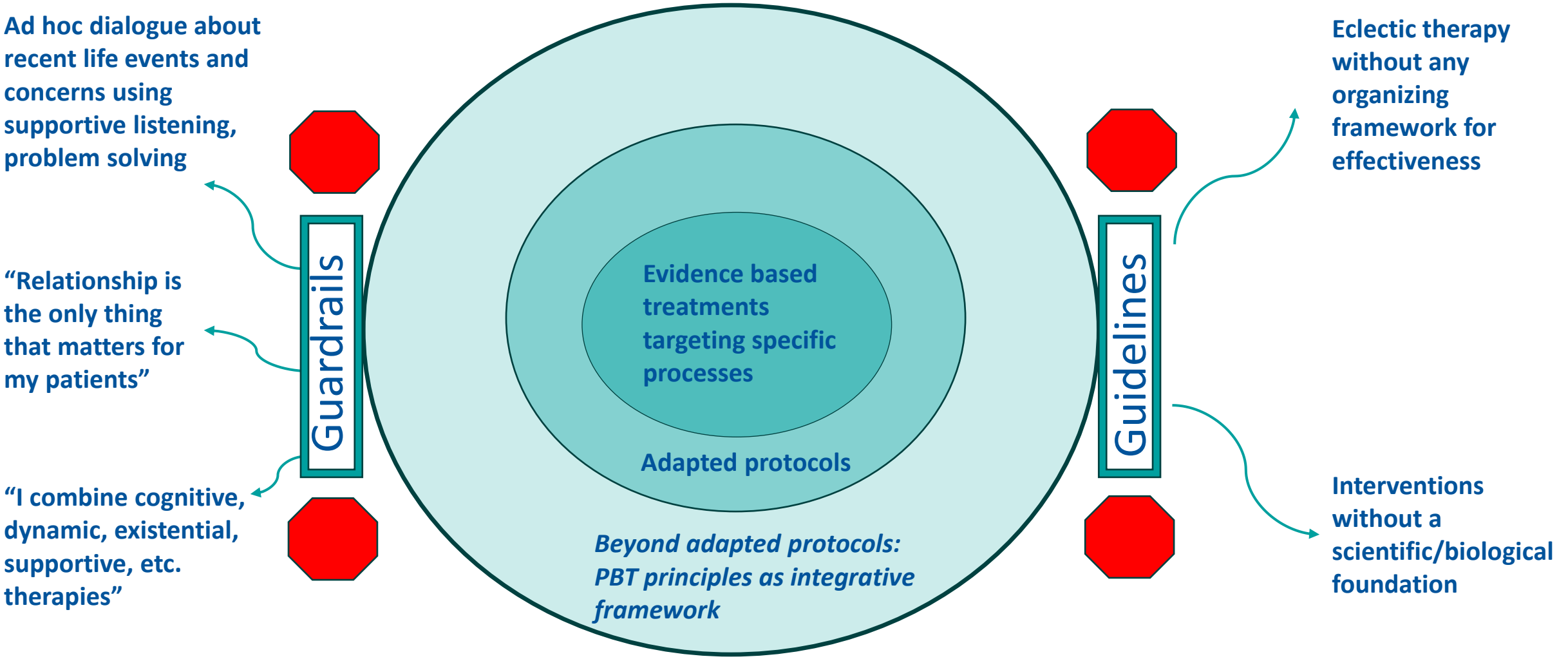
1950s-1970s: New schools of therapy emerge as options (e.g., humanistic, existential, gestalt, behavioral, cognitive)

1960s-1980s: Technical eclecticism emerges as way to blend techniques across different types of therapy

1980s-2010s: Integrative approaches (many) become accepted and differentiated from technical eclecticism by being theoretically anchored

2018-now: Process Based Therapy outlines principles and approaches to adapt and personalize branded evidence-based therapies and use non-branded case formulation-based approaches

PBT as Frame for Psychotherapy



PBT is Not a Brand, it is a Framework

- Most brands of therapies are process-based
- Core tenets of PBT are found in many brands of therapy
- PBT is a framework to help individualize existing process-based therapies
- PBT provides guidelines and guardrails for therapists choosing to individualize a specific type of therapy
- PBT is not intended to replace other therapies
- Instead, PBT is a model to help unify psychotherapy as a field by supplanting dogmatic and tribal allegiances with patient-centered principles at the sweet spot between overly rigid treatment manuals and overly loose talk therapy

PBT Framework

- Does not use medical model
- Prioritizes patient preference, capability, strengths, and collaboration with therapist
- Functional analysis used as a primary assessment tool
- Case formulation-based treatment planning
- Can use, adapt, or not use evidence-based branded treatment protocols
- Use evidence-based therapeutic procedures targeting specific change processes
- Assumes a network of biopsychosocial processes maintain problems
- Assumes contextual variability across/within patients in problematic processes
- Theoretically grounded but procedurally diverse (i.e., not eclectic therapy)

Comparing PBT to Other Approaches

PBT

- Tailored using functional analysis, clear organizing frame, patient strengths and collaboration
- Target known change processes identified scientifically
- Uses transdiagnostic evidence-based interventions
- Uses measurement to assess progress and refine interventions

Other Approaches

- May rigidly use a protocol, loosely provide support, or use eclectic therapy without a clear framework
- May or may not target known change processes
- May or may not use evidence-based interventions
- May or may not use measurement to assess progress and outcomes

What's New with PBT?

- Many components to PBT are not new (e.g., functional analysis, case formulation-based approach, use of multiple therapeutic procedures)

- Case formulation-based therapy is common in clinical practice, but can be idiosyncratic without coherence and consistency, eclectic, and/or use therapeutic approaches not well grounded in biology or science

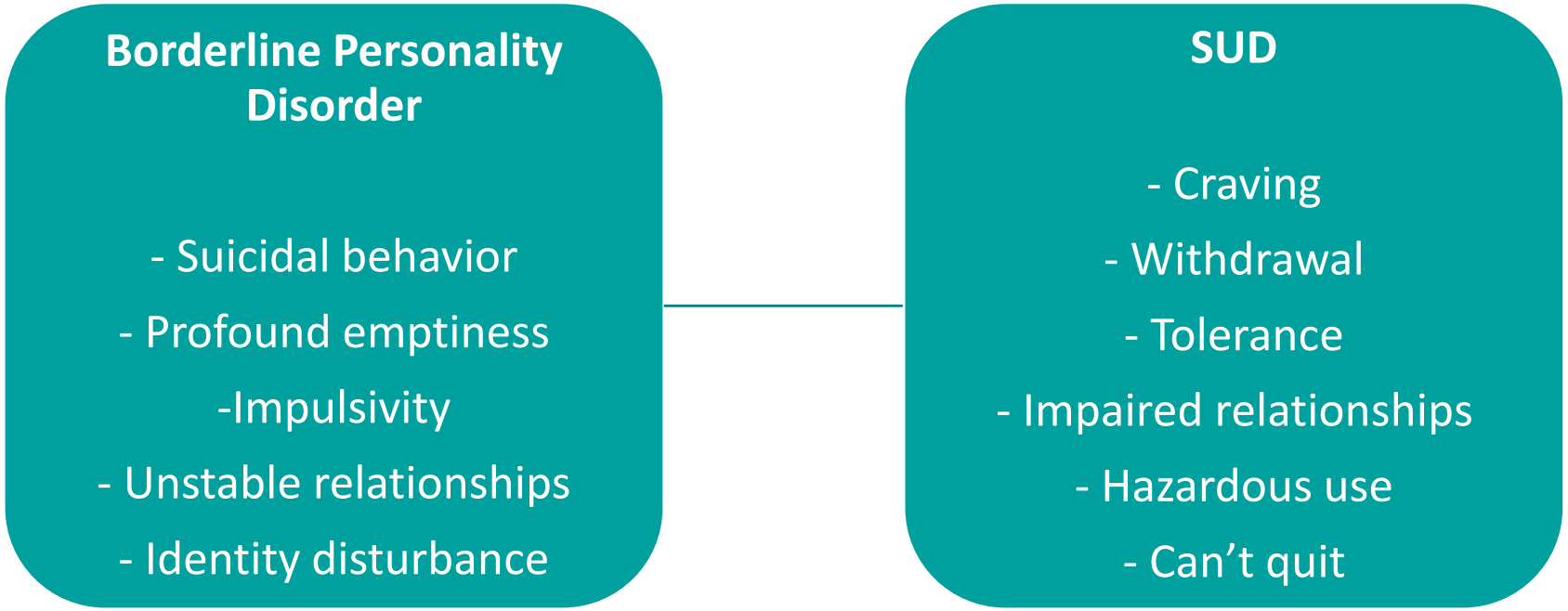
- PBT adds:
  - Use of network-based case formulation
  - Emphasis on targeting mechanistic biopsychosocial change processes
  - Theoretically grounded model enabling procedurally integrative treatment
  - Use of branded protocols as options
  - Emphasis on evidence-based change procedures spanning non-specific and specific interventions across brands of therapies

Overview of a PBT Case Formulation Approach Without a Specific Branded Protocol

Individualized collaborative use of therapeutic procedures that are transdiagnostic, evidence-based, and target underlying biopsychosocial processes causing impairment

1. Biopsychosocial assessment of current problems, context, and development of problems
2. Identify patient values/goals and assess/enhance motivation to change
3. Build and attend to strong therapeutic relationship and alliance on shared expectations about treatment process and goals
4. Identify helpful and unhelpful biopsychosocial processes before, during, and after problems
5. Develop shared understanding about networked processes maintaining problems
6. Collaboratively prioritize targeted biopsychosocial processes to disrupt the network
7. Offer evidence-based intervention options to change prioritized processes
8. Use evidence-based interventions to develop new responses in specific contexts
9. Increase flexibility of new responses, ability to discriminate which new responses work in which contexts, and retention of learned new responses over time
10. Measure change in targeted processes qualitatively and quantitatively, problem-solving use of interventions and adjusting interventions and process targets as needed based on data

