

Process-Based Therapy

Stefan G. Hofmann, Ph.D.
Alexander von Humboldt Professor
LOEWE Spitzenprofessur fuer Translationale Klinische
Psychologie
Department of Clinical Psychology, Philipps-University
Marburg, Germany

Disclosure

SGH receives financial support from the Alexander von Humboldt Foundation (as part of the Humboldt Prize), NIH/NCCIH (R01AT007257), NIH/NIMH (R01MH099021, U01MH108168), and the James S. McDonnell Foundation 21st Century Science Initiative in Understanding Human Cognition – Special Initiative.

Objectives

- To describe the ongoing transition from the nomothetic approach of protocol-based treatments targeting latent diseases (back) to an idiographic approach of theory-based and process-based therapy.
- To show how this transition can be used practically to target change.
- To reduce unnecessary divides and broaden the range of methods available to evidence-based therapists.

Clinical Psychology in Crisis

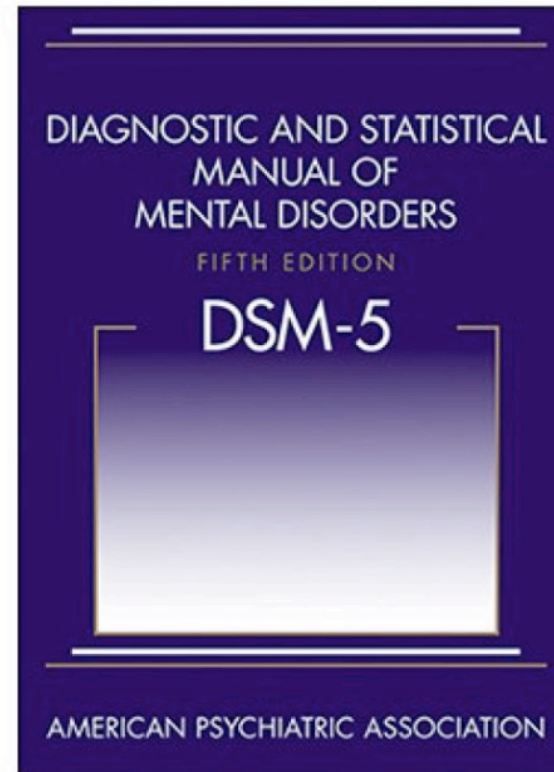
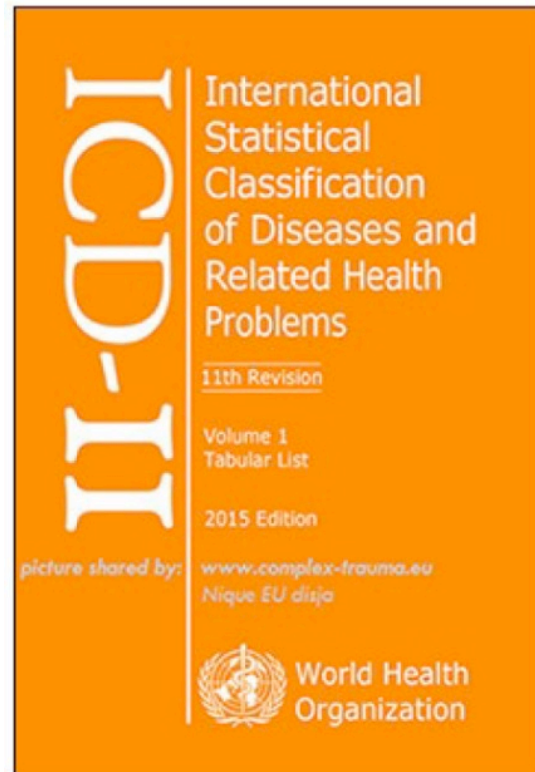
Problems:

1. Too much focus on protocols for syndromes
2. Too little consideration of the individual
3. Too mechanistic and too little focus on treatment change

The Solution:

Process-Based Therapy!

Protocols Linked to Syndromes



A long and ever expanding list of protocols for syndromes...

Acceptance and Commitment Therapy for Depression
Acceptance and Commitment Therapy for Chronic Pain
Acceptance and Commitment Therapy for anxiety disorder
Acceptance and Commitment Therapy for coping with psychosis
Applied Relaxation for Panic Disorder
Assertive Community Treatment for Schizophrenia
Behavior Therapy/Behavioral Activation for Depression
Behavioral Couple Therapy for Depression
Behavioral and Cognitive Behavioral Therapy for Chronic Low Back Pain
Behavioral Weight Loss Treatment for Obesity and Pediatric Overweight
Biofeedback-Based Treatments for Insomnia
Cognitive Adaptation Training for Schizophrenia
Cognitive Behavioral Analysis System of Psychotherapy for Depression
Cognitive Behavior Therapy for Insomnia
Cognitive Behavioral Therapy for Anorexia Nervosa
Cognitive Behavioral Therapy for Binge Eating Disorder
Cognitive Behavioral Therapy for Bulimia Nervosa
Cognitive and Behavioral Therapies for Generalized Anxiety Disorder
Cognitive Behavioral Therapy for Panic
Cognitive and Behavioral Therapies for Social Phobia/Public Speaking Anxiety

Cognitive Behavioral Therapy for Chronic Headache
Cognitive Behavioral Therapy for Schizophrenia
Cognitive Processing Therapy for Post-Traumatic Stress Disorder
Cognitive Remediation for Schizophrenia
Cognitive Therapy for Bipolar Disorder
Cognitive Therapy for Depression
Cognitive Therapy for Obsessive-Compulsive Disorder
Dialectical Behavior Therapy for Borderline Personality Disorder
Emotion-Focused Therapy for Depression
Exposure and Response Prevention for Obsessive-Compulsive Disorder
Exposure Therapies for Specific Phobias
Eye Movement Desensitization and Reprocessing for Post-Traumatic Stress Disorder
Family-Based Treatment for Anorexia Nervosa
Family-Based Treatment for Bulimia Nervosa
Family Focused Therapy for Bipolar Disorder
Family Psychoeducation for Schizophrenia
Healthy-Weight Program for Bulimia Nervosa
Interpersonal Therapy for Depression
Illness Management and Recovery for Schizophrenia
Interpersonal Psychotherapy for Binge Eating Disorder
Interpersonal Psychotherapy for Bulimia
Interpersonal and Social Rhythm Therapy for Bipolar Disorder

Multi-Component Cognitive Behavioral Therapy for Fibromyalgia
Multi-Component Cognitive Behavioral Therapy for Rheumatologic Pain
Paradoxical Intention for Insomnia
Problem-Solving Therapy for Depression
Prolonged Exposure for Post-Traumatic Stress Disorder
Psychoanalytic Therapy for Panic Disorder
Psychoeducation for Bipolar Disorder
Psychological Debriefing for Post-Traumatic Stress Disorder
Relaxation Training for Insomnia
Reminiscence/Life Review Therapy for Depression
Schema-Focused Therapy for Borderline Personality Disorder
Self-Management/Self-Control Therapy for Depression
Self-System Therapy for Depression
Short-Term Psychodynamic Therapy for Depression
Sleep Restriction Therapy for Insomnia
Social Learning/Token Economy Programs for Schizophrenia
Social Skills Training for Schizophrenia
Stimulus Control Therapy for Insomnia
Supported Employment for Schizophrenia
Systematic Care for Bipolar Disorder
Transference-Focused Therapy for Borderline Personality Disorder

...but a limited list of effective strategies

- Contingency management
- Stimulus control
- Shaping
- Self-management
- Arousal reduction
- Coping and emotion regulation
- Problem solving
- Exposure strategies
- Behavioral activation
- Interpersonal skills
- Cognitive reappraisal
- Modifying core beliefs
- Cognitive defusion
- Experiential acceptance
- Attentional training
- Values choice and clarification
- Mindfulness practice
- Enhancing motivation
- Crisis management and treating suicidality

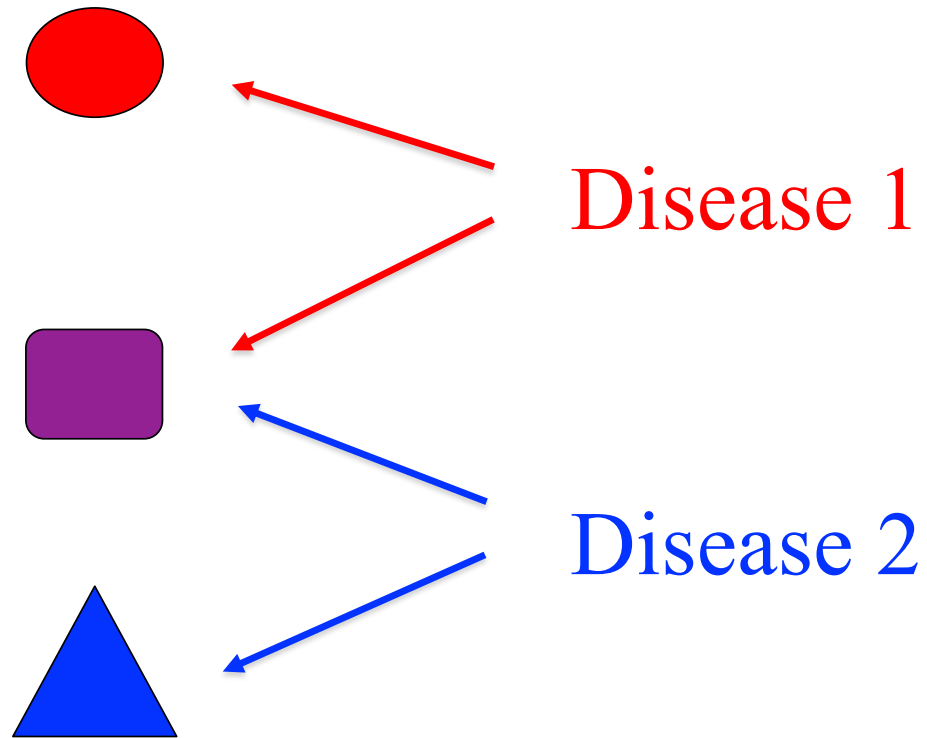
Effective treatment is combining strategies...



