

Mobilizing Hope in the Face of Despair: Applying Social Neuroscience Research At the Bedside

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Presentation Aims

- Show how our residents are learn to extend psychotherapeutic interventions into routine psychiatric care, beyond formal psychotherapy
- Illustrate a rapid approach to the assessment/formulation/intervention that mobilizes hope as a “common factor” for therapeutic change
- Demonstrate what empirical social psychology and social neuroscience can add to the traditionally phenomenological approach to psychotherapy

What Would You Do Next?



Patient R.W. in Despair—

- Suicidal thoughts, in partial hospital
- Recently released from prison
- Relapsed on heroin
- Jobless and Homeless
- “There is no chance for me in the future”
- “I’d rather not to wake up.”
- “I don’t want to think about my shit life.”

T.J. Price, MD

PGY-II Residen

t

Patient R.W.

(with Dr. T.J. Price, MD)

PATIENT: *"I don't know why I am here."*

DR. PRICE: "Why are your here?"

Patient: *"I really don't know."*

Dr. Price then summarized what he had told him—
leaving prison, facing addiction and homelessness, no
job— yet he had come to his clinic appointment.
Why?

Patient R.W.

(with T.J. Price, MD)

The patient began remembering how he dropped out of school amidst an unstable home environment, but finishing his G.E.D., relying upon grandparents for support, and finally getting a job. Even as his addiction supervened, he had more than once achieved sobriety “cold turkey” for periods of time.

PATIENT: *“I guess I’ve been here before.”*

Patient R.W.

(with T.J. Price, MD)

Dr. Price noted R.W.'s past reliance upon grandparents as attachment relationships & his use of personal identity.

He asked R.W. to list in order the most pressing stressors: 1) Homelessness; 2) Unemployment; 3) Lack of insurance for medications; 4) Substance abuse.

PATIENT [looking at list]: *"This is doable, isn't it?"*

Patient R.W.

(with T.J. Price, MD)

The patient began engaging in the clinic group program. He re-connected with his grandparents, then, through an old friend, found a job at a local restaurant.

“There was a noticeable difference in his affect, including smiling when he told me about his new job.”

After discharge from day treatment, R.W. initiated psychiatric care at his local county service facility.

What Would You Do Next?

Patient T.D. in Despair—

- Suicide attempt by overdose
- Depression
- Losing home to foreclosure
- Recent death of dog who was long-term companion



Carrie Lewis, MD

PGY-II Resident

Patient T.D.

(with Carrie Lewis, MD)

Dr. Lewis asked: “How has adversity affected you in the past? How did you respond to it?”

T.D. remembered her grief when her father died 4 years earlier. When she thought about her father, she remembered he would have told her:

“I am strong and a fighter. I am the glue that kept the family together, and that shouldn’t stop now.”

After that time, she turned to her children for support.

Patient T.D.

(with Carrie Lewis, MD)

Dr. Lewis assessed T.D.'s hope-building competencies as:

- 1) Activating her core identity as a person who is “strong and a fighter” and “the glue that holds the family together”
- 2) Attachment relationships with her children

Patient T.D.

(with Carrie Lewis, MD)

Dr. Lewis suggested that when T.D. felt despair, she should:

- 1) Look at a photo of her father and reflect upon his words that she was “strong and a fighter”
- 2) Contact her children to let them know what she had been enduring

Patient T.D.

(with Carrie Lewis, MD)

After the interview, T.D. appeared more hopeful and stated that she now had “options and didn’t feel as alone.”

The next day she called her children who responded by coming to visit. She arranged a visit to a chronically ill sibling and began strategizing how to keep her home from foreclosure.

How to Explain Effectiveness of Residents' Interventions?

- Patients with major psychiatric illnesses & demoralized by multiple extreme stressors
- Brief 1 – 2 session patient encounters
- PGY-II residents had not yet received psychotherapy training
- No setting for psychotherapy
- No contract for psychotherapy
- No supervision for psychotherapeutic interventions

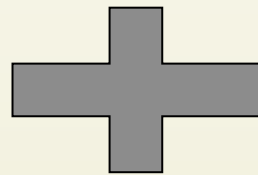
Story of the Hope Modules

Mission to Cure and to Heal, Plus . . .

- Base psychiatric treatment upon evidence-based practices
- Open access— Integrate mental health into other healthcare platforms (primary care, emergency medicine, community health systems)
- Portability— Make therapeutic interventions usable across different patient populations and treatment settings
- Costs Reduction— Task-shift to less expensive mental health professionals

Where To Find New Resources for Effective, Efficient, Portable Treatments?

Psychotherapy Outcome Research
("Common Factors for Change Processes")



Cognitive and Social Neuroscience
Research

Mission to Cure and to Heal, Plus . . .

Modularize Core Practices That Are—
Effective
Portable
Efficient

How People Change— What Psychotherapy Research Teaches Us

Psychotherapy Is Highly Effective

In meta-analyses, treatment effect size across different psychotherapies is consistently 0.8 standard deviations.