Case Example: Co-Occurring PD and SUD



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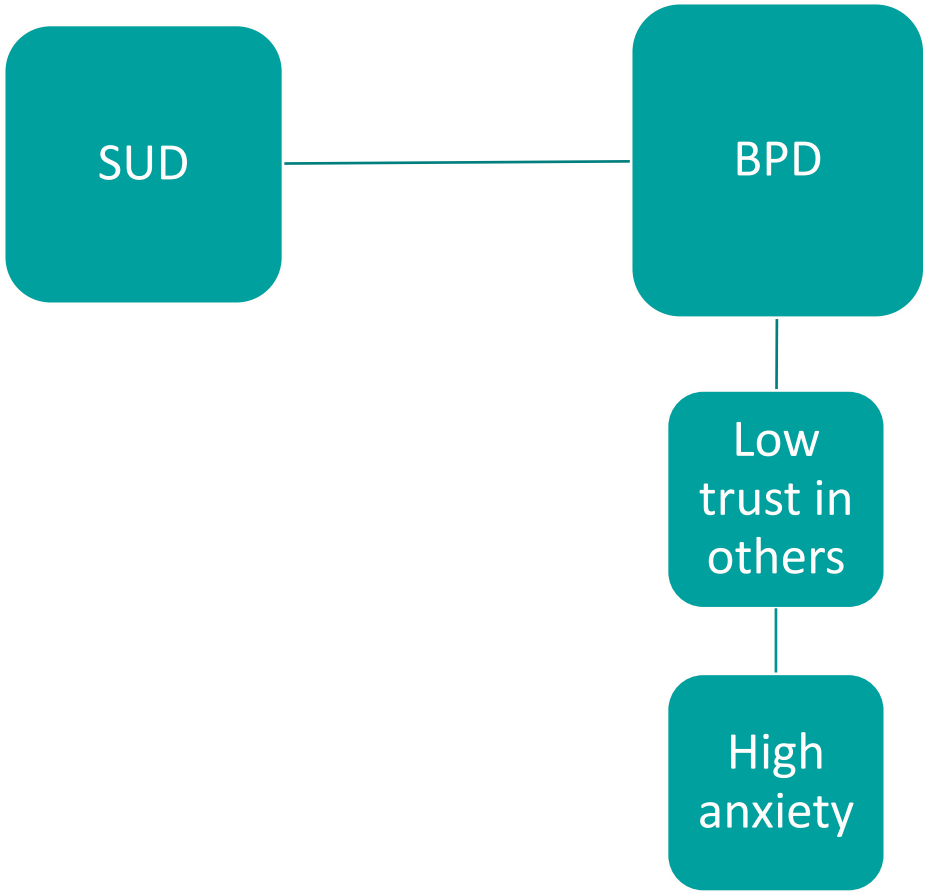

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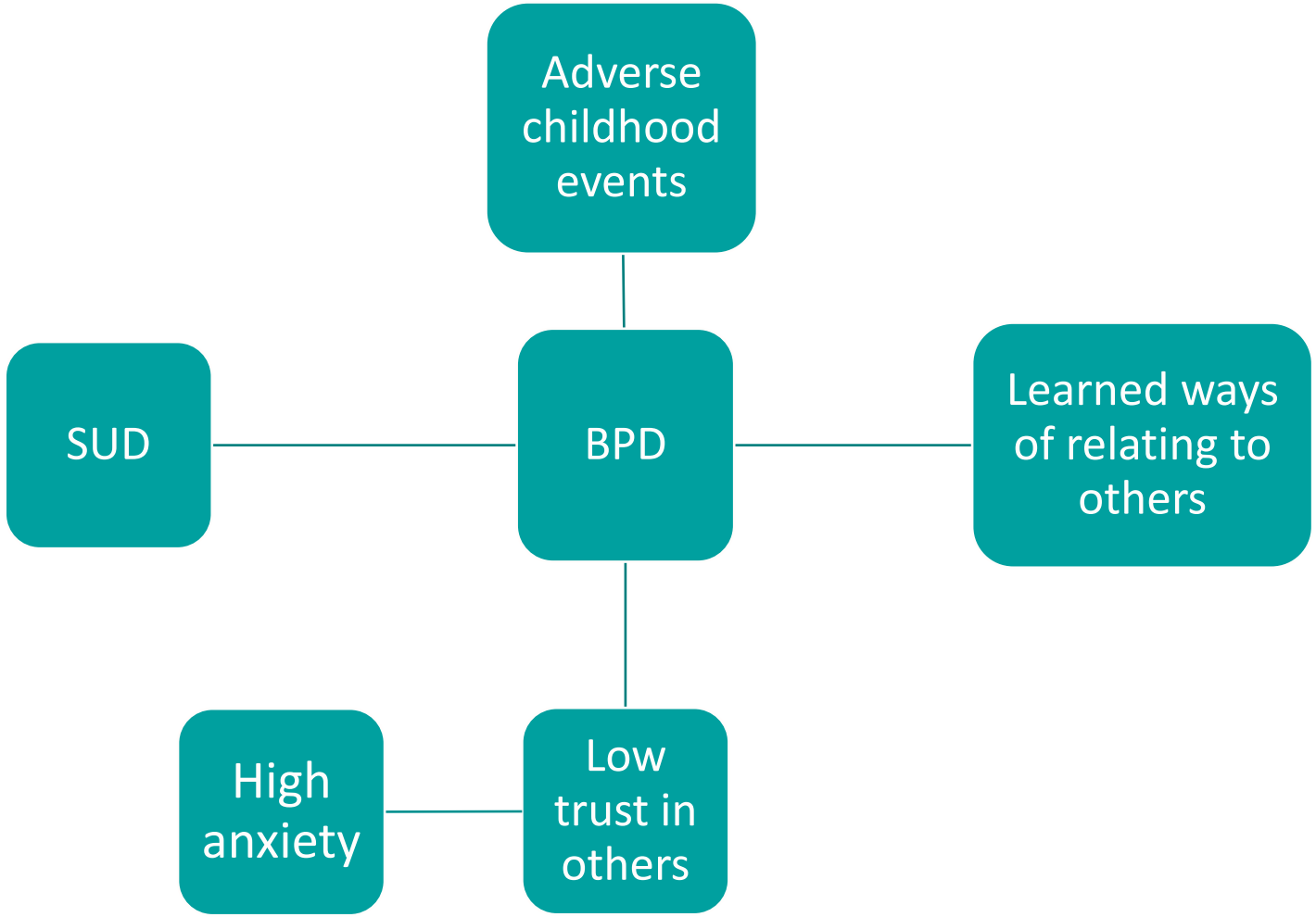

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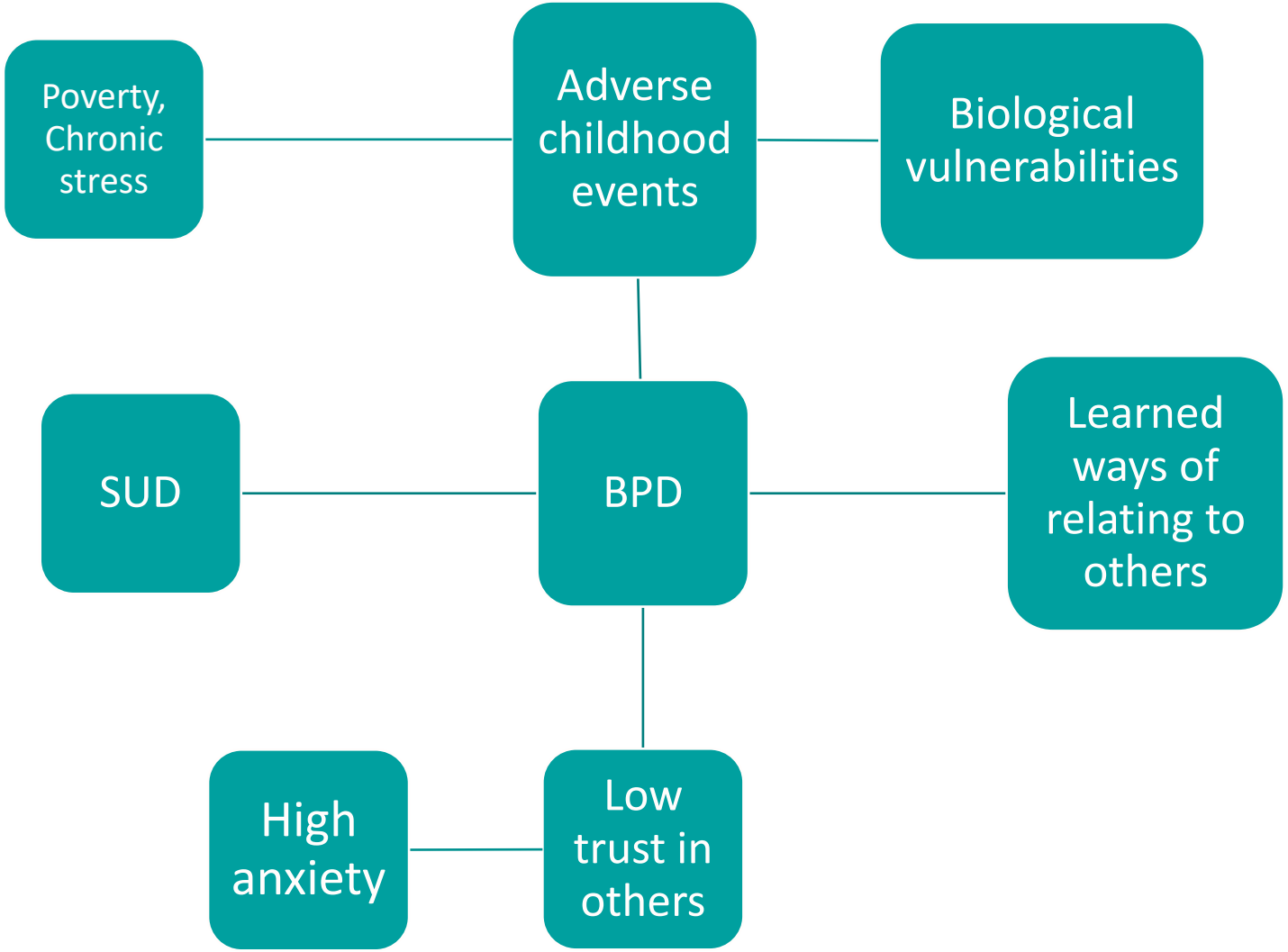