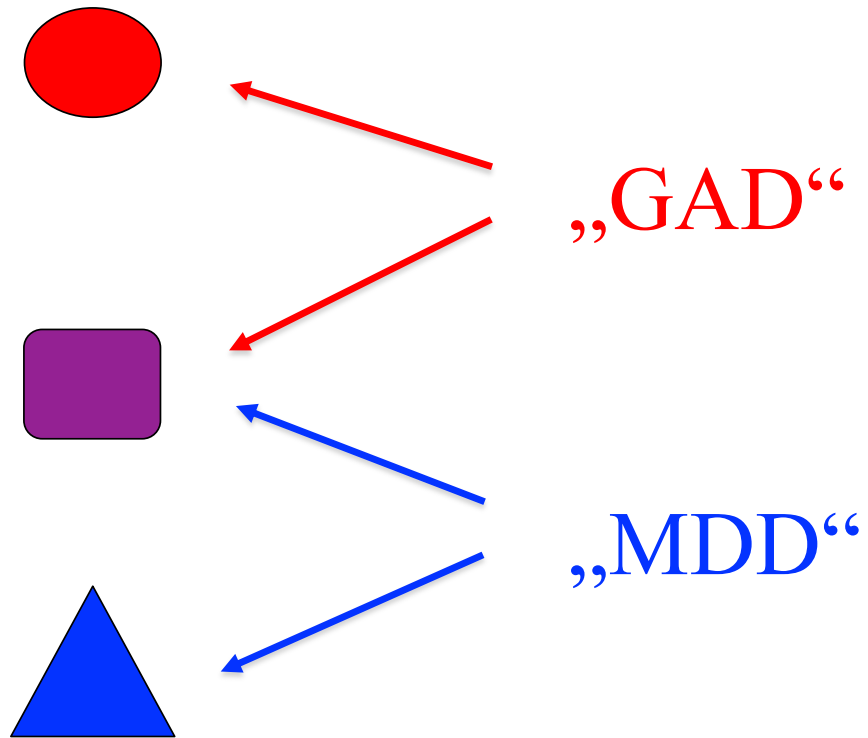
...to tailor them to achieve specific goal