Number Needed to Treat = 3

Duncan, B.L., Miller, S.D., Wampold, B.E., & Hubble, M.A. (2010). *The Heart & Soul of Change, 2nd Edition*. Washington: American Psychological Association.

But Due to “Common Factors,” Not Theory-Specific Methods

Factors accounting for psychotherapy outcomes:

- 40% Patient factors
- 30% Therapeutic alliance
- 15% Mobilization of hope
- 15% Specific psychotherapeutic methods

There is significant interplay among these factors.

-- Lambert, M.J., & Bergin, A.E. (1994). The effectiveness of psychotherapy. *Handbook of Psychotherapy and Behavior Change, 4th Edition*. New York: Wiley.

What Explains the Potency of the Common Factors?

- Human beings are designed for healing and growth— multiple latent processes exist that only need activation;
- Activation largely occurs relationally, through confiding, attachment, social dominance, peer affiliation, or other sociobiological relationships;
- Specific models of psychotherapy ***that have efficacy*** provide a structure that activates common factors.

Hope As a Common Factor for Psychotherapeutic Change

Hope—

- 40%: Patient factors (skills, competencies, motivation, other resources)
- 30%: Therapeutic alliance
- 15%: Mobilization of hope
- 15%: Specific psychotherapeutic methods

Duncan, B.L., Miller, S.D., Wampold, B.E., & Hubble, M.A. (2010). *The Heart and Soul of Change, Second Edition*. Washington, DC: American Psychological Association.

Hope Practices Are Ideal for Teaching the Common Factors

- Extensive empirical research on hope from cognitive psychology, social psychology, psychosomatic medicine, & palliative care medicine literatures
- “The Domino Effect”— Mobilizing hope mobilizes other common factors for change

What Is Hope?

*Hope is the worst of all evils because it
prolongs the torment of men.*

-- Freidrich Nietzche (1878)

*The miserable have no other medicine,
only hope.*

-- William Shakespeare,
Measure for Measure

Jewish Museum Berlin



“I wish I could live for a long time so that one day I may know how to explain it, and if I am not granted that wish, well, then somebody else will perhaps do it, carry on from where my life has been cut short. And that is why I must try to live a good and faithful life to my last breath: so that those who come after me do not have to start all over again, need not face the same difficulties.”

-- Etty Hillesbrum, awaiting transport to her death at Auschwitz.

What is Hope?

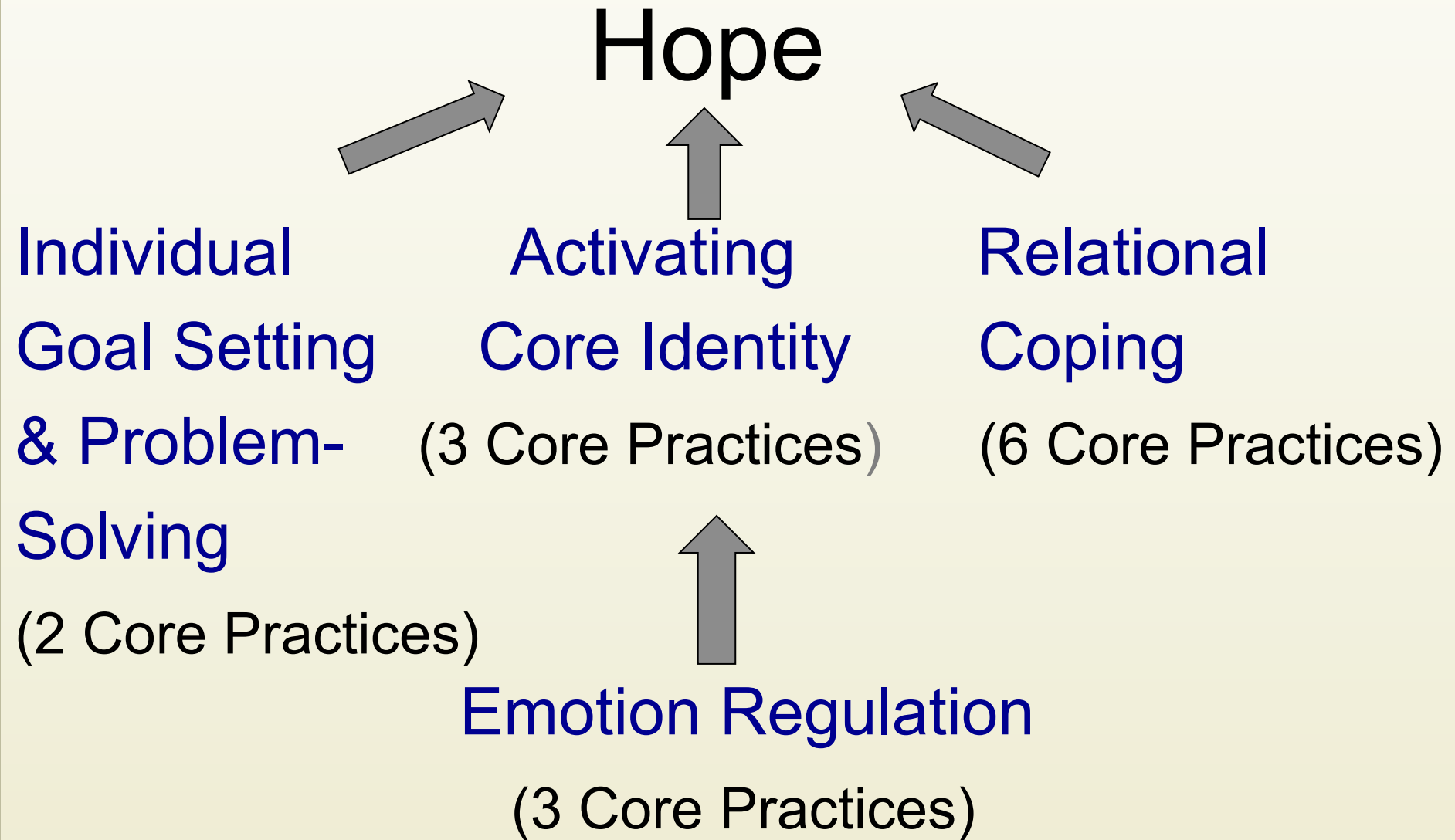
- A person's posture of hope is not fully determined by the likelihood for a positive outcome;
- Hope is a practice— something *you do*, not something *you feel*;
- Hope is practiced by locating a deep desire or commitment and taking a step towards it.