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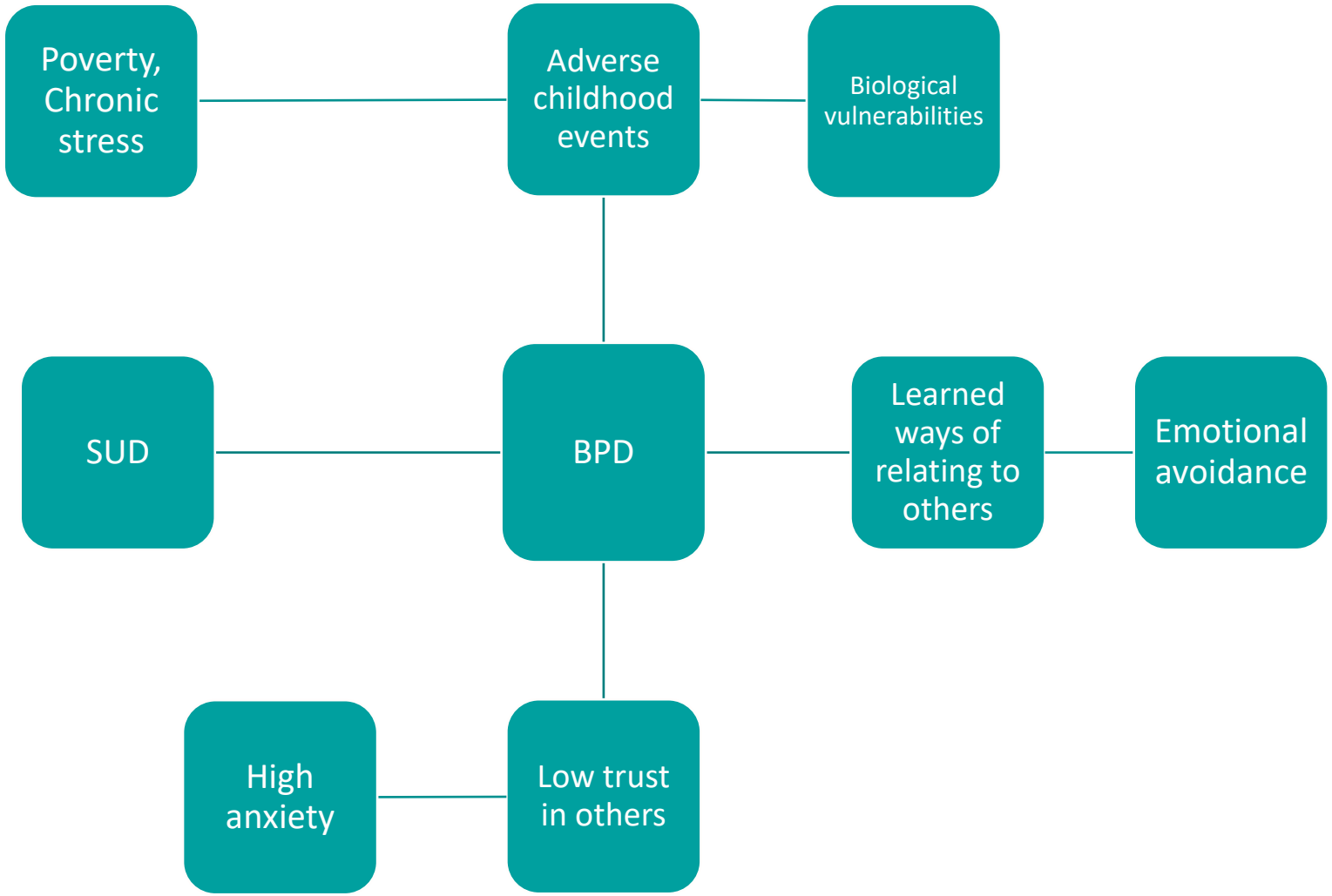

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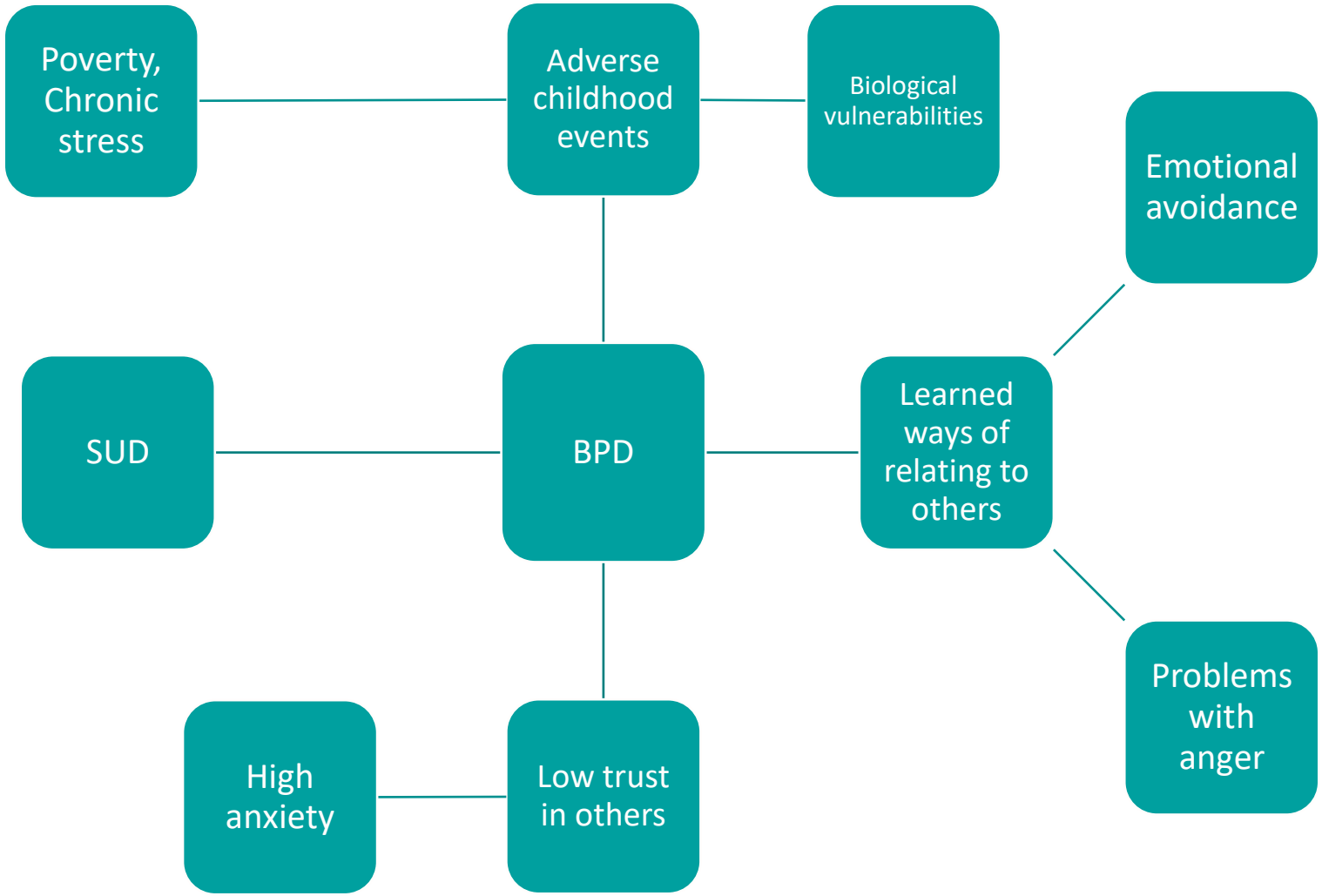


Treatment Option 1: Manualized Protocol

- Use evidence-based manualized protocol for co-occurring BPD and SUD (e.g., DBT)

- But what if the patient is unable or unwilling to do DBT?
- Or, what if they are only able/willing to do parts of DBT?
- Or, what if they complete a course of DBT but need more treatment?

Treatment Option 2: Adapt the Manualized Protocol

- Personalize the treatment approach using DBT
- But at what point in adapting DBT are you no longer doing DBT?
- What if you add other non-DBT interventions? Which ones should you use?
- What if the patient relapses on substances when you target self-harm behavior?
- What if the patient's mistrust of you interferes with a strong therapeutic alliance?
- What if they seem to benefit from insights about childhood history
- What if you stop using or only sometimes use core required elements of DBT?
- What if most of your session looks like non-directive supportive therapy?