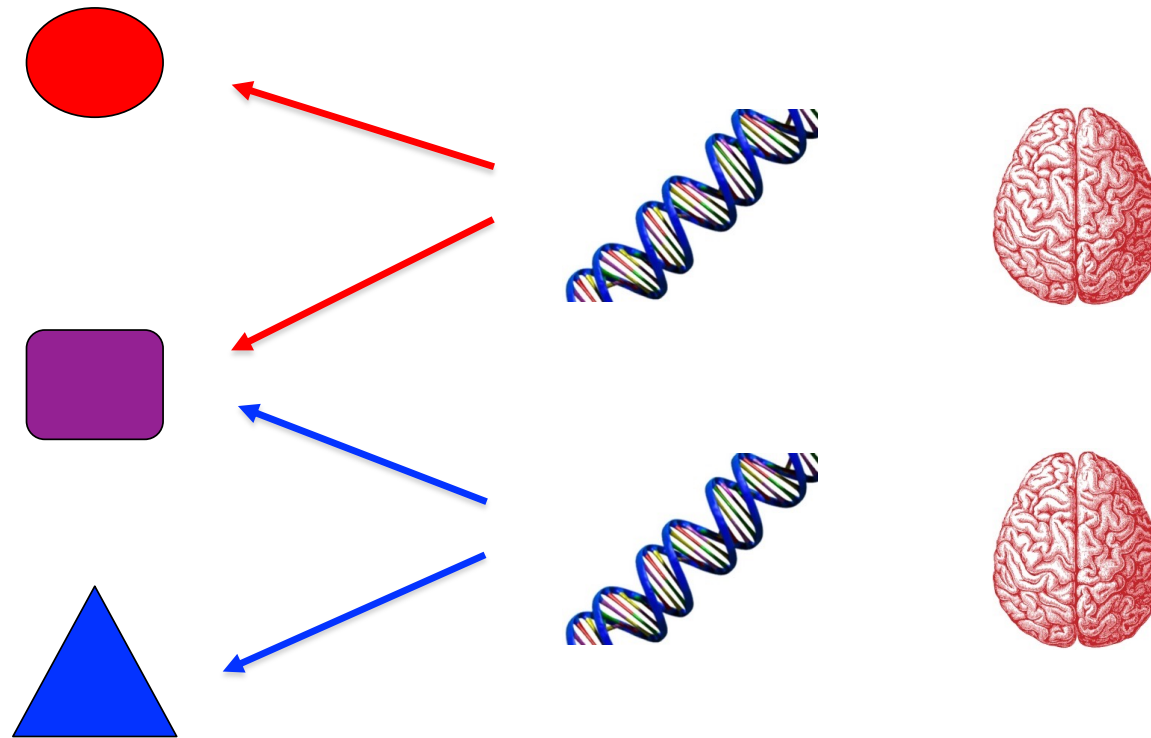
Latent Disease Model

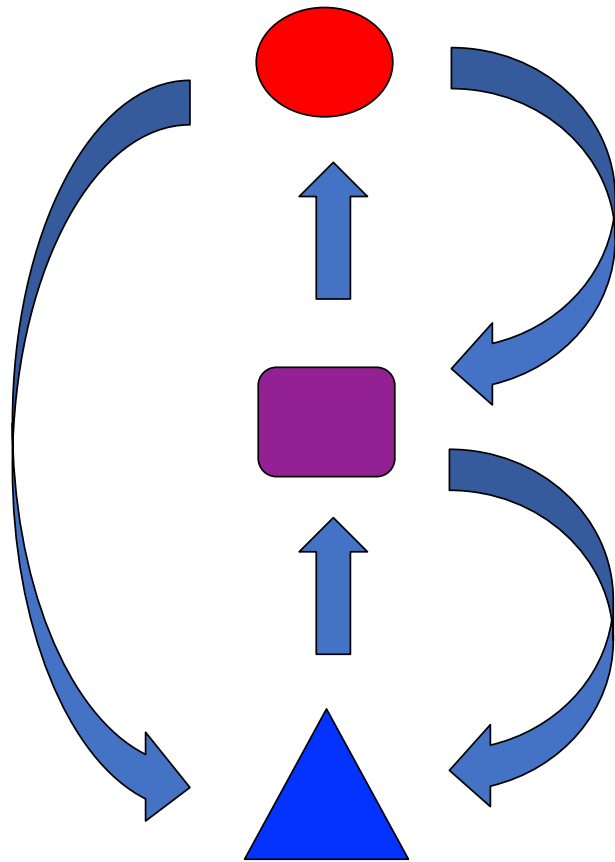


DSM/ICD



RD0C



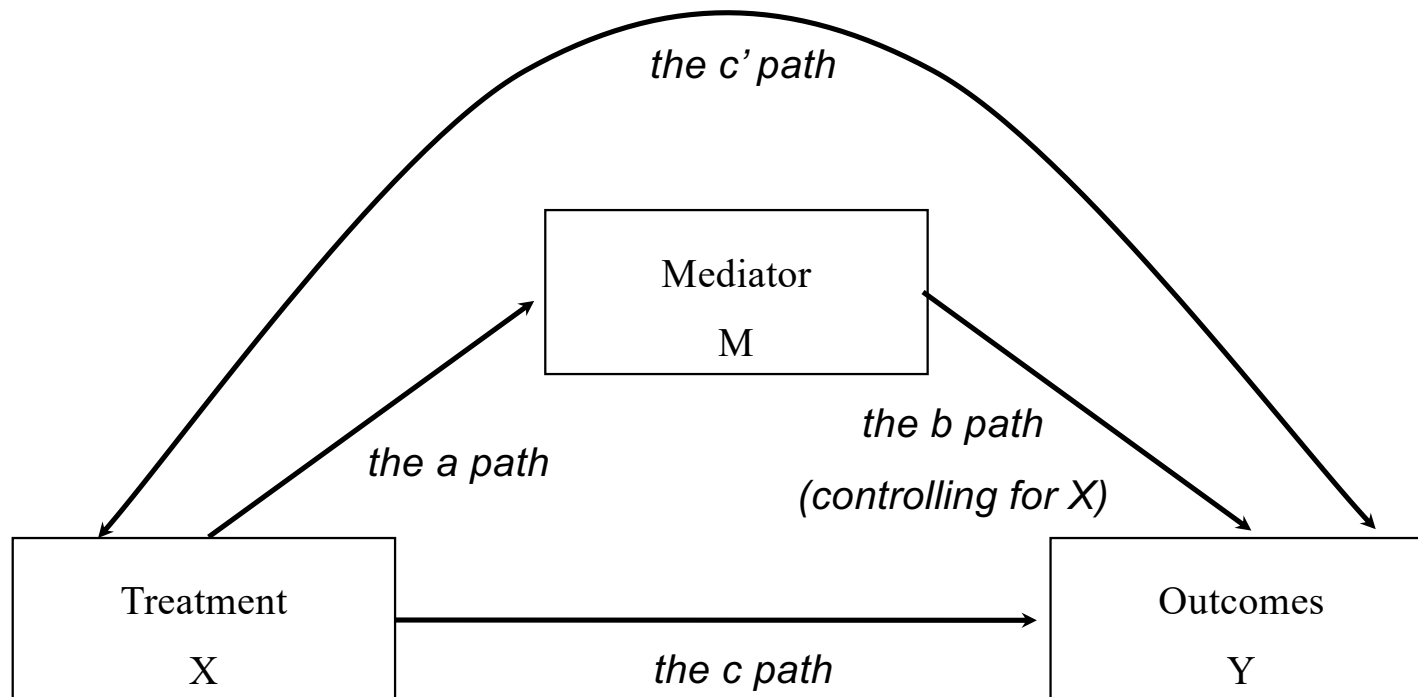


~~Disease 1~~

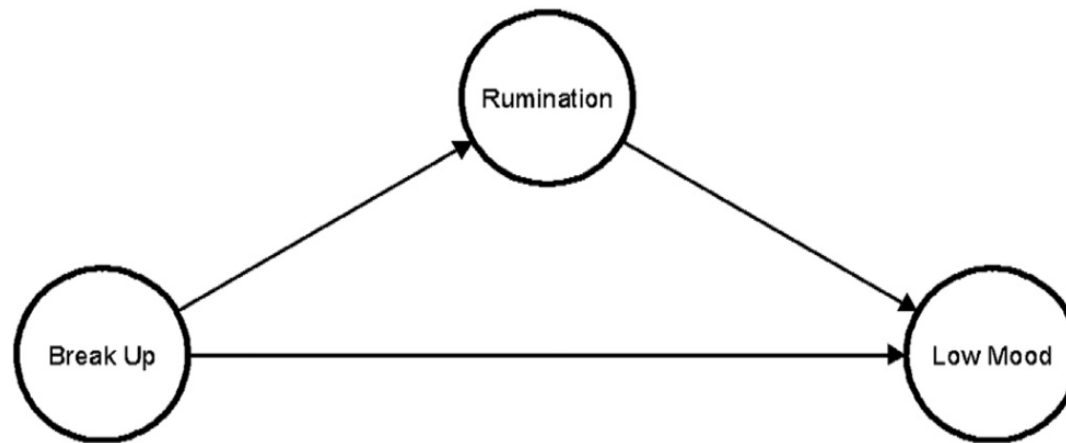
~~Disease 2~~

Hofmann, S. G., Curtiss, J., & McNally, M. J. (2016). A complex network perspective on clinical science. *Perspectives on Psychological Science, 11*, 597-605.

The Usual Way To Study Mediation

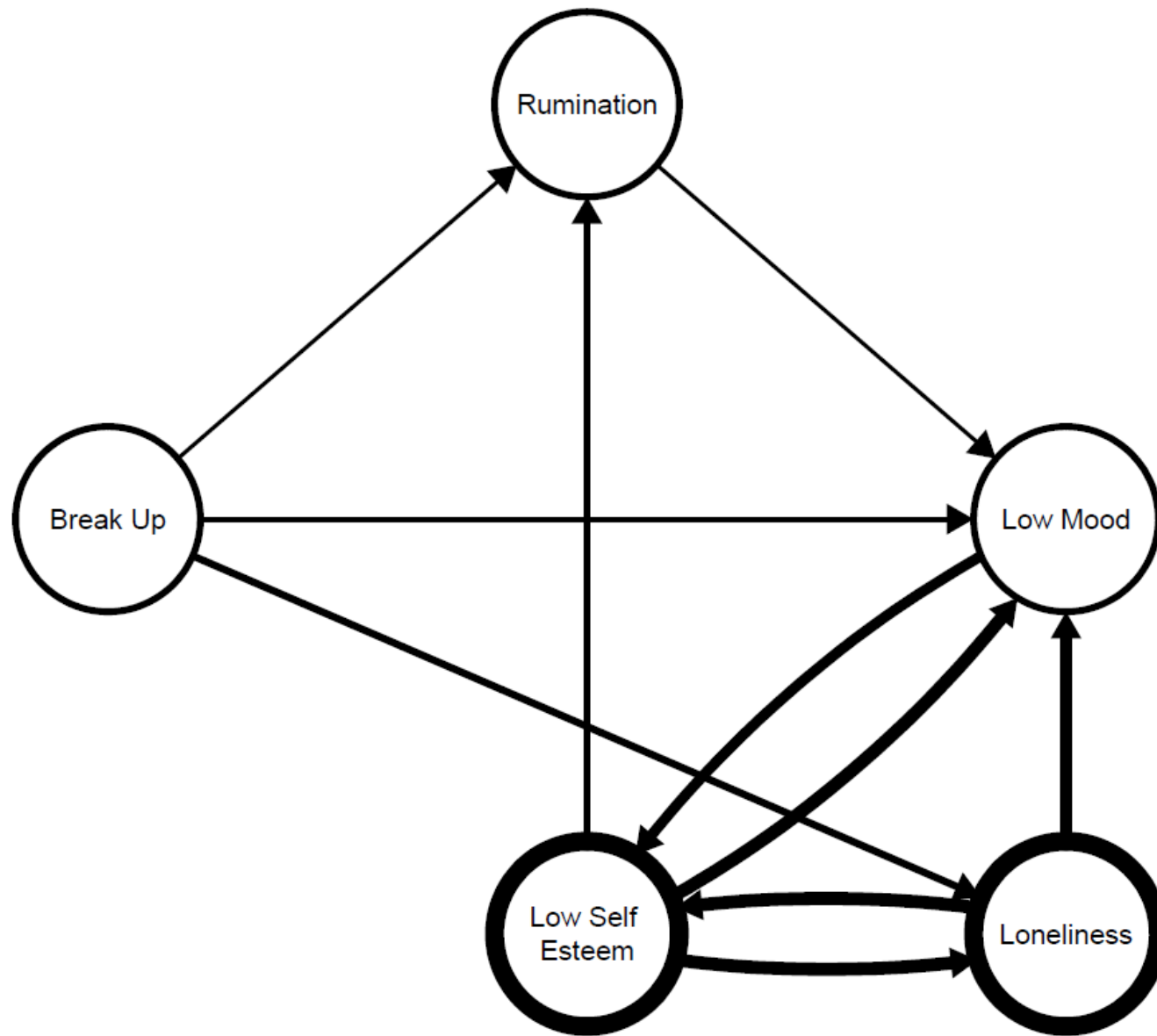


The Conventional Mediation Model



Problems with Baron & Kenny for Therapy Research

- Therapy mechanism is due to one (or a few) variables.
- Variables have to form linear relationship.
- Variables are in uni-directional relationship.
- Mediation results from groups of people are supposed to apply for the individual.



Therapy is not a linear,
unidirectional, paucivariate
mechanism.

Instead, it is a complex,
multivariate, and dynamic process!

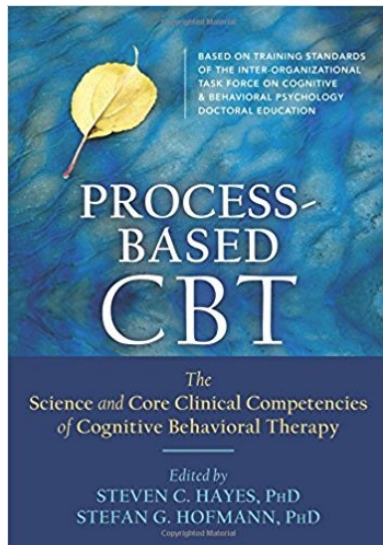
Complex Network





Guidelines for Cognitive Behavioral Training Within Doctoral Psychology Programs in the United States: Report of the Inter-Organizational Task Force on Cognitive and Behavioral Psychology Doctoral Education

Behavior Therapy 43 (2012) 687–697



Theoretical/Methodological/Review Article

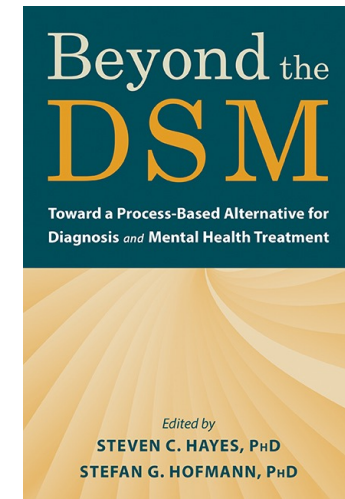
The Future of Intervention Science: Process-Based Therapy

Stefan G. Hofmann¹ and Steven C. Hayes²

¹Department of Psychological and Brain Sciences, Boston University, and
²Department of Psychology, University of Nevada, Reno



Clinical Psychological Science
2019, Vol. 7(1) 37–50
© The Author(s) 2018
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2167702618772296
www.psychologicalscience.org/CPS
SAGE



PERSPECTIVES

The third wave of cognitive behavioral therapy and the rise of process-based care

Steven C. Hayes¹, Stefan G. Hofmann²

¹Department of Psychology, University of Nevada, Reno, NV, USA; ²Department of Psychological and Brain Sciences, Boston University, Boston, MA, USA

World Psychiatry 16:3 - October 2017

<https://vimeopro.com/newharbinger/pb-cbt-1>

Process-Based Therapy (PBT)

Treatment based on the coherent application of changeable evidence-based processes linked to evidence-based procedures that ameliorate the problems and promote the prosperity of people.

Extending the Tradition

Gordon Paul (1969):

“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).