-- Weingarten K. (2010). Reasonable hope: Construct, clinical applications, and supports. *Fam Proc.* 2010; 49: 5–25.

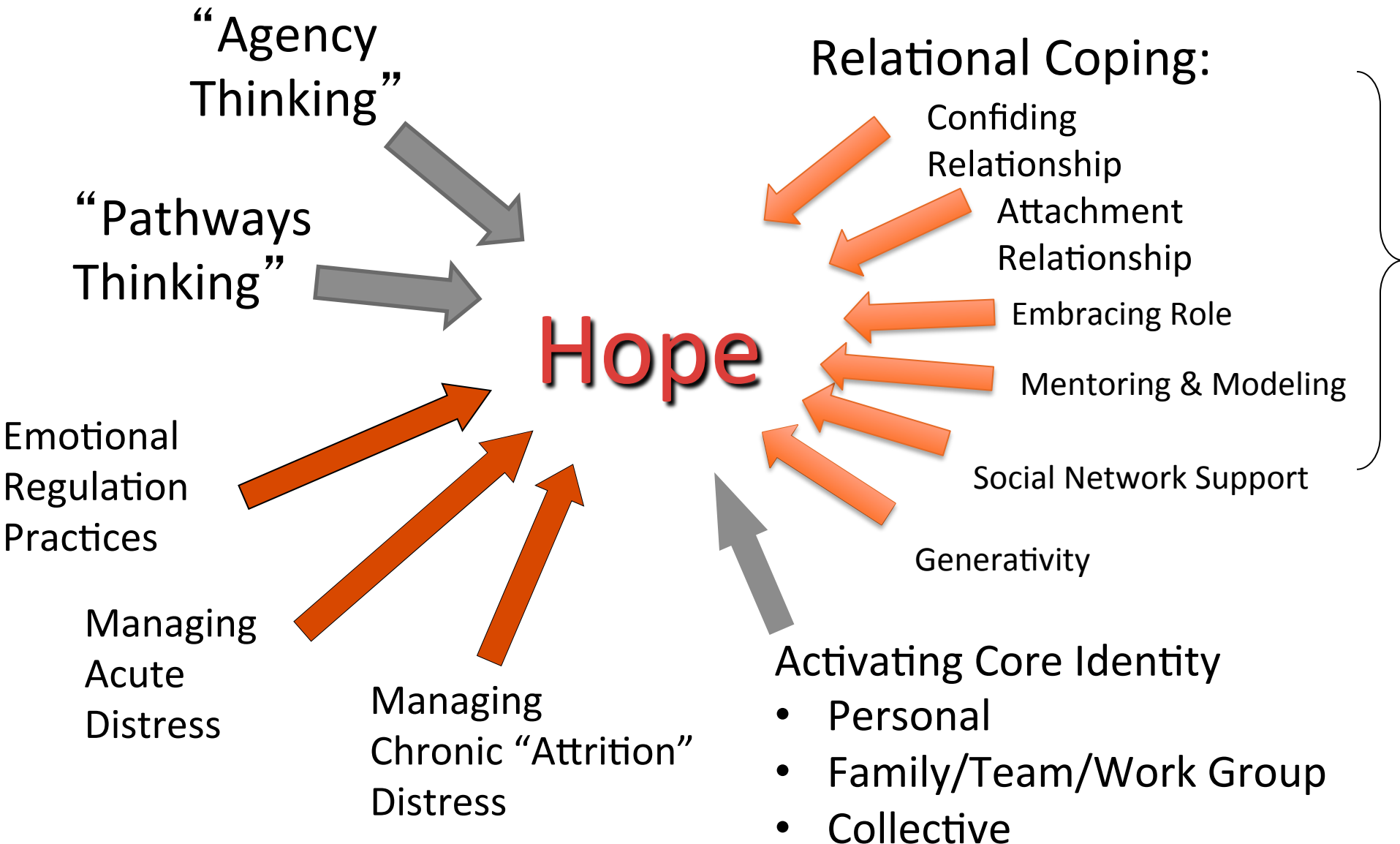
Creating Hope Modules

- Package of psychotherapy skill sets for mobilizing hope organized around a single evidence-based practice
- Integrates assessment, formulation, and intervention
- Can be inserted into different clinical encounters, for different problems, and with different patient populations.