- At what point are you no longer adapting DBT? **Now what?**

Treatment Option 3: Use Common Factors Only

- Listen
- Support
- Empathy
- Trust
- Hope
- Validation
- Strong relationship

**What if the patient needs more than this to meet therapy goals?

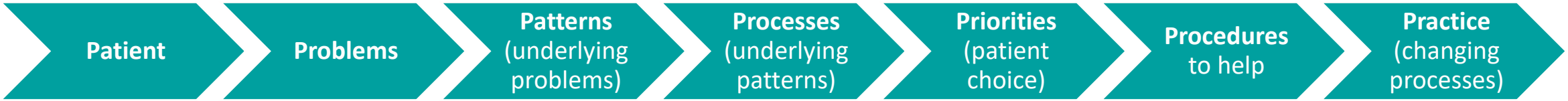
Case Formulation-Based PBT: What Could it Look Like?

- Individualized collaborative use of therapeutic procedures that are transdiagnostic and not unique to any specific branded treatment

1. Build and attend to therapeutic relationship and alliance
2. Assess patterns underlying problems
3. Collaboratively prioritize specific biopsychosocial processes to change
4. Use evidence-based interventions to change those biopsychosocial processes
5. Measure change qualitatively and quantitatively

- Repeat and modify these steps as needed until treatment ends

The P’s of a PBT Framework



PBT Case Formulation Tool: EEMM Grid

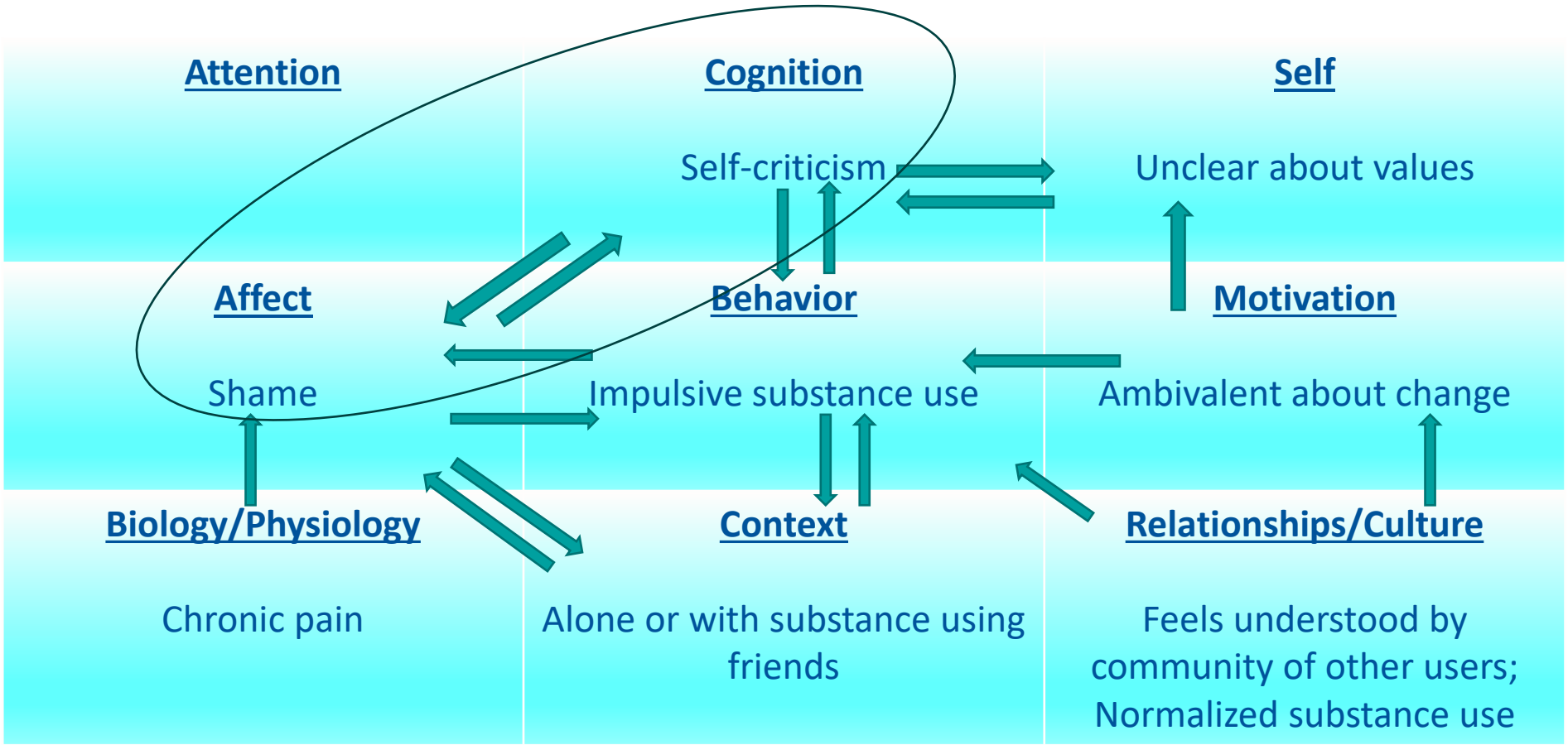
Core PBT Change Principles: Variability, Selection, and Retention

	Variability **(flexible range of responses available to adapt to needs)**	**Selection** **(use of different responses based on context needs)**	**Retention** **(maintenance of context-based responses over time)**
Clinically friendly definition of PBT change strategy	Try multiple new ways to deal with difficult situations or experiences to see what works	Use different responses based on your needs in the situation	Remember over time to use these new responses in these kinds of situations to achieve your goals
Example 1: Cannabis Use Disorder	Try lots of different skills to manage cravings and emotions	Learn to use certain skills in certain contexts and choose contexts supporting skills	Create a daily structure and plan with reminders of what works for long-term success
Example 2: Borderline Personality Disorder	Use varied emotion regulation and distress tolerance strategies	Identify and use certain skills in certain contexts but not others	Develop long-term plan for use of reinforced skills and strategies

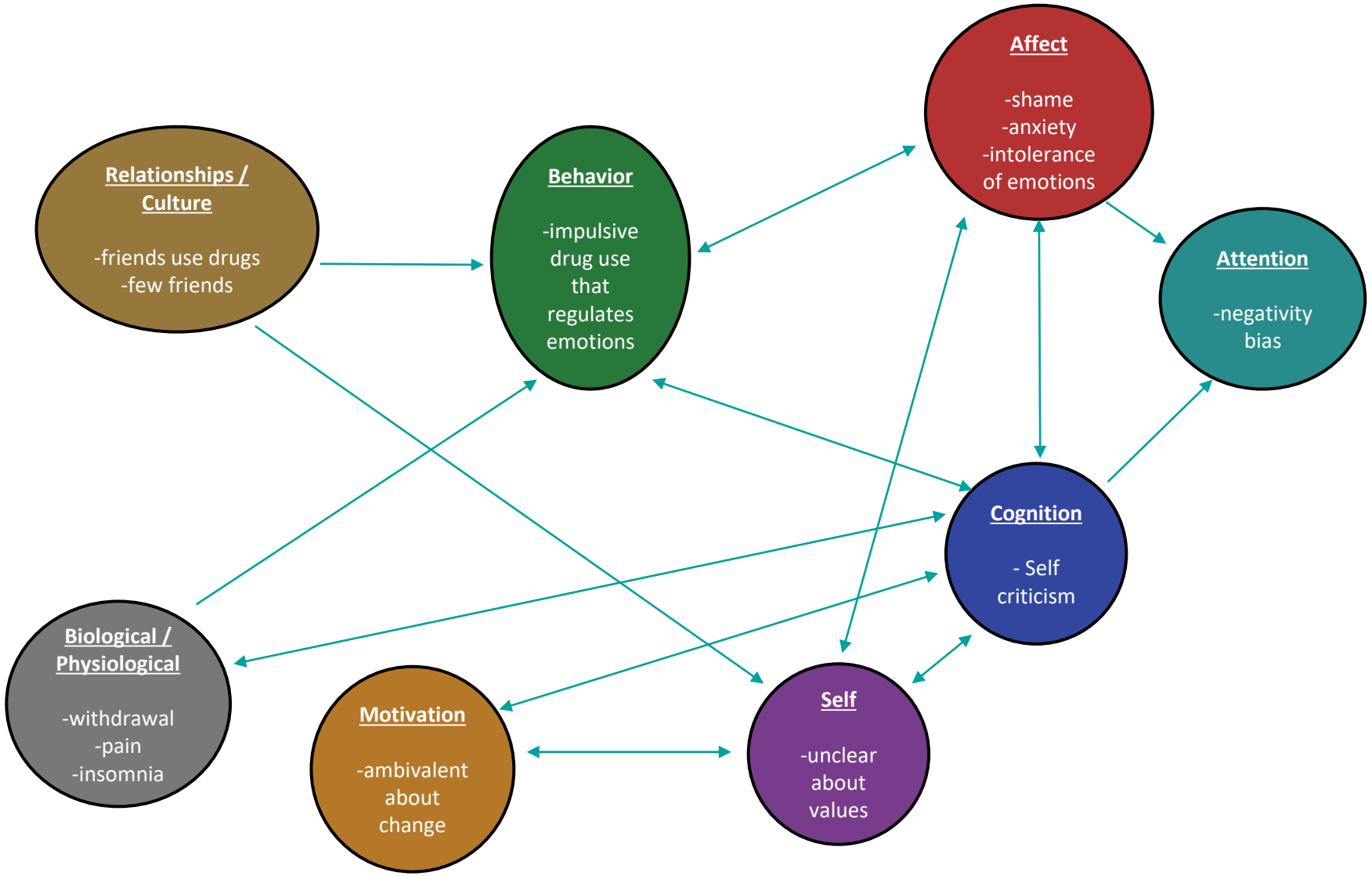
Assessment Using EEMM Grid

Attention	**Cognition**	**Self**
Affect	**Behavior**	**Motivation**
Biology/Physiology	**Context**	**Relationships/Culture**