Hofmann and Hayes (2019):

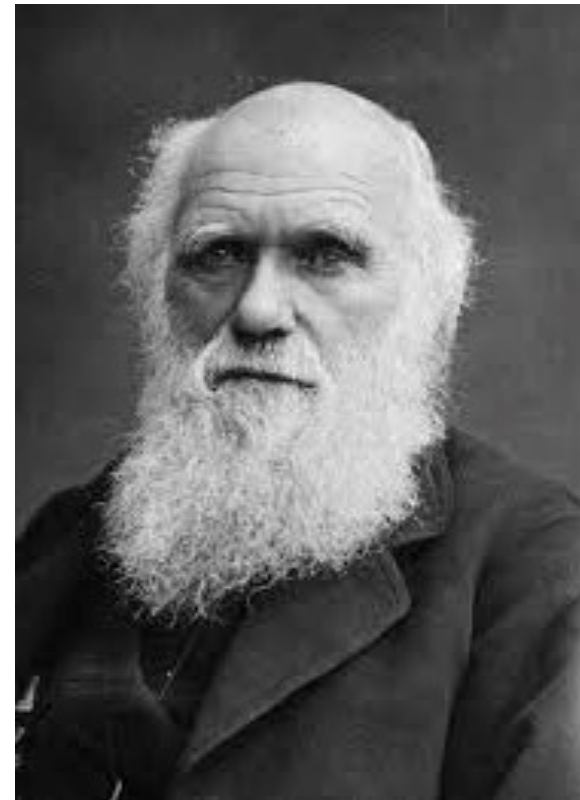
“What core biopsychosocial processes should be targeted with this client given this goal in this situation, and how can they most efficiently and effectively be changed?”

Focus on Processes of Change

- A sequence of changeable events that lead to good outcomes, that are theoretically sensible, dynamic, progressive, multi-level, and contextual bound.
- Think of them as empirically established pathways of change.

A Meta Model of Adaptive Change

Variation
Selection
Retention
Context
Dimension
Level



Model of Models - Dimensions

Consider the dimensions you have examined.

Are there elements in the areas of:

- Affect
- Cognition
- Attention
- Self
- Motivation
- Overt behavior

And These Additional Levels

Social and cultural factors

- Therapeutic relationship
- Social support
- Couples / Family / Friends

Biological and Physiological factors

- Physical abilities and disabilities
- Diet, Exercise, Sleep
- Measures of biological functioning (brain imaging; genetic and epigenetic factors)

Variation



Selection



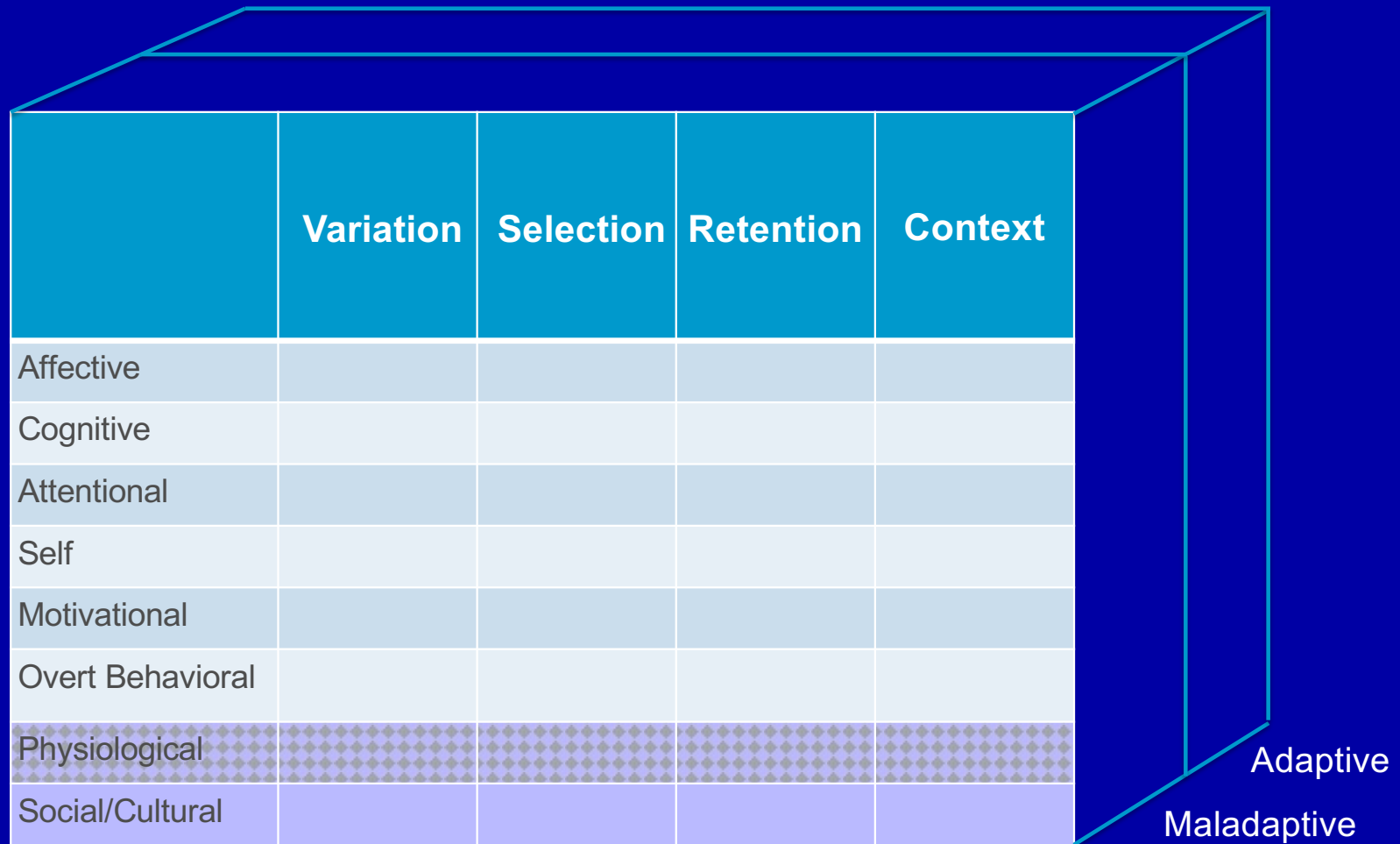
Retention



Context



Extended Evolutionary Meta-Model (EEMM)



List of Top Mediators

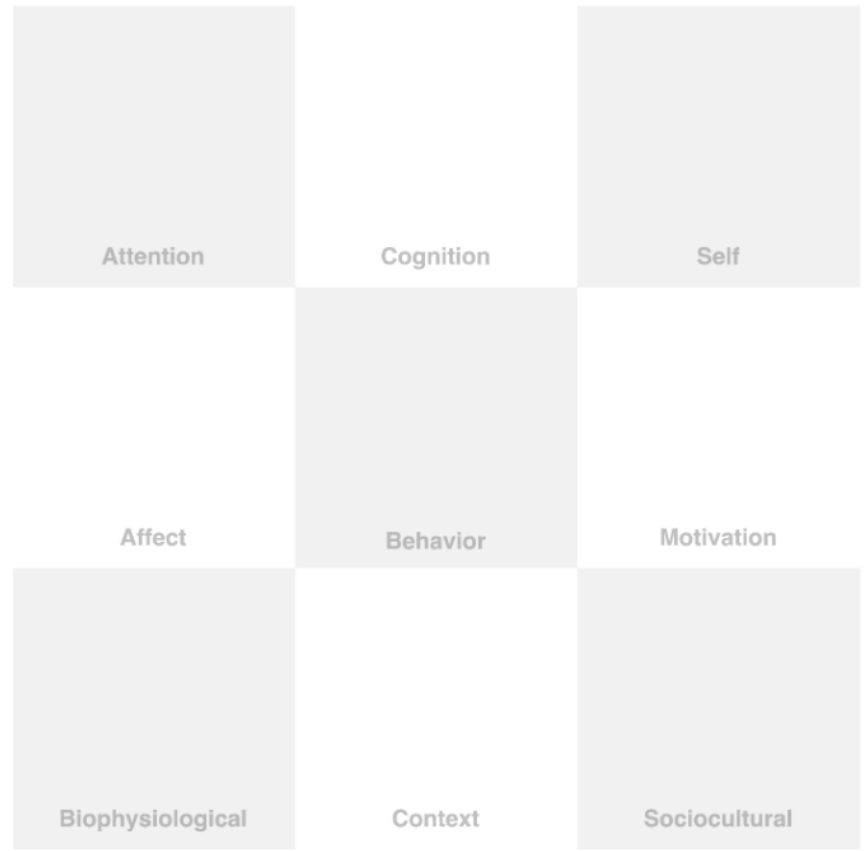
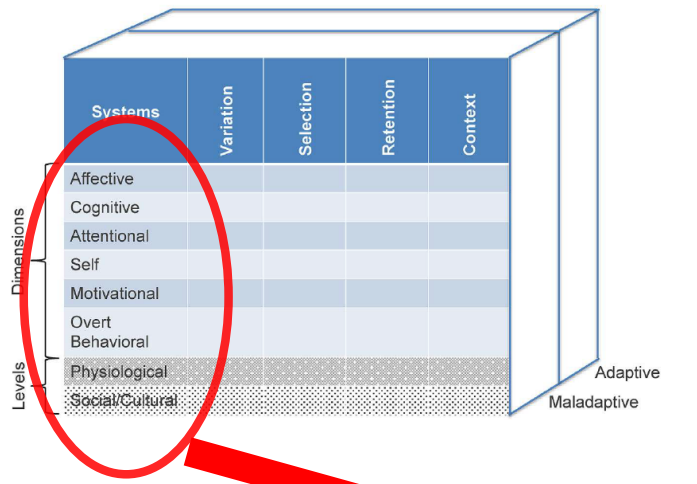
List of Top Mediators			
Dimension	Cognition	1.	Beliefs
		2.	Cognitive defusion
		3.	Cognitive reappraisal
	Affect	1.	Acceptance
		2.	Anxiety sensitivity
		3.	Self-compassion
	Attention	1.	Mindfulness
		2.	Rumination & worry
		3.	Acting with awareness
	Self	1.	Self-efficacy
		2.	Self-regulation
		3.	Religiousness/spirituality
	Motivation	1.	Values
		2.	Intensions
		3.	Goals
	Behavior	1.	Coping skills
		2.	Behavioral activation
		3.	Avoidance