Sectors of Hope Practices



Evidence-Based Hope-Building Practices



How Is Hope Assessed?

How Is Hope Assessed?

Inquire how a person has responded to adversity in the past with two questions:

- 1) *“How did this affect you?”*
- 2) *“How did you respond?”*

-- Wade A. (1997). Small acts of living: Everyday resistance to violence and other forms of oppression. *Contemporary Family Therapy* 19: 23-39.

Every human being possesses a reserve of strength whose extent is unknown to him, be it large, small, or nonexistent, and only through extreme adversity can we evaluate it.

-- Primo Levi, The Drowned and the Saved, (1988, p 60)



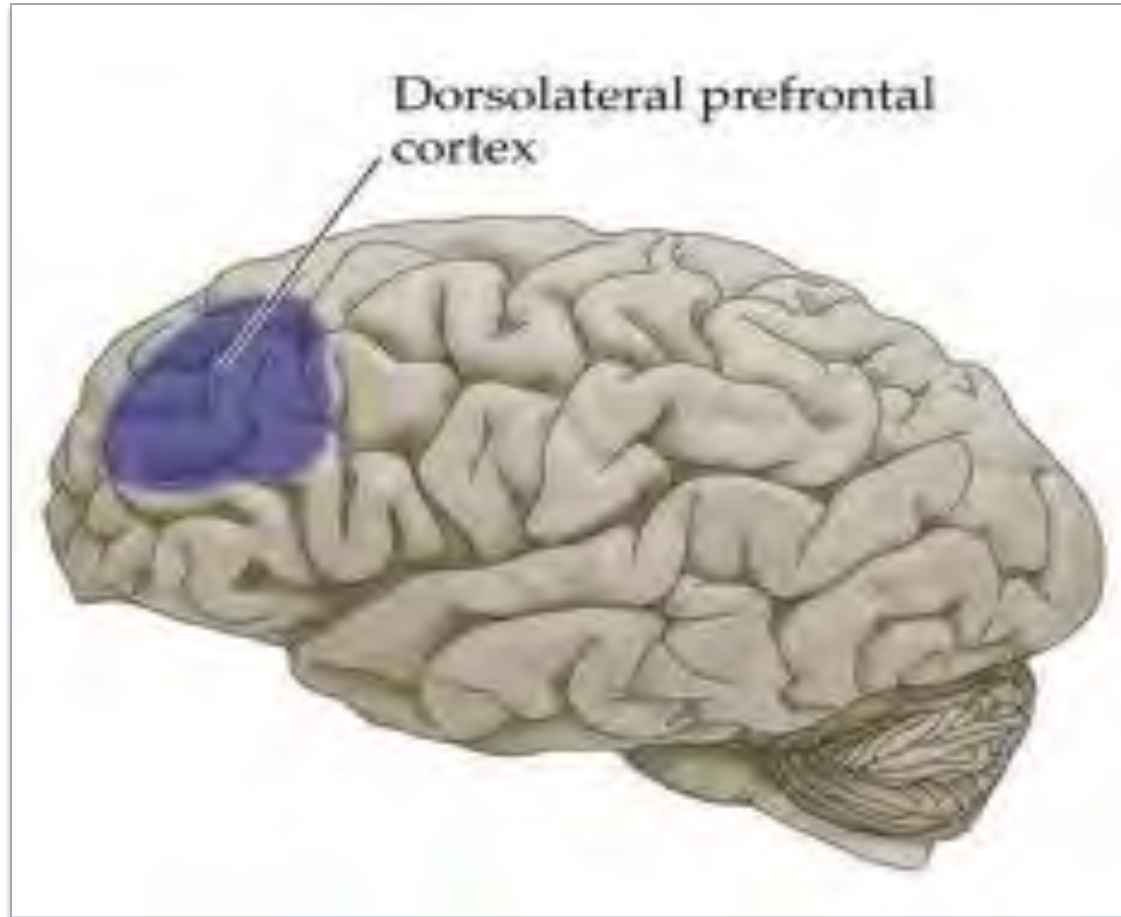
Individual Hope Practices— Problem-Solving that Overcomes Obstacles to Goals



Hope = Pathways Thinking + Agency Thinking

-- Snyder, C. R. (Ed.). (2000) *Handbook of Hope: Theory, Measures, and Applications*. New York: Academic Press.