EEMM Grid Example



Example Network Using EEMM Grid



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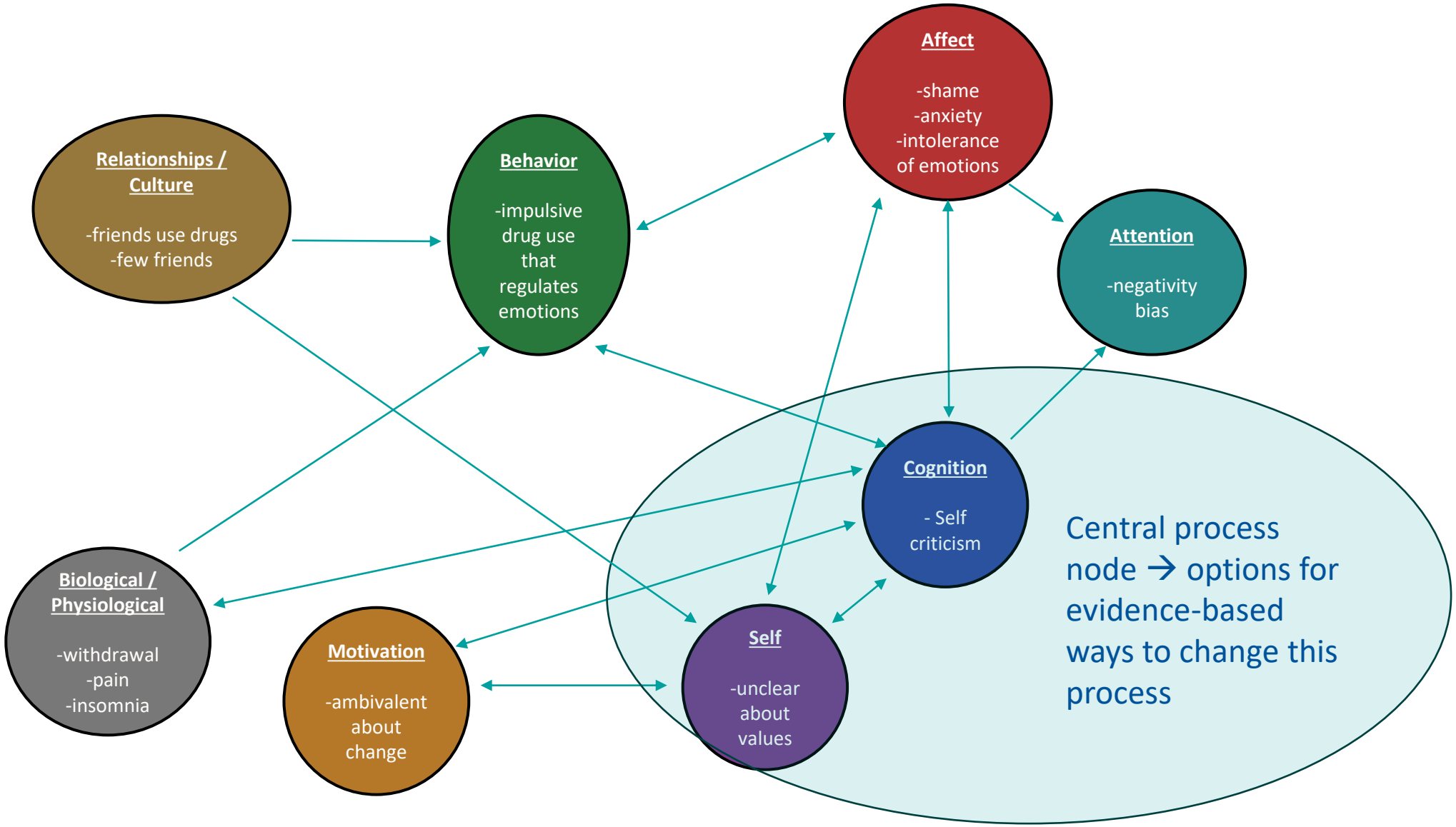


PBT Case Formulation Tool: BASIC Transdiagnostic Process Areas

Behavioral (e.g., avoidance, escape, impulsivity, poor stimulus control, excesses, deficits)

Attentional (e.g., distractibility, hypervigilance, attentional bias, risk avoidance)

Somatic (e.g., sensory/emotional sensitivity/reactivity, anhedonia, hyperarousal)

Interpersonal (e.g., indirect aggression, low empathy, hostility, isolation)

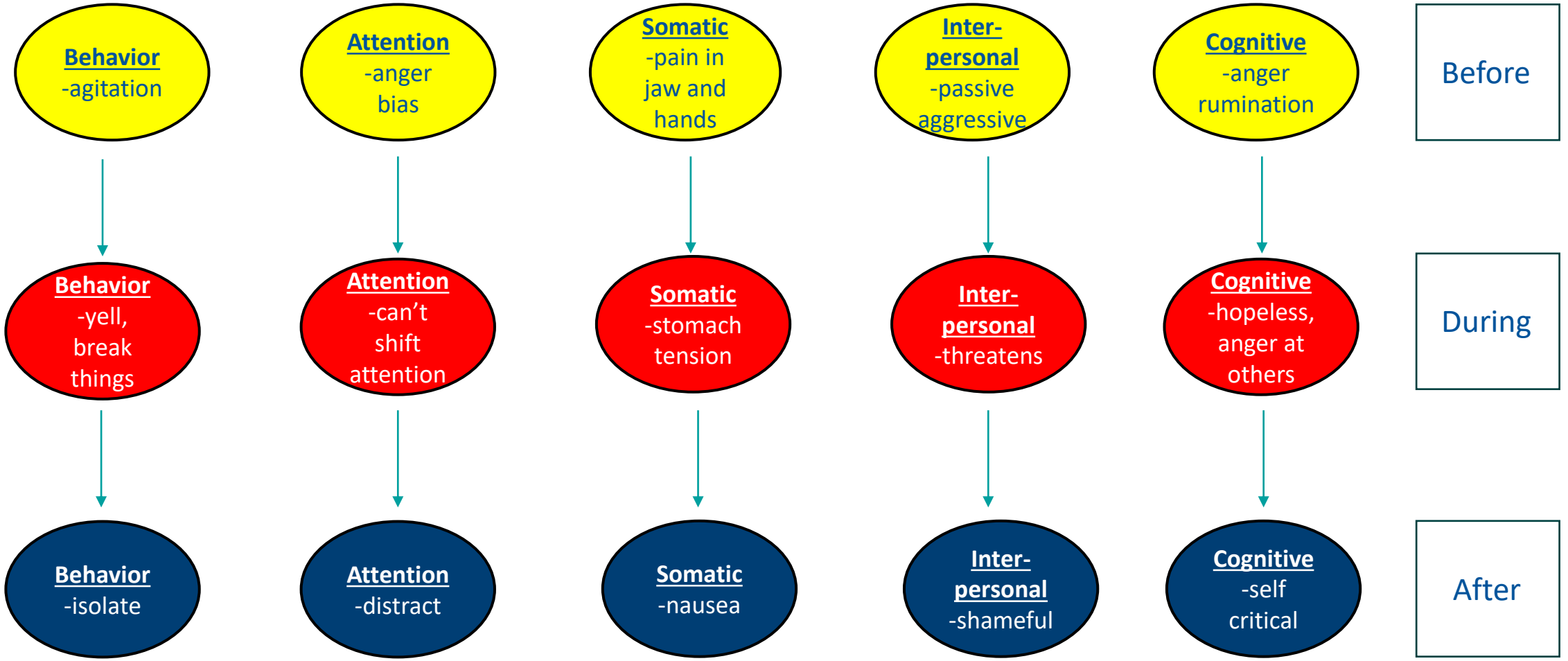
Cognitive (e.g., unhelpful core beliefs, rules, assumptions, automatic thought types)