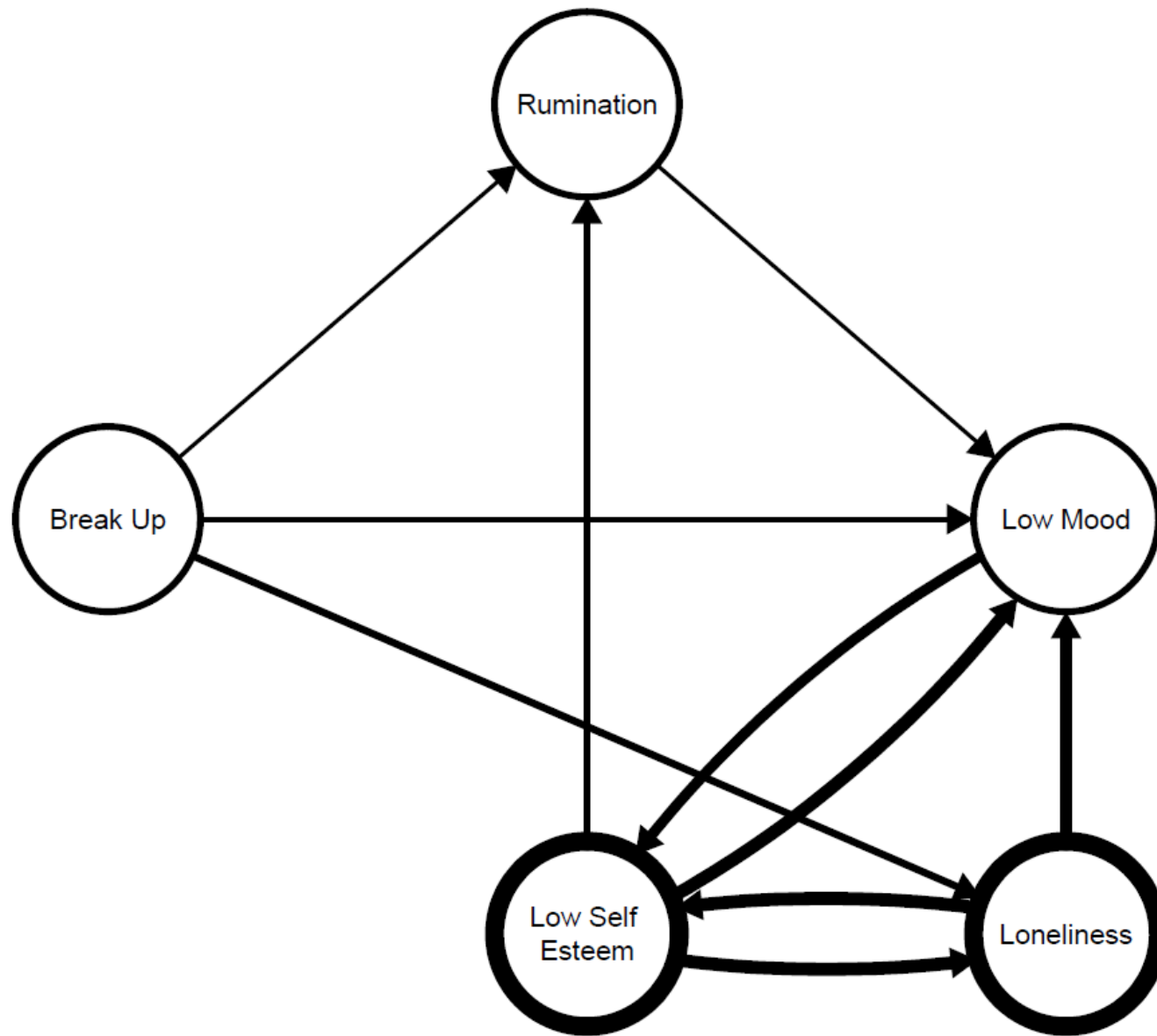
Level	<u>Biophysiological</u>	1.	Physiological
		2.	Dietary intake
		3.	Exercise
	<u>Sociocultural</u>	1.	Parenting
		2.	Social support
		3.	Therapeutic alliance

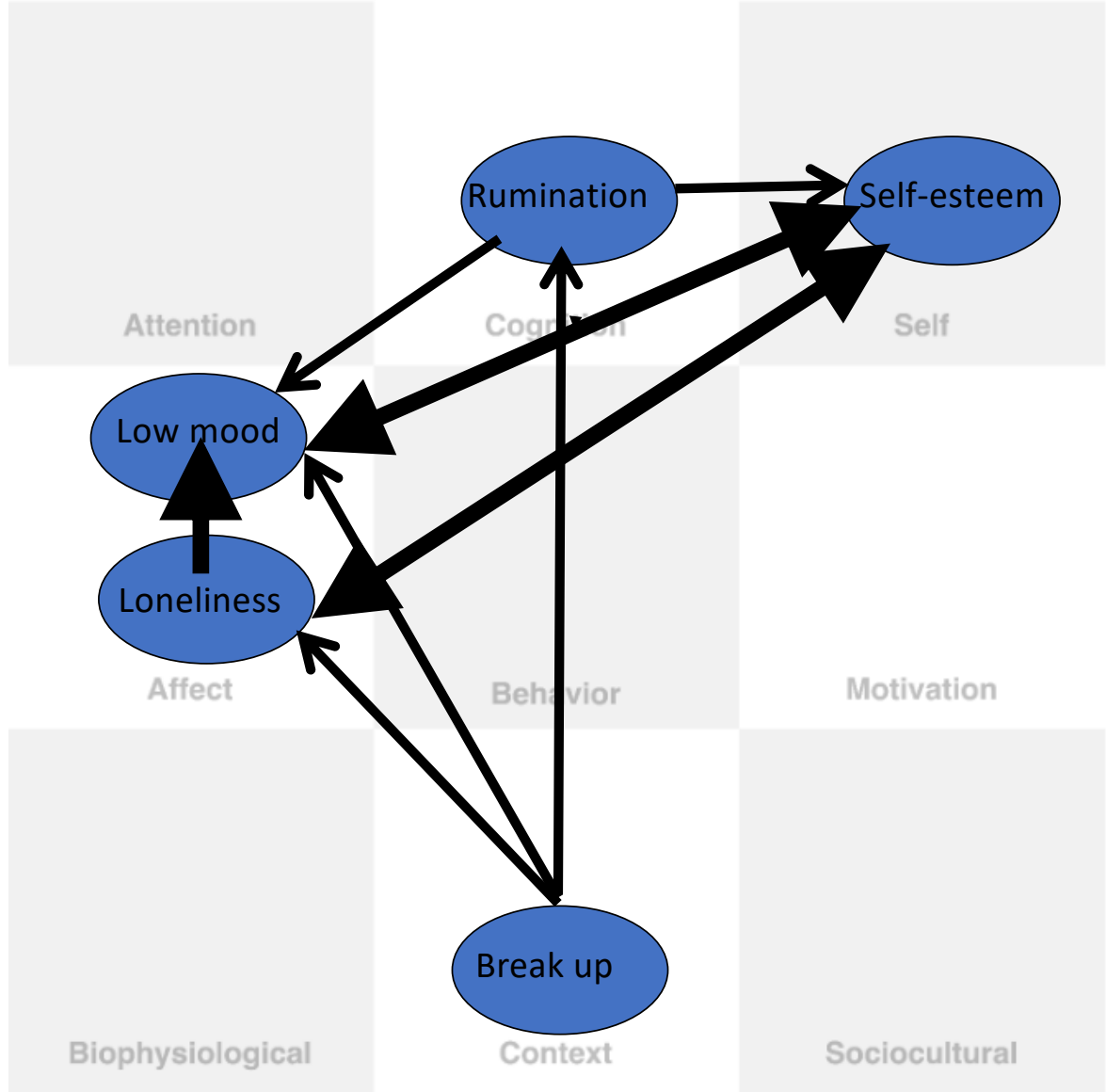
	Maladaptive				
		Rigidity or Unhealthy Variation	Selection Criteria	Retention	Context
Psychological dimensions	Cognition	Fusion	Being right: Literal coherence	Broaden and build using practice, and integration into larger negative habit patterns	Attend to threats but otherwise show limited context sensitivity
	Affect	Experiential avoidance	Feeling “good” leading to a “happy numb”		
	Self	Conceptualized Self	Belonging through conceptualized specialness		
	Attention	Rigid attention past or future	Involuntary orientation		
	Motivation	Self-gratification or external “success”	Meaning by imposition		
	Overt Behavior	Impulsivity, inaction, or avoidant persistence	Short term behavioral gains at the cost of long term competence		
Sociobiological Level	Socio Cultural				
	Bio Physiological				