Dorsolateral Prefrontal Cortex— Home of Executive Functions



Emotion Regulation and Distress Management Augment Hope Capacity

Stress signalling pathways that impair prefrontal cortex structure and function

Amy F. T. Arnsten

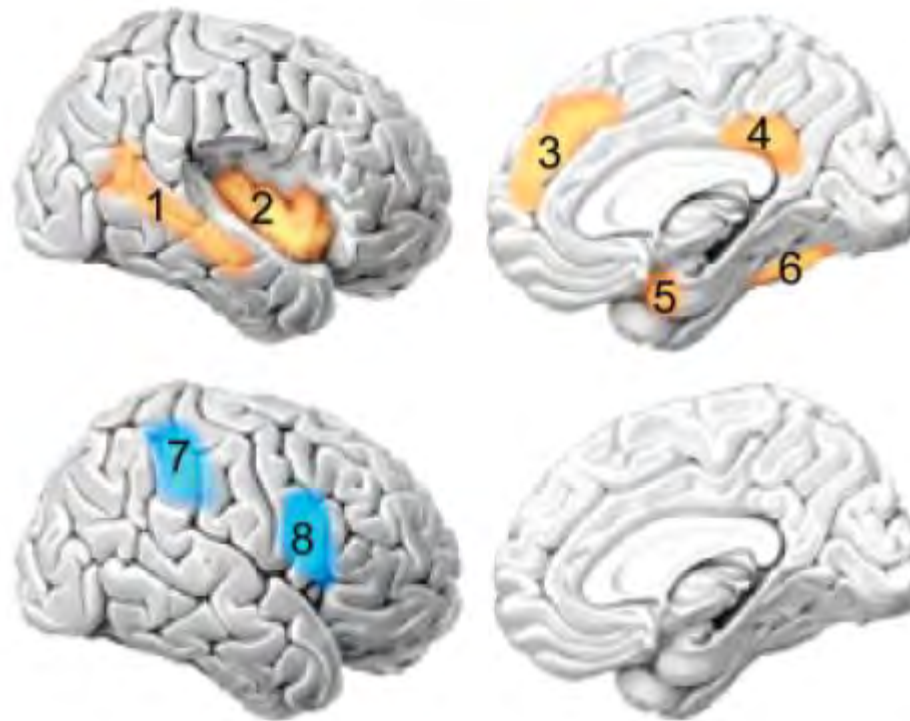
Abstract | The prefrontal cortex (PFC)—the most evolved brain region—subserves our highest-order cognitive abilities. However, it is also the brain region that is most sensitive to the detrimental effects of stress exposure. Even quite mild acute uncontrollable stress can cause a rapid and dramatic loss of prefrontal cognitive abilities, and more prolonged stress exposure causes architectural changes in prefrontal dendrites. Recent research has begun to reveal the intracellular signalling pathways that mediate the effects of stress on the PFC. This research has provided clues as to why genetic or environmental insults that disinhibit stress signalling pathways can lead to symptoms of profound prefrontal cortical dysfunction in mental illness.

Arnsten, A.F.T. (2009). *Nature Reviews* 10:410-422.

Relational Coping

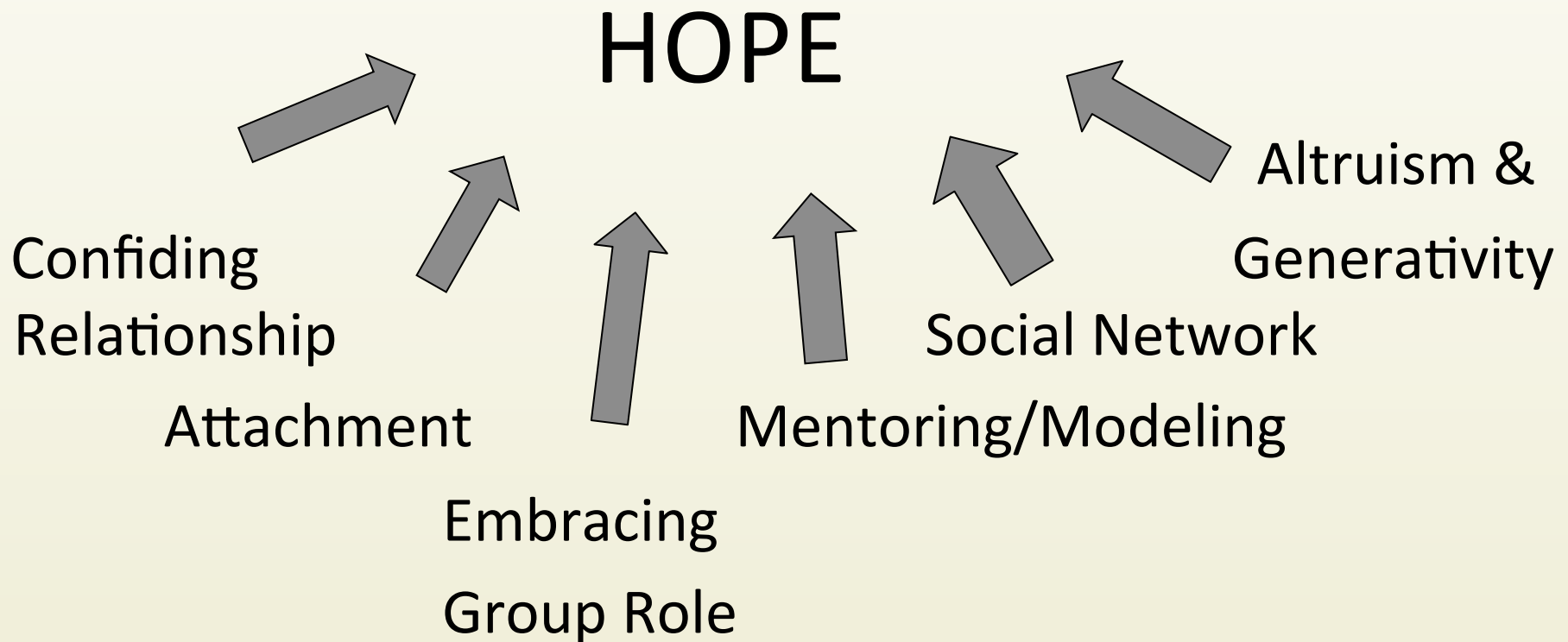
Relational coping transforms pathways-thinking, agency-thinking, and emotion regulation by an individual to a couple/family/team-based effort.