BASIC Processes Grid

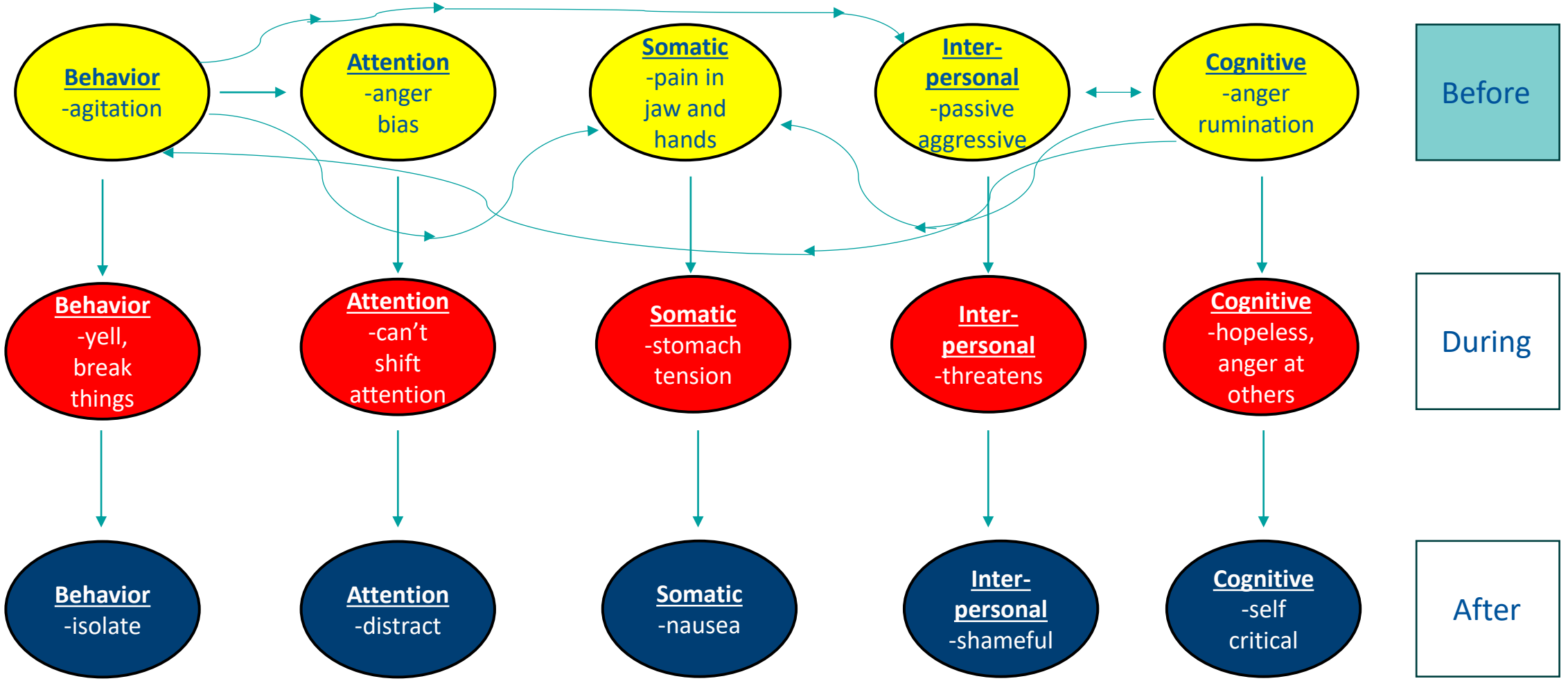
- Functional analysis of problems being targeted for change

	Before	During	After
Behavioral			
Attentional			
Somatic			
Interpersonal			
Cognitive			

Example Network Using BASIC Grid



Example Network Using BASIC Grid



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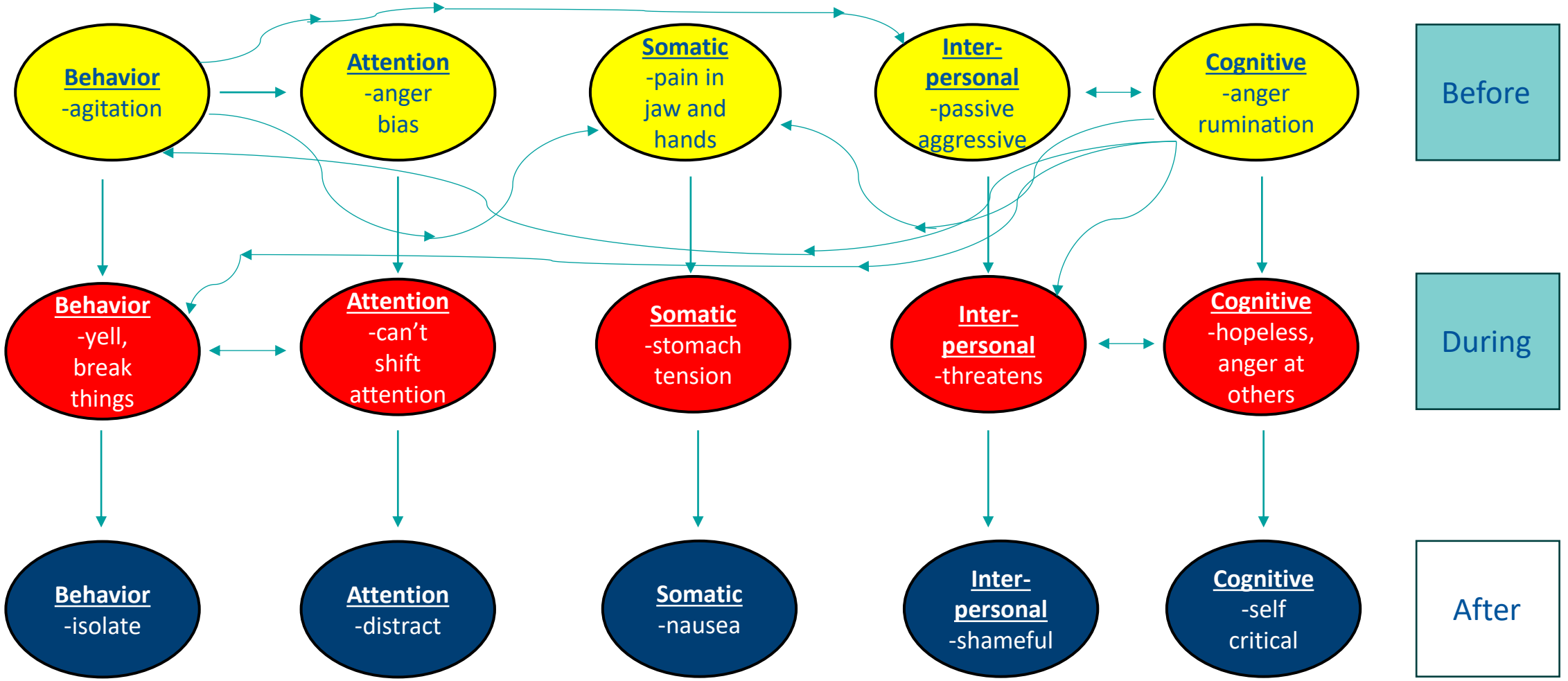

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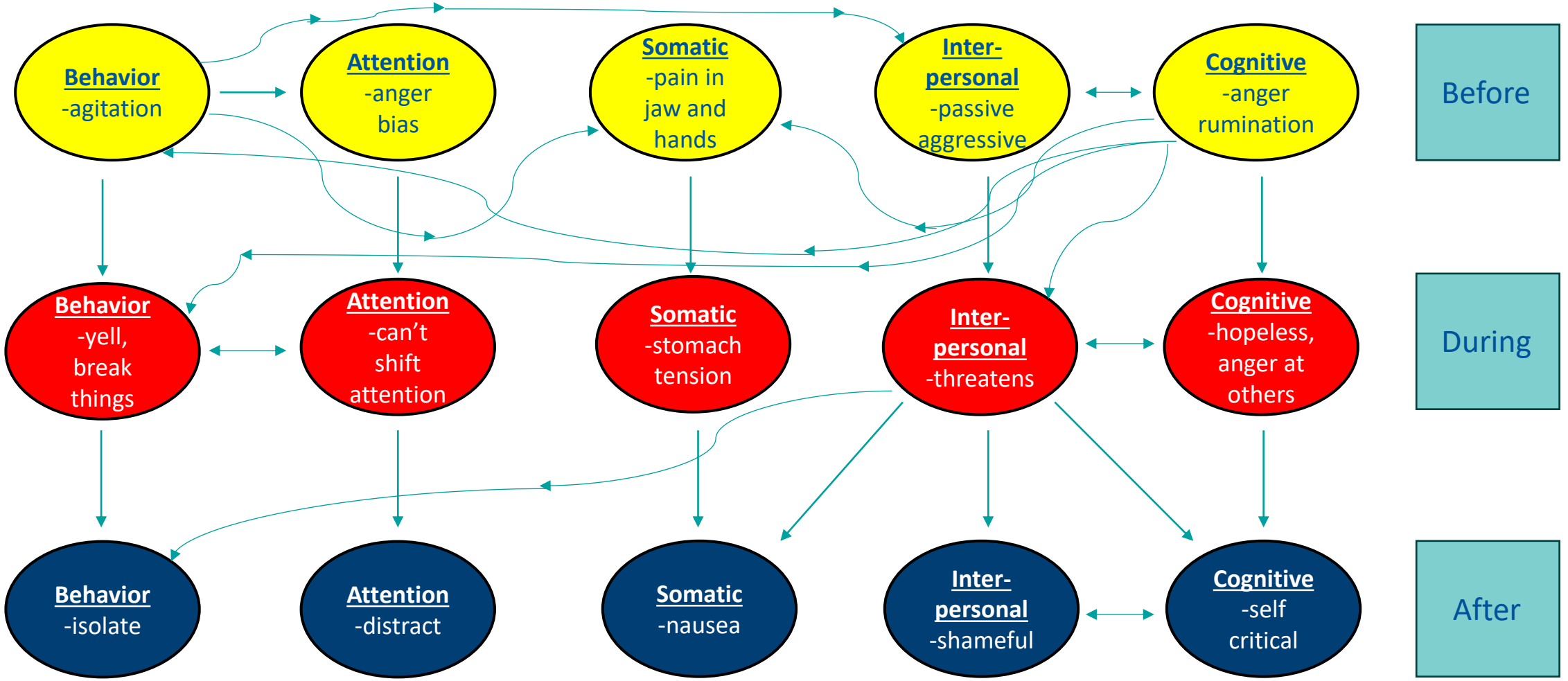