	Adaptive				
		Healthy Variation	Selection Criteria	Retention	Context
Psychological dimensions	Cognition	Defusion and cognitive flexibility	Functional coherence	Broaden and build using practice, and integration into larger habit patterns	Use conscious attention to maintain balance and effectiveness
	Affect	Acceptance and emotional openness	Feeling fully		
	Self	Perspective taking sense of self	Belonging in Consciousness		Key strength of these processes
	Attention	Flexible, fluid, and voluntary attention to the now inside and out	Orientation		
	Motivation	Values	Meaning by choice	Key strength of these processes	Use conscious attention to maintain balance and effectiveness
	Overt Behavior	Committed action	Competence		
	Sociobiological Level	Socio Cultural			
Bio Physiological					

	Socially Extending Adaptive Psychological Flexibility Dimensions				
		Healthy Variation	Selection Criteria	Retention	Context
Group Dimensions	Cognitive	Mutual understanding	Functional coherence	Broaden and build using practice, and integration into larger patterns	Use conscious attention to maintain balance
	Affective	Compassion	Feeling		
	Self	Attachment and conscious connection	Belonging		Key strength of this process
	Attentional	Joint attention	Orientation		
	Motivational	Shared values and acknowledgment	Meaning	Key strength of these processes	Use monitoring to detect maintenance of values-based commitment
	Overt Behavior	Shared commitments	Competence		

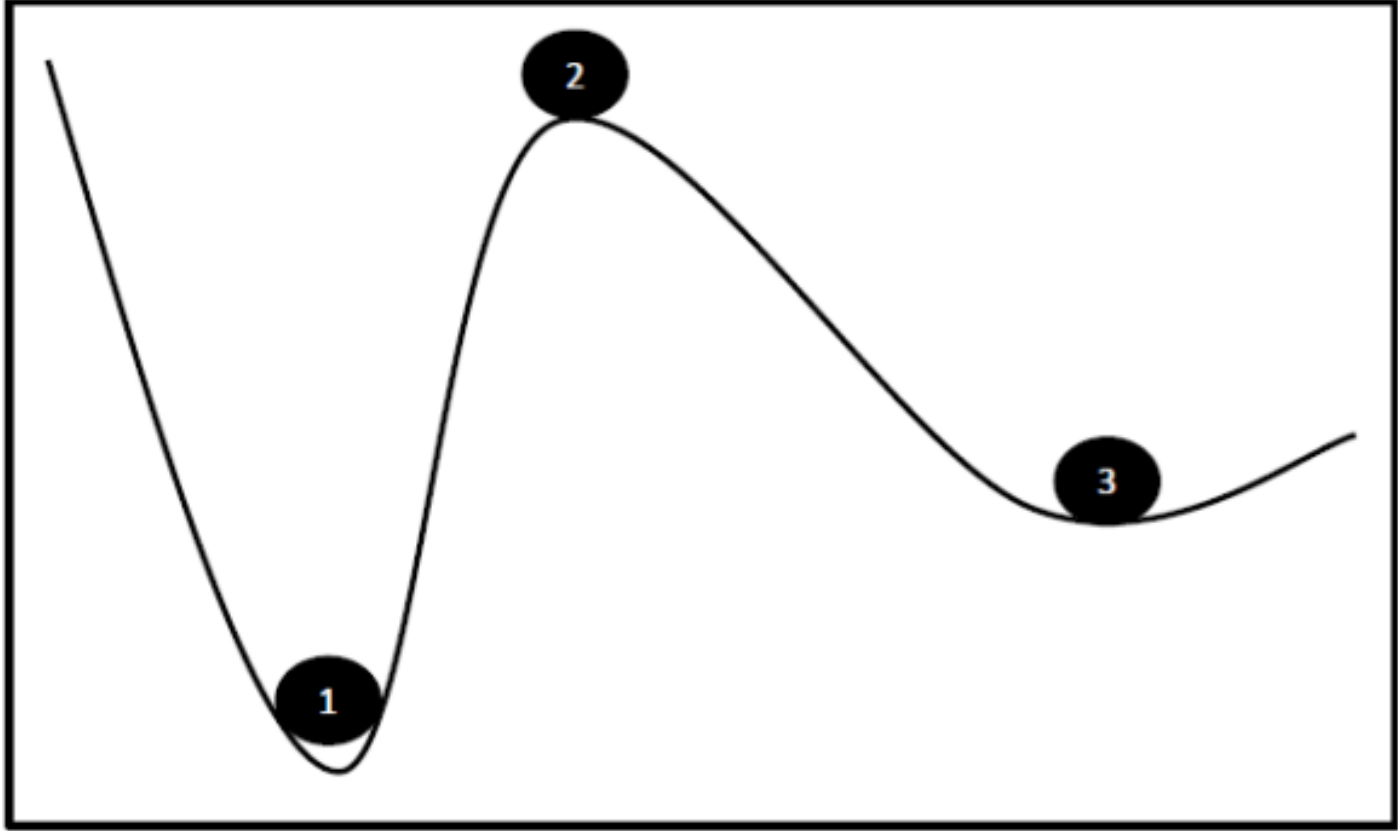






Therapy as a way to change a network from **maladaptive** to **adaptive**.

We also want adaptive networks to be **self-sustaining**.



The Goal of Process-Based Therapy is
to Become More Versatile (VRSCDL)

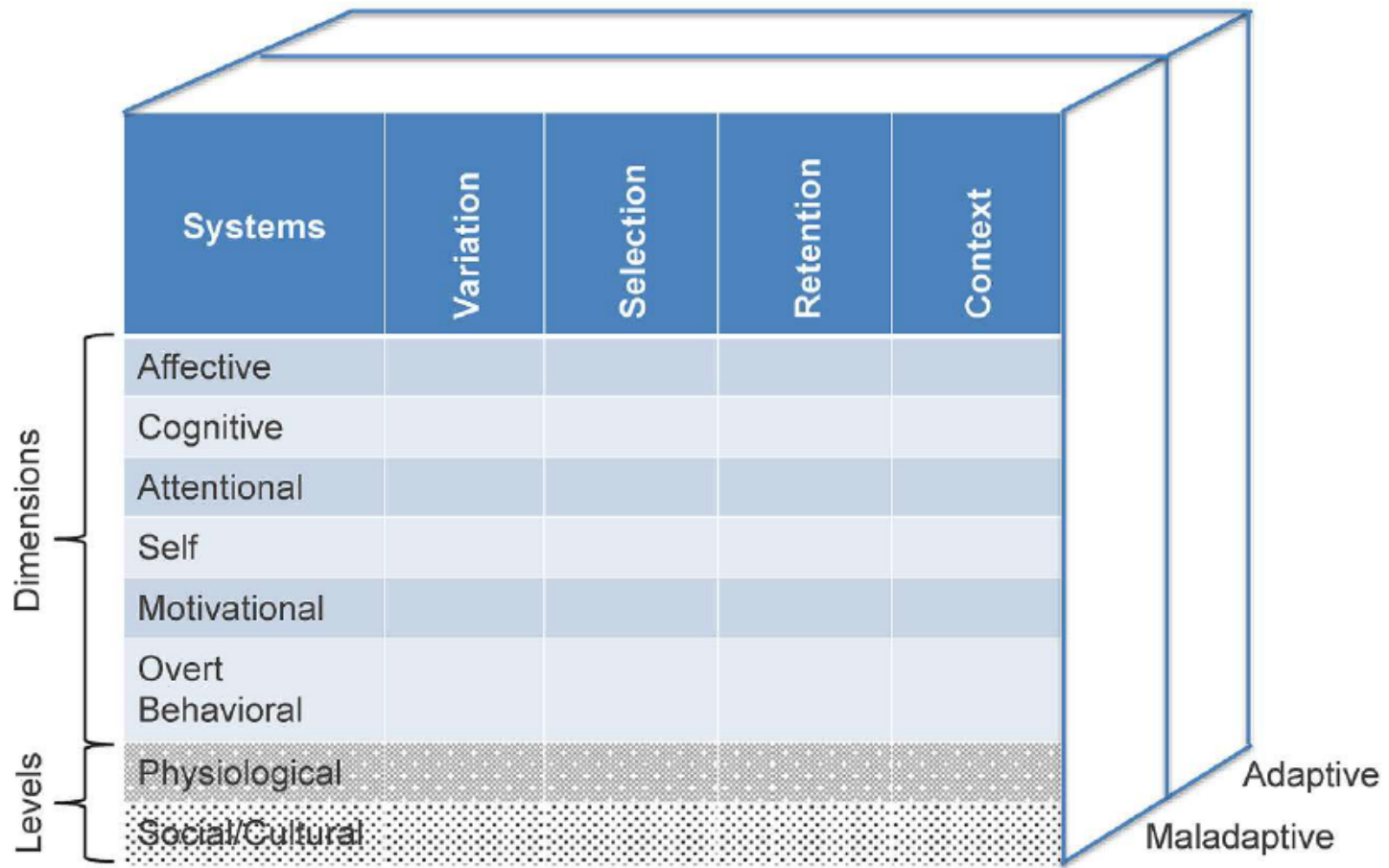
Variation and **R**etention of what
is **S**uccessful in **C**ontext at the
right **D**imension and **L**evel.