Mirror Neuron System & Medial Prefrontal Cortex Enable Dual Social Cognition Systems— Person-to-Person & Categorical Social Cognition



Syncing pain systems enables compassion— relieving pain of Other relieves one's own pain in person-person relations.

Relational Coping



Mobilizing a Core Identity

- Personal Identity
- Family, Team, Work Group Identity
- Collective Identity

Personal Identity

- In your “heart of hearts,” who are you?
Who do you know yourself to be?
- What have you found to be most authentic in your living?
- Who is it important that you become?
- What important stories anchor this sense of personal identity?

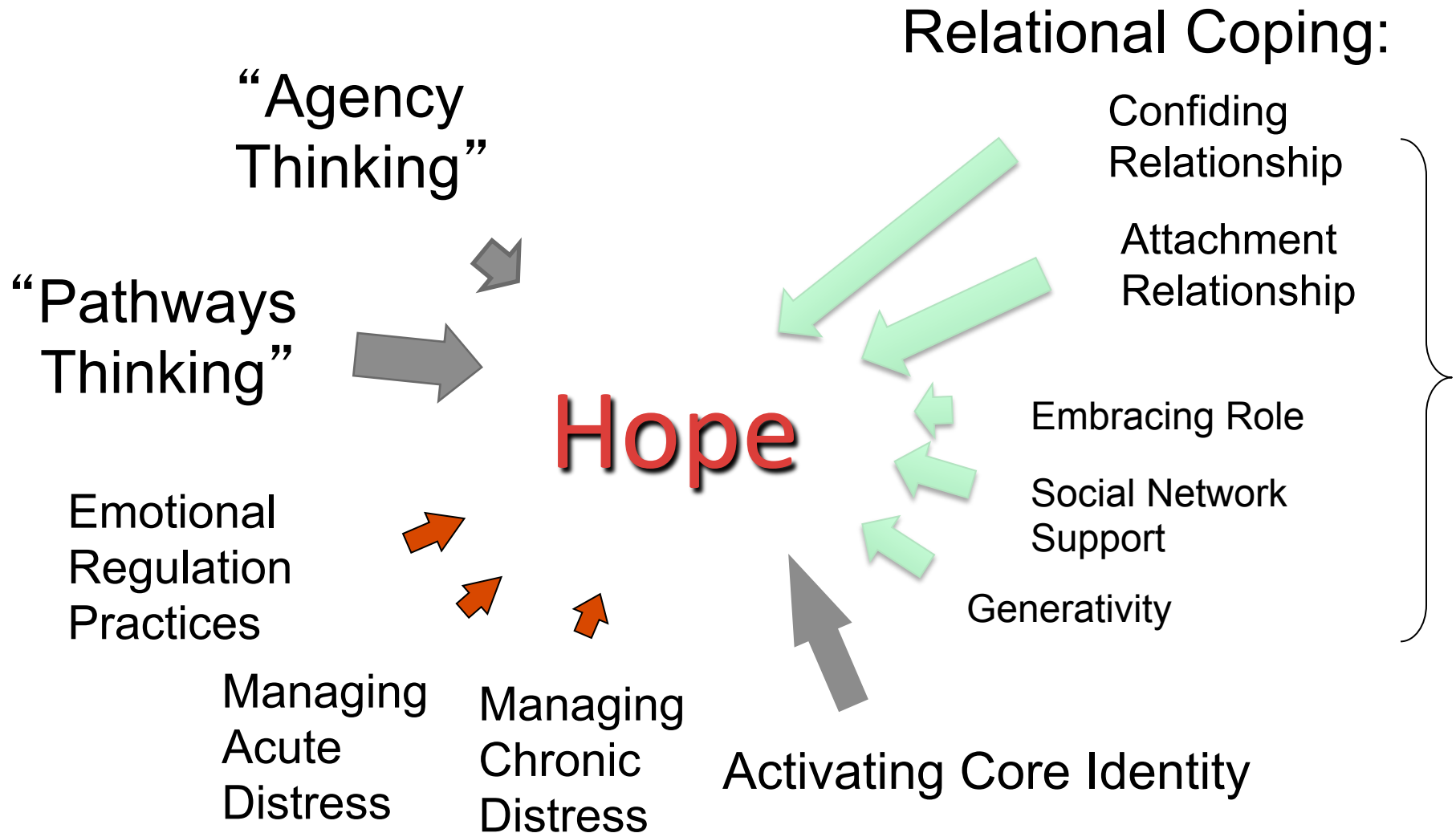
Work Group, or Team Identity