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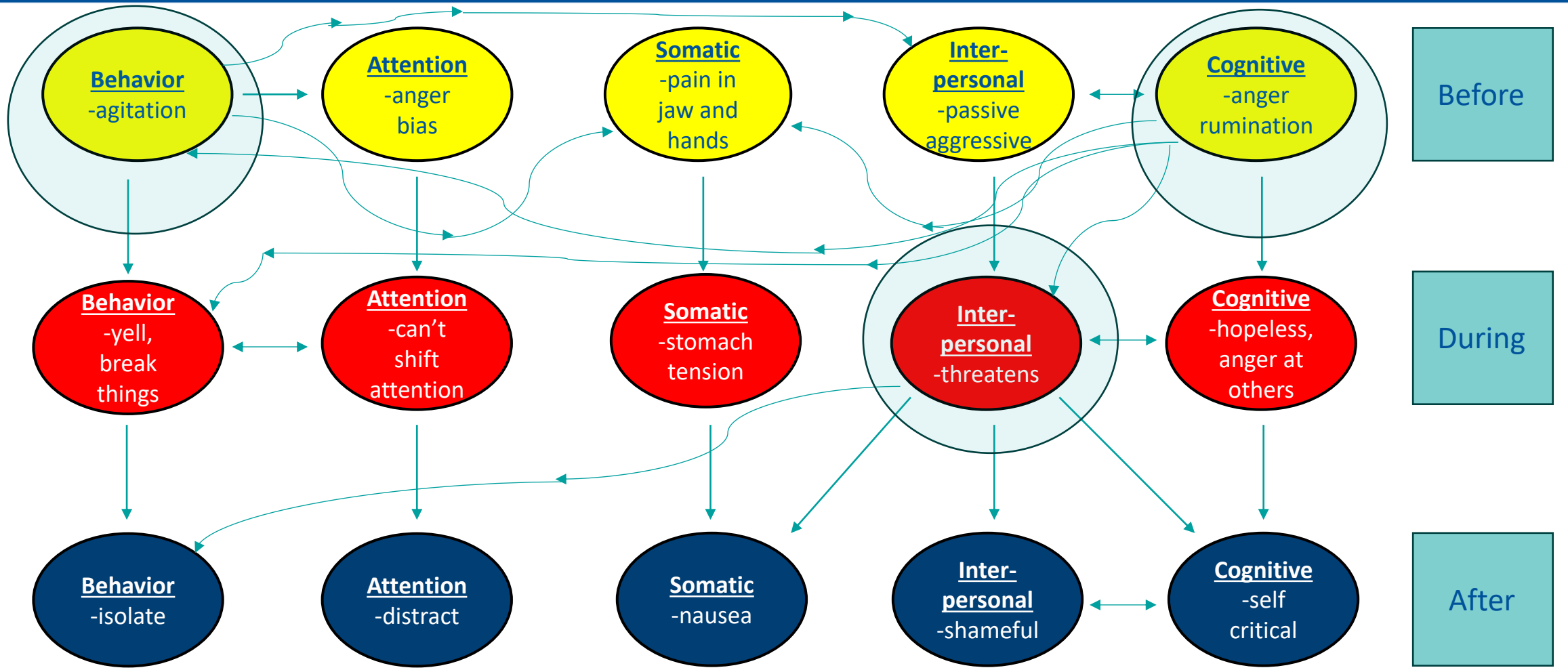


Shared Decision Making on Targeted Processes

- Prioritize targeted change processes collaboratively

    1) How **central** is each process to the others (e.g., biggest impact)?
    2) How **distressing** is each process?
    3) How **impairing** is each process?
    4) How **capable** is the patient of changing each process?
    5) How **willing** is the patient to change each process?

- Can use quantitative or qualitative approach to decide together

Example BASIC Processes Grid

	Before	During (arguments)	After
Behavioral	Agitation **2**	Cry, yell, scream Pace Break things	Isolate from others
Attentional	Anger bias in others	Inability to shift attention	Distraction from emotions
Somatic	Muscle tension Pain in jaw and hands	Stomach tightens Whole body feels tense	Nauseated
Interpersonal	Inhibited, aloof Passive aggressive	Verbally aggressive Threatens others Threats to self-harm **1**	Inhibited Shamefully apologetic
Cognitive	Anger rumination **3**	Hopeless Anger rumination at others	Anger at self Self-criticism and shame Hopeless

PBT: Examples of Interventions Across Brands

- Validation
- Empathy
- Safety and trust signaling
- Motivational enhancement
- Empowerment of choices
- Psychoeducation
- Arousal reduction
- Stimulus control
- Values clarification and valued actions
- Emotion regulation skill training
- Crisis management
- Attentional training
- Social skills training
- Contingency management
- Mindfulness
- Cognitive defusion
- Cognitive reappraisal
- Exposure-based procedures
- Identifying and changing core beliefs
- Environmental interventions to enhance resources

Treating Biopsychosocial Processes

Types of Patterns	Biopsychosocial Processes (examples)	Candidate Interventions (examples)
Behavioral	Avoidance behaviors Escape behaviors	**Inhibitory learning; mindfulness** **Emotion regulation skills training** **Distress tolerance skills; acceptance and cognitive defusion**
Attentional	Distractibility Hypervigilance	**Mindfulness; attentional training** **Valued actions; effortful distraction** **Problem-solving**
Somatic	Increased heart rate Muscle tension Sweating	**Muscle relaxation training** **Breathing exercises, grounding exercises to present moment** **Imagery, self-soothing using senses**
Interpersonal	Indirect aggression Threats, gestures, demands	**Interpersonal skill training** **Modeling, rehearsing, role playing, coaching** **Inhibitory learning, family interventions**
Cognitive	Internalizing appraisals Externalizing appraisals Unhelpful assumptions & beliefs	**Acceptance** **Cognitive defusion** **Reappraisal**

PBT: Examples of Change Processes and Interventions

Client/Patient Description	Possible Biopsychosocial Change Processes	Possible Therapeutic Procedures
"I hate it when I feel that way and keep trying not to think those thoughts"	Emotional avoidance	Distress tolerance skills
"I get upset and give people dirty looks whenever I think they are excluding me"	Rejection sensitivity Indirect aggression	Cognitive restructuring Interpersonal skills
"I can't stop thinking about these things and it just wears me out"	Rumination	Cognitive defusion
"If I don't sleep or eat well I am more likely to drink or use drugs"	Impulsivity when under-resourced	Sleep hygiene, CBT-I, balanced eating

Fundamental Questions for All Psychotherapies

"What treatment, by whom, is most effective for this individual with that specific problem under which set of circumstances, and how does it come about?" (Paul, 1969, p.44)

PBT Reframe: "What core biopsychosocial processes should be targeted with this client given this goal in this situation, and how can they most efficiently and effectively be changed?" (Hofmann & Hayes, 2019, p.38)

PBT has Been Suggested as a Framework for a Wide Range of Psychotherapies

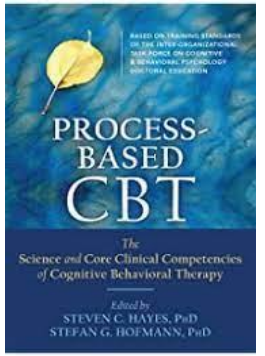
- Emotion Focused Individual Therapy (Greenman et al., 2024)
- Compassion Focused Therapy (Fraser & Gregory, 2024)
- Functional Analytic Psychotherapy (Maitland, 2024)
- Acceptance and Commitment Therapy (Ong et al., 2024)
- Existential Therapy (Menzies & Menzies, 2024)
- Cognitive Behavioral Therapy (Ryum & Kazantizis, 2024)
- Psychedelic Assisted Psychotherapy (Diehl & Rosenthal, 2025)
- Intensive Short-term Psychodynamic Therapy (Thomas & Abbass, 2022)

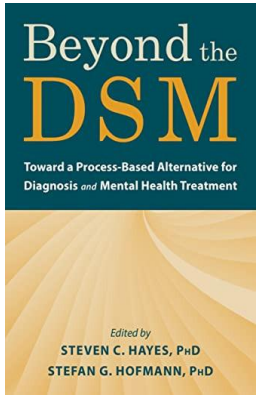
Process-Based Therapy

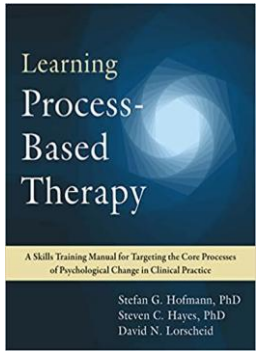
Hayes, S. C. & Hofmann, S. G. (Eds.) (2018). Process-based CBT: The science and core clinical competencies of cognitive behavioral therapy. Oakland, CA: New Harbinger Publications. ISBN-13: 978-1626255968.

Hayes, S. C. & Hofmann, S. G. (Eds.) (2020). Beyond the DSM: Toward a process-based alternative for diagnosis and mental health treatment. Oakland, CA: Context Press / New Harbinger Publications. ISBN: 978-1684036615

Hofmann, S. G., Hayes, S. C., & Lorscheid, D. (2021). Learning process-based therapy: A skills training manual for targeting the core processes of psychological change in clinical practice. Oakland, CA: New Harbinger Press. ISBN: 1684037557







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Newer and Varied Psychotherapies Target Specific Biopsychosocial Change Processes

- Unified Protocol (e.g., *reducing emotional avoidance*; Barlow et al., 2007)
- Sensorimotor Therapy (e.g., *increasing somatic awareness*; Ogden & Minton, 2000)
- Mentalization Based Therapy (e.g., *enhancing mentalization*; Fonagy & Bateman, 2005)
- Accelerated Experiential Dynamic Psychotherapy (e.g., *transforming responses to affective states*; Fosha, 2000)
- Internal Family Systems (e.g., *metacognitive decentering*; Schwartz, 2013)