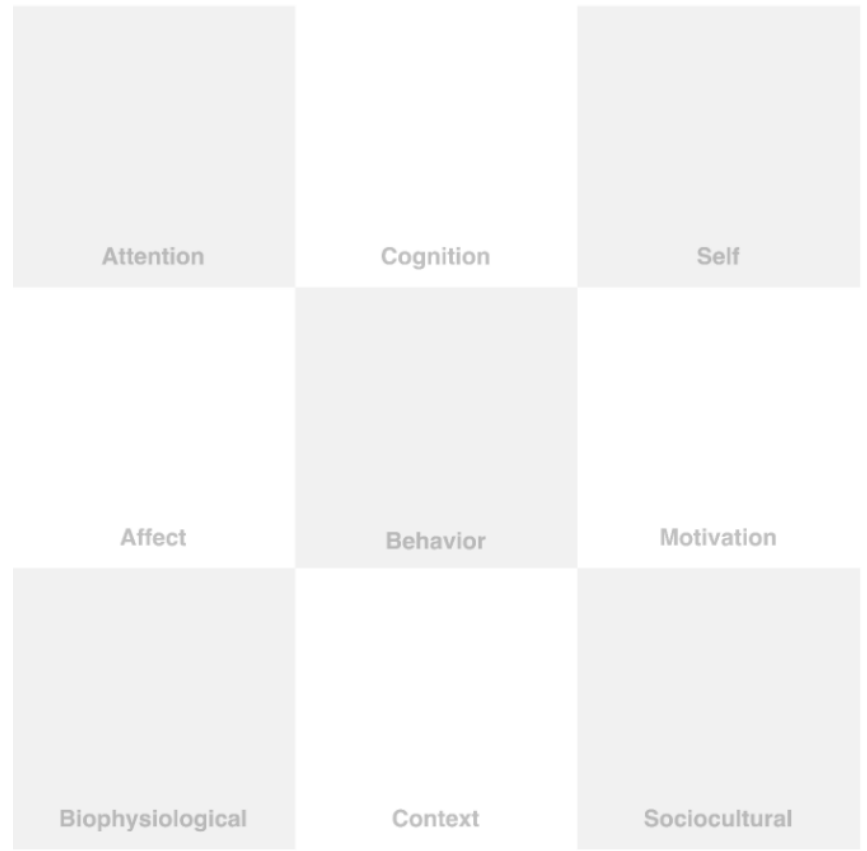
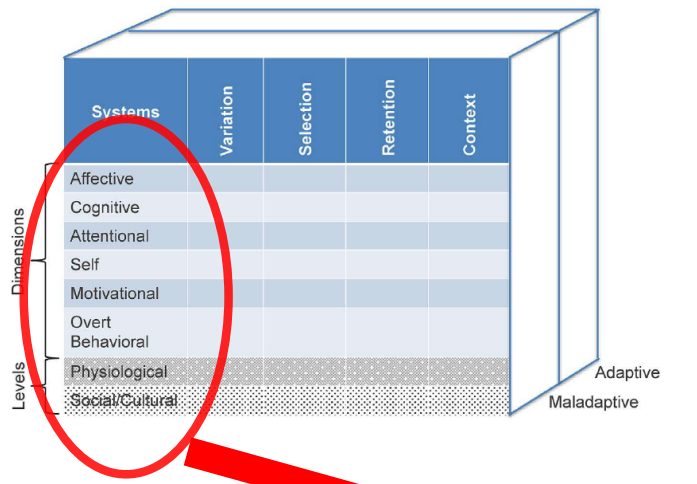
Strategies/Processes

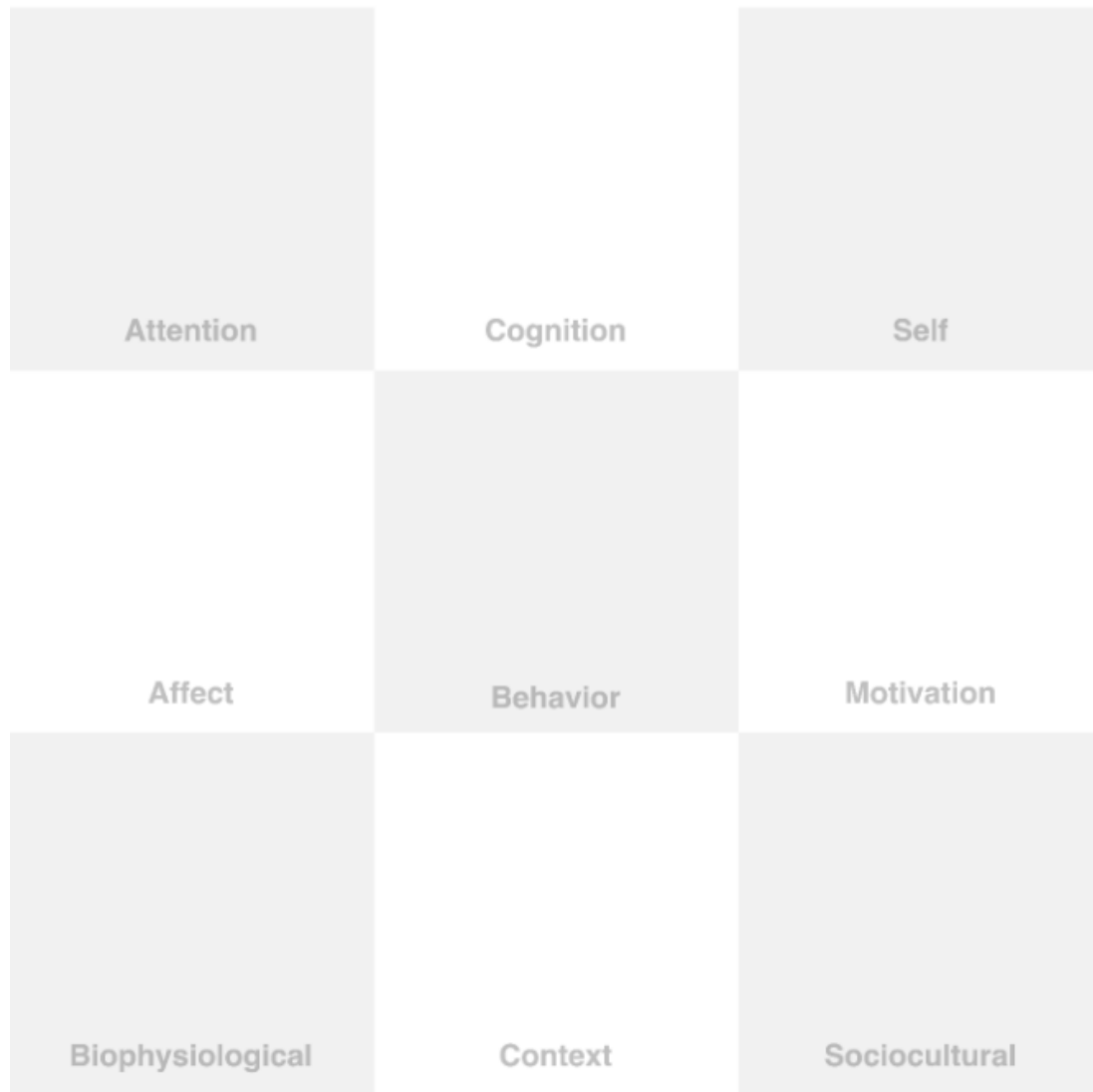
- Contingency management
- Stimulus control
- Shaping
- Self-management
- Arousal reduction
- Coping and emotion regulation
- Problem solving
- Exposure strategies
- Behavioral activation
- Interpersonal skills
- Cognitive reappraisal
- Modifying core beliefs
- Cognitive defusion
- Experiential acceptance
- Attentional training
- Values choice and clarification
- Mindfulness practice
- Enhancing motivation
- Crisis management and treating suicidality