- Who is in your group? To whom do you belong?
- For whom would you fight to protect? Who would fight to protect you?
- For whom is it important that you persevere in your work?
- What important stories anchor this sense of family or group identity?

Collective Identity

- Of what greater whole are you a part?
- Of those aspects of your collective identity—gender, ethnicity, community, nationality, religion, or other— for which would you be willing to sacrifice and suffer in order to protect?
- What important stories anchor this sense of collective identity?

Primary Hope Practices Among GWU Psychiatry Residents



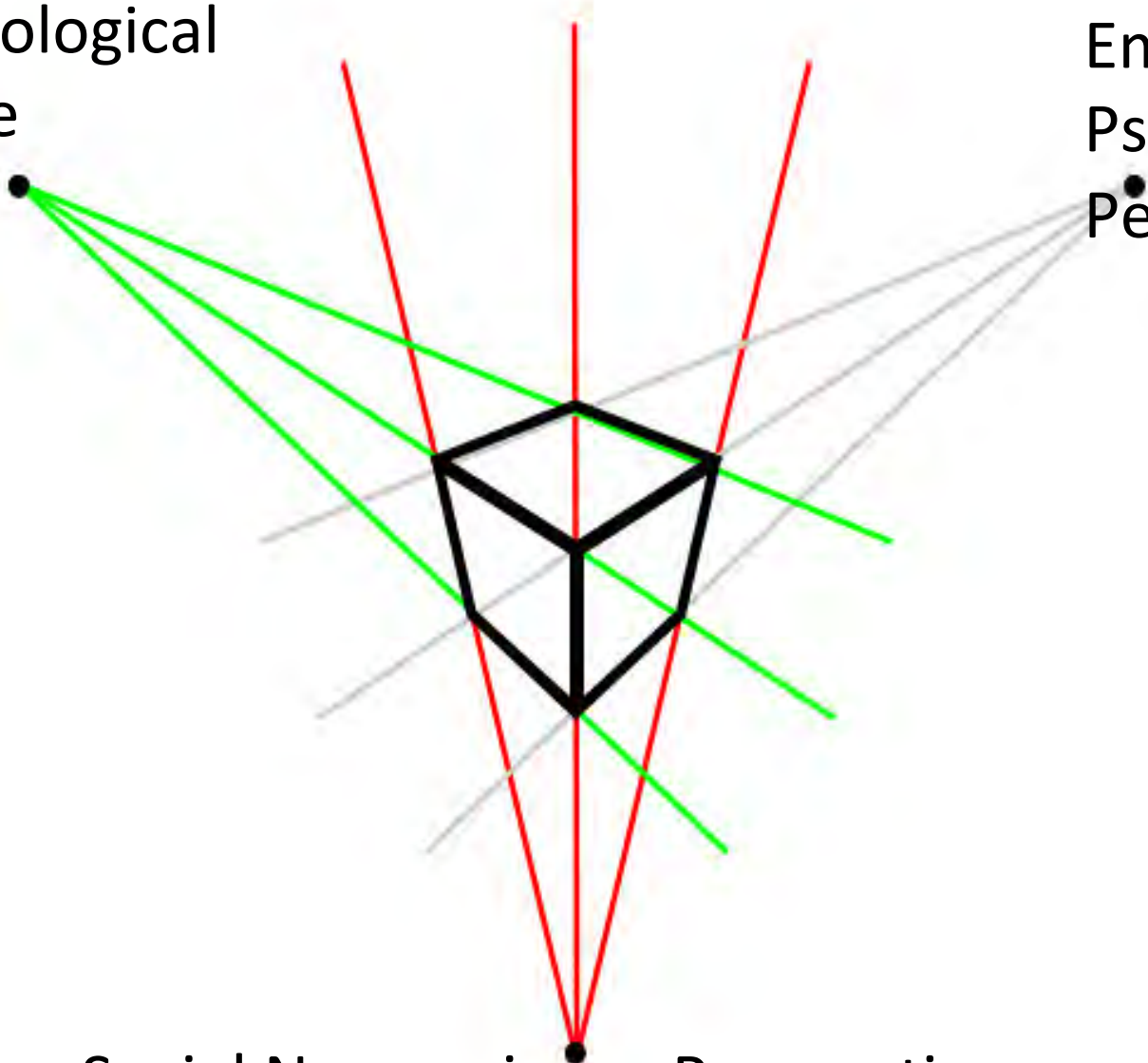
What Does Neuroscience Add?