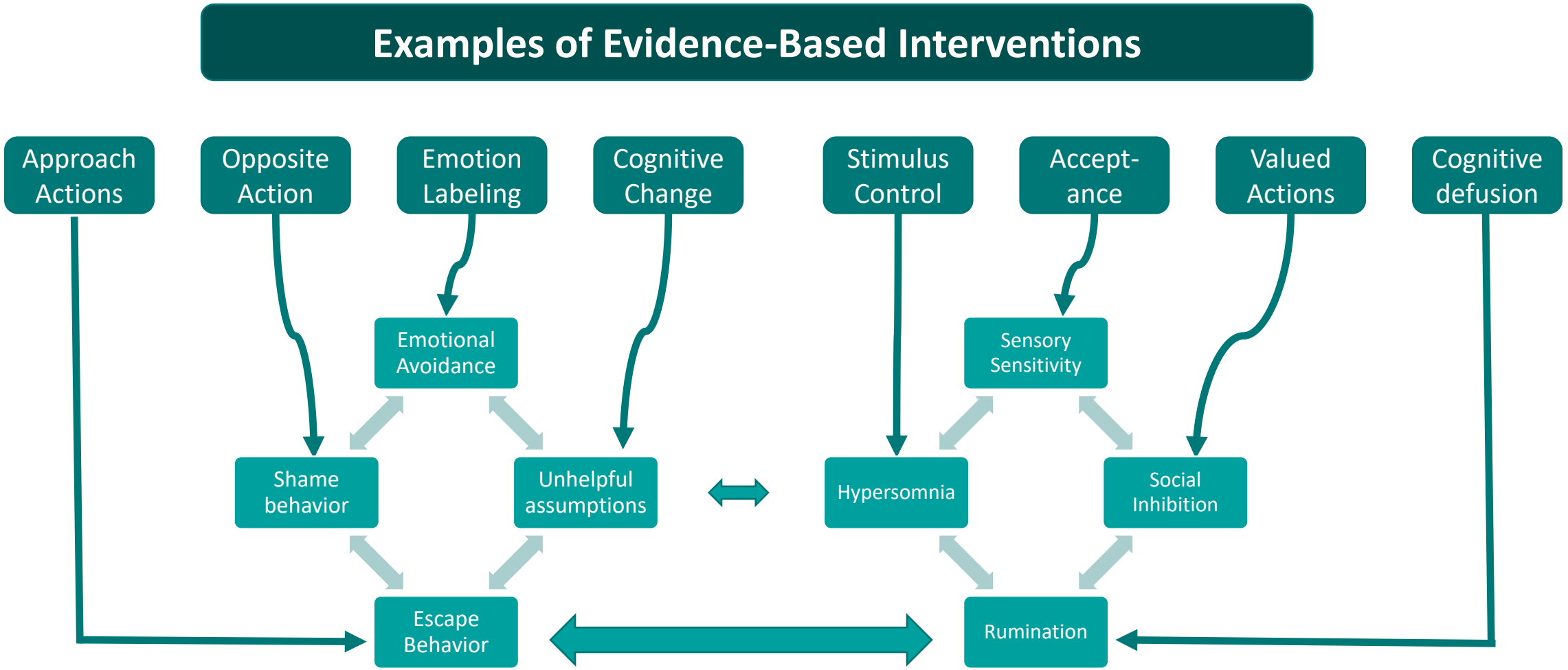
Example for Depression

Behavioral	Attentional	Somatic	Interpersonal	Cognitive
Risk aversion	Negativity bias	Fatigue	Isolation	Rumination
Avoidance		Hypersomnia	Rejection sensitive	Hopelessness
Escape		Chronic stress	Inhibition	Helplessness
				Self-criticism

Example for PTSD

Behavioral	Attentional	Somatic	Interpersonal	Cognitive
Avoidance	Hypervigilance	Insomnia	Social Inhibition	Dissociation
Escape	Risk discrimination deficit	Numb	Indirect aggression	Shame
			Mistrust	Worthlessness

Changing Transdiagnostic Processes



Across the Field, Psychotherapies Are Increasingly Emphasizing Processes of Change

- Temporally dynamic, biopsychosocial, multi-level, interdependent
- Change is non-linear, multi-causal, and systemic
- Underlying processes are mechanisms of this or that problematic pattern the patient wants to change
- Processes are observable, testable, and vary across people with the same diagnosis

Funding Contingencies Have Shaped Advances in Psychotherapy

- The NIMH Research Domain Criteria (RDoC) outlines a framework for understanding transdiagnostic domains of functioning:
  - Negative Valence Systems (e.g., acute threat, potential threat)
  - Positive Valence Systems (e.g., reward responsiveness)
  - Cognitive Systems (e.g., attention, perception, memory)
  - Social Processes (e.g., affiliation and attachment)
  - Arousal and Regulatory Systems (e.g., arousal, sleep-wakefulness)
  - Sensorimotor Systems (e.g., Motor actions)

- Scientists study these transdiagnostic systems across various units of analysis: Genes, molecules, cells, circuits, lab paradigms, physiology, behavior, self-report

Can You Include DSM Disorder Categories in a Grant Application to NIMH?

"Yes, you can include diagnostic categories in your grant application to NIMH…If the aims of a translational project focus on a DSM-defined disorder, then it is important to address how heterogeneity within the disorder will be addressed…there is no prohibition on using standard diagnostic categories as eligibility criteria. For some studies, it will make sense to enroll individuals who meet criteria for a diagnosis or a cluster of diagnoses and then use a dimensional approach to test RDoC-informed hypotheses. However, it is important to consider whether it is appropriate to also enroll individuals with symptoms that are mild-to-moderate in severity and would not meet diagnostic criteria in order to fully explore the relevant dimensions. Another approach is to establish eligibility criteria that are independent of diagnosis and then use existing diagnostic criteria to characterize the participants, even if the hypotheses are not focused on the diagnoses."

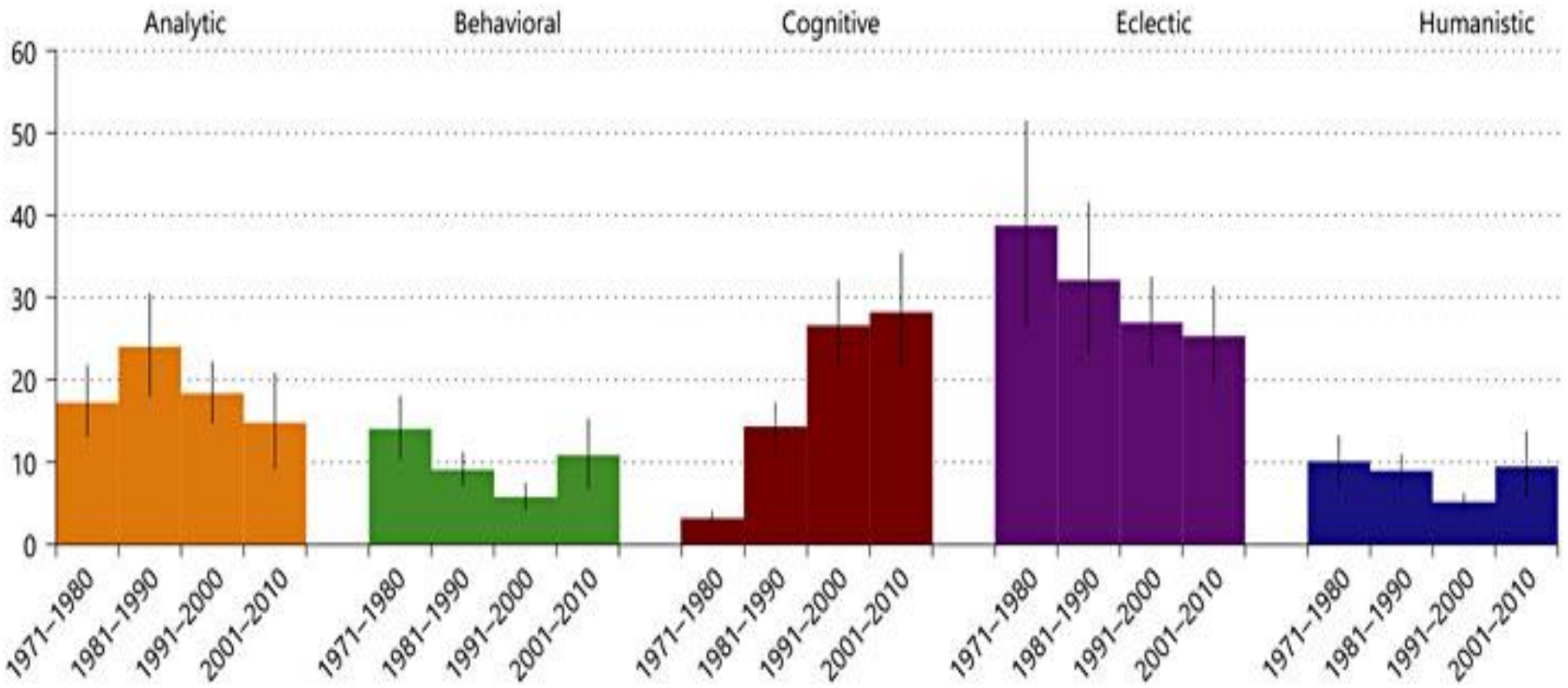
** Grant applications using transdiagnostic approaches and RDoC dimensions are heavily emphasized in recent NIMH funding (Perlis, 2025)

Examples of How Research Questions Being Funded by NIMH Have Changed

Questions	Approach Before RDoC	Approach Now
What is the underlying neurobiology of depression?	Recruit homogenous sample of people diagnosed with MDD	Recruit across levels of severity of MDD or with specific RDoC systems or constructs related to MDD
Does therapy X work to treat depression?	Measure change in symptoms of MDD in homogenous sample diagnosed with MDD but with few co-morbidities	Measure change in mediating processes temporally predicting change in functional outcomes in sample high on a depression-related transdiagnostic biopsychosocial process dimension that the treatment specifically targets

** Grant applications using transdiagnostic approaches and RDoC dimensions are highly prevalent in recent NIMH funding (Perlis, 2025)

Therapist Primary Theoretical Orientation Over Time



Psychother Psychosom. 2015;84(6):377-378. doi:10.1159/000433555