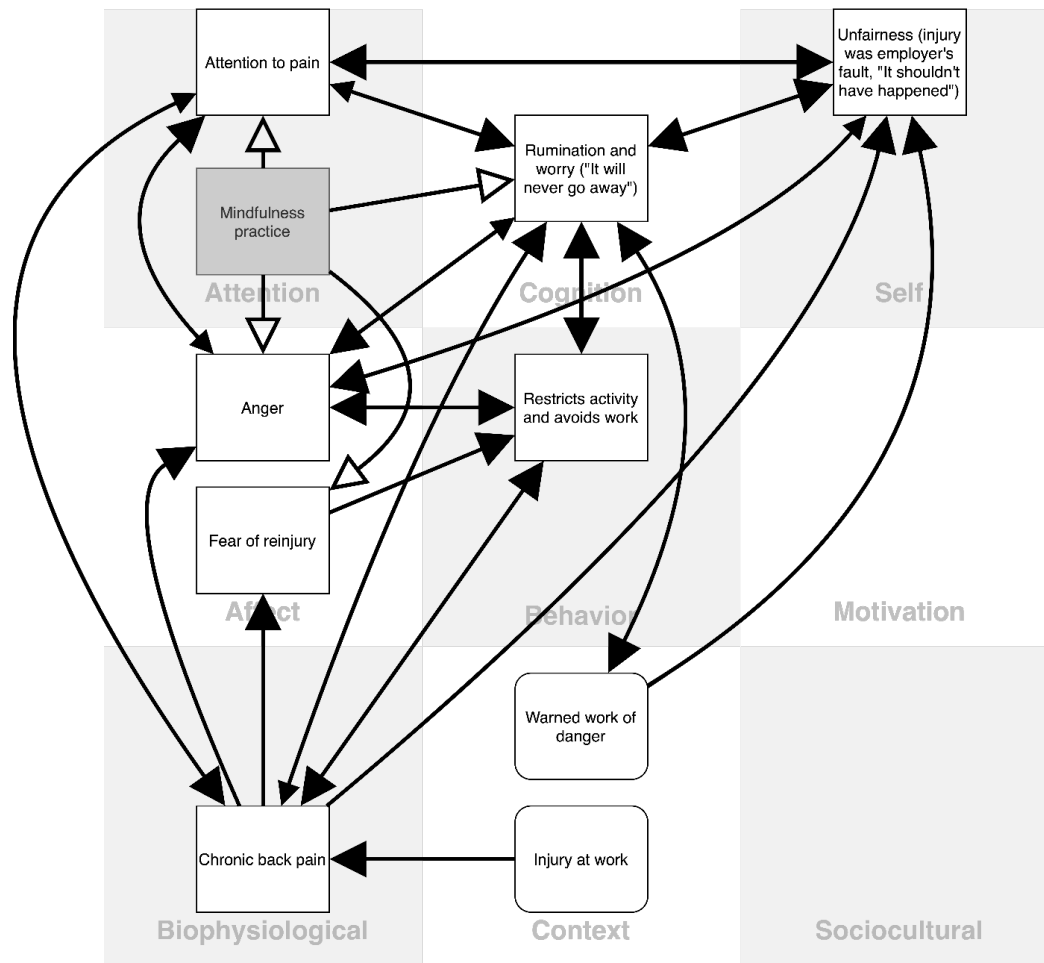
The Case of Maya

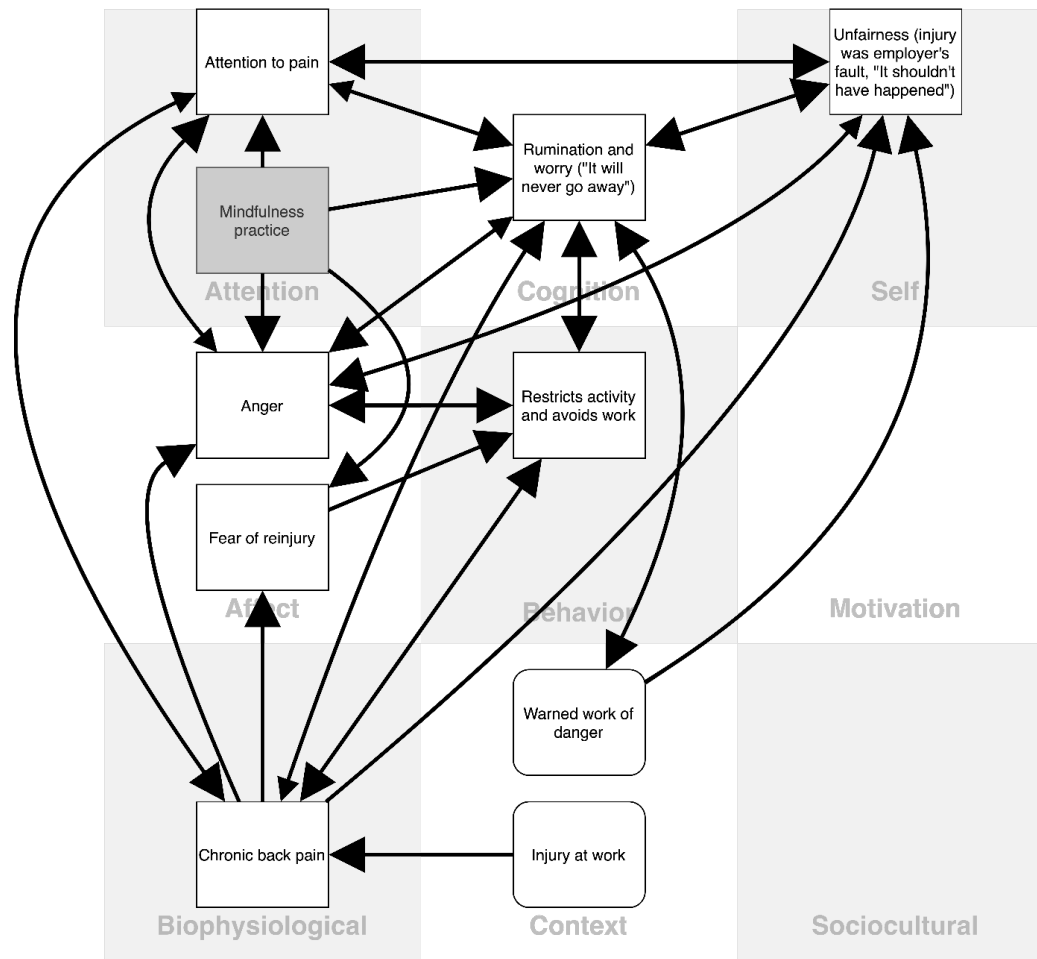
- Maya is a 30 year old nurse working in a hospital.
- One day, she had an accident where she slipped and fell in the storage room.
- As a result, she now suffers from chronic back pain.
- She resents his superiors, because she had warned them about the safety hazard in the cluttered storage room – but to no avail.
- She focusses a lot on his pain, ruminates about the unfairness, and worries that „it may never go away“.
- She is also scared of re-injuring himself, and so she barely leaves the house.

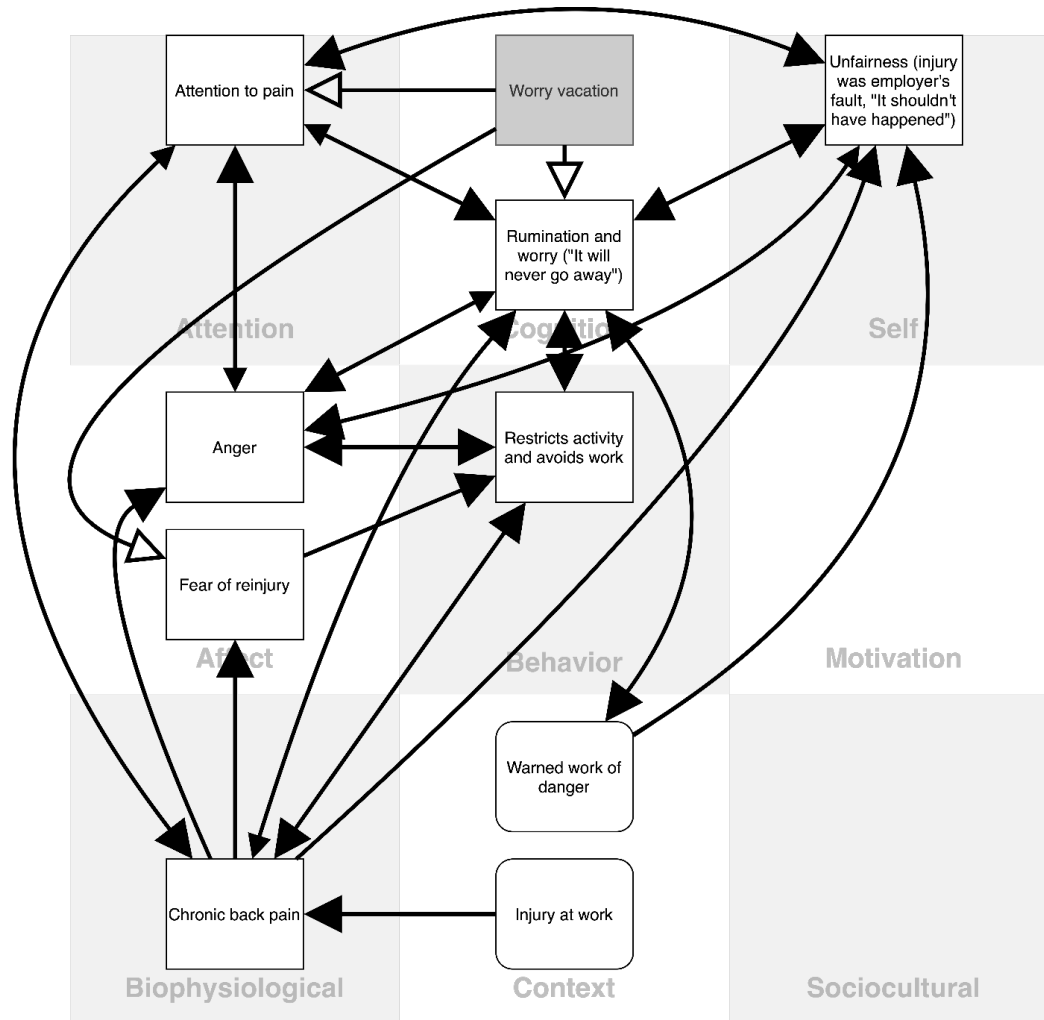












Conventional Strategies

- Focus on DSM-defined symptoms and syndromes within the medical model.
- Focus on cognitive restructuring of schemas and automatic thoughts.
- Focus on reducing negative affect.

Modern Strategies

- Depart from the latent disease model
- Focus on core processes linked to theory/philosophy and techniques: Process-Based CBT!
- Embrace an idiographic and functional analytic approach
- Emphasize flexibility
- Widen the goals of treatment from merely reducing negative affect toward positive affect, social connectedness, purpose, and quality of life.

Implications of PBT for the Future of Intervention Science

- Declined of named therapies
- Greater scalability
- Decline of general schools and rise of testable models
- Rise of mediation and moderation studies
- New forms of diagnosis and functional analysis
- From nomothetic to idiographic approaches
- Processes need to specify modifiable elements
- Importance of context
- Component analyses and the reemergence of laboratory-based studies
- New approaches to training
- Integration of behavioral and psychological science with the other life sciences
- New forms of delivery of care
- A science of the therapeutic relationship
- The role of culture

Conclusion

- Taking down the walls between traditions, schools, and waves.
- Foundational PBT question is: “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?”
- Model of model: Evolution science.
- Utilizing functional analysis and network approach to isolate and target treatment processes.

Questions?