Epistemology of Tri-Ocular Vision

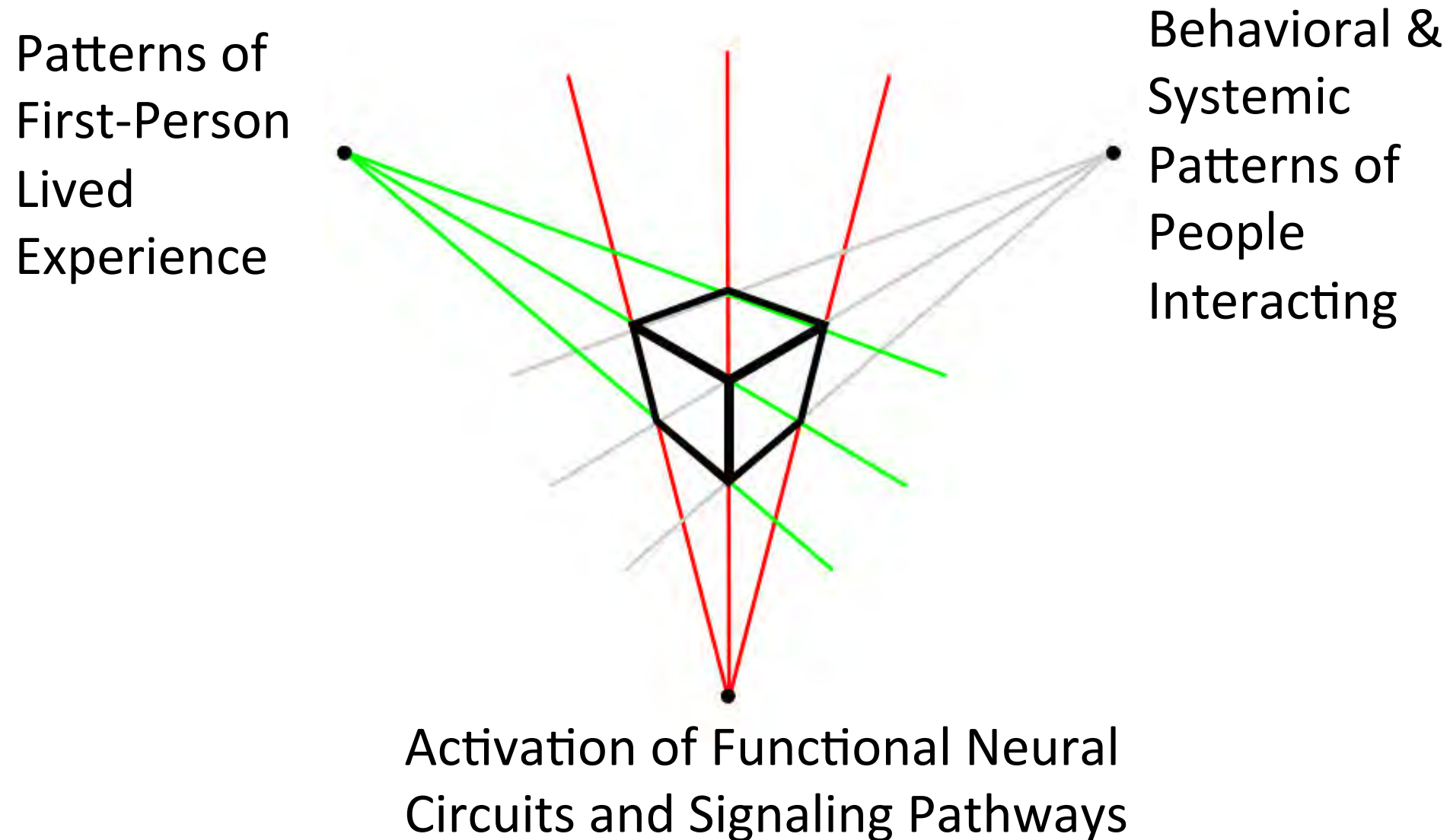
Phenomenological
Perspective

Empirical
Psychological
Perspective

Social Neuroscience Perspective



Epistemology of Tri-Ocular Vision



What Does A Neuroscience Perspective Uniquely Add?

- 1) Impaired executive functions impair pathways-thinking and agency-thinking
- 2) Emotion regulation protects executive functions
- 3) Cognitive load diminishes executive functions.
- 4) “Attention trumps emotion” in the brain
- 5) Circuitry for sense of safety is different from circuitry for sense of threat.
- 6) Attachment relationships activate safety circuitry.

Summary

Hope modules provide effective, efficient, and portable methods for activating therapeutic change:

- Can be inserted into routine psychiatric patient encounters
- Do not need formal contract for psychotherapy
- Teachable without prior psychotherapy training
- Add to, but do not replace, formal psychotherapy training