A Case Formulation Approach to Cognitive-behavior Therapy

Jacqueline B. Persons, Ph.D.
Dept of Psychiatry and Behavioral Sciences
Stanford University School of Medicine
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Cognitive Behavior Therapy & Science Center

I will post slides and handouts at . . .

www.cbtscience.com on the Training page

Cognitive Behavior Therapy & Science Center

- The case formulation approach to CBT
- Exercise: Developing a case formulation
- Review and Feedback

Action Items

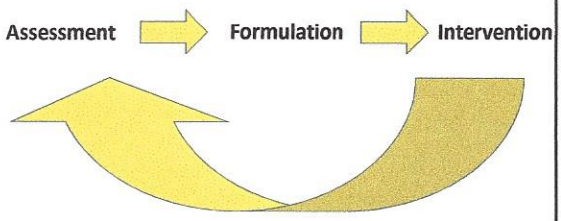
- _____
- _____
- _____

Very little here is original. I am borrowing from....

- Ira Turkat
- Aaron T. Beck
- Joseph Wolpe
- Stephen Haynes
- Kuyken, Padesky, & Dudley
- Nick Tarrier
- Michael Lambert . . .
- and many others

- **The case formulation approach to CBT**
- Exercise: Developing a case formulation
- Review and Feedback

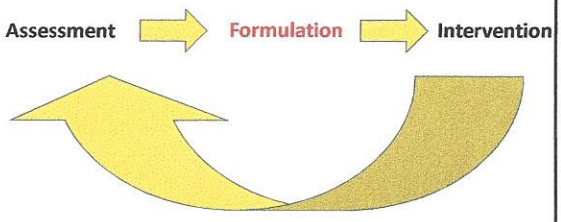
A Case Formulation Approach to Cognitive-behavior Therapy



Elements of a Case Formulation Approach to Treatment

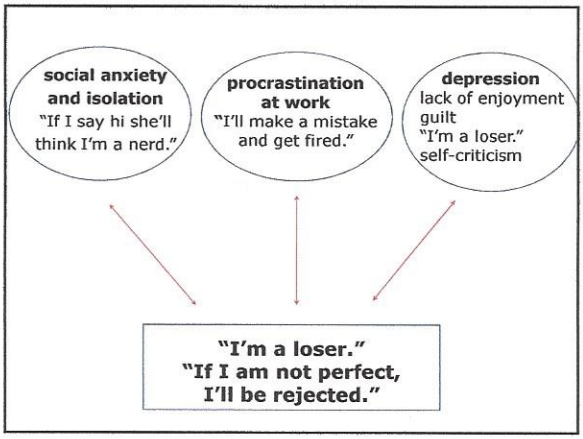
- Assess to develop a formulation
- Use the formulation to guide intervention and solve problems
- Assess progress at every session to determine if patient is reaching goals and to test the formulation

A Case Formulation Approach to Cognitive-behavior Therapy

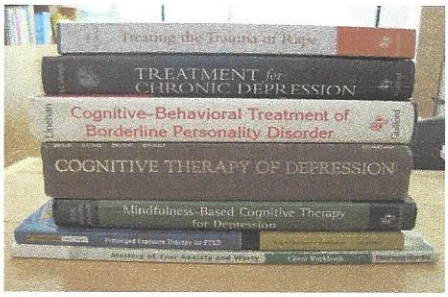


Definition of Formulation

A formulation is a hypothesis about the psychological mechanisms that cause and maintain a patient's problems.



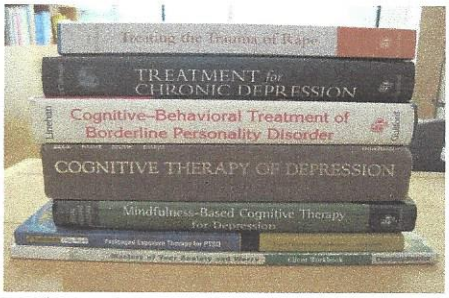
The alternative to a case formulation approach: Assign a diagnosis and use an empirically-supported protocol for a disorder



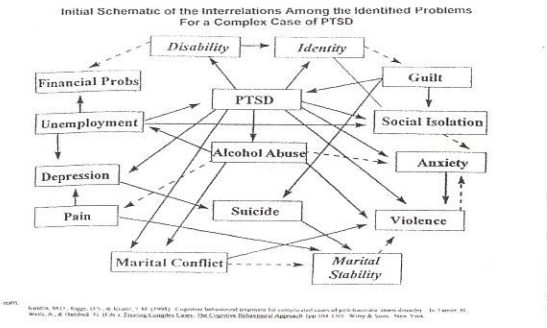
case formulation-driven CBT helps the therapist solve these problems

✓Multiple disorders and problems

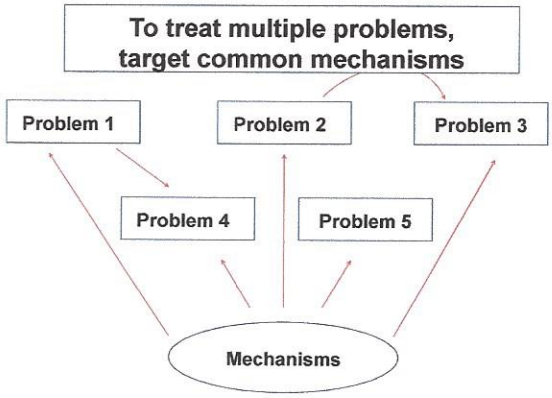
Protocols for empirically-supported treatments (ESTs) generally target a single disorder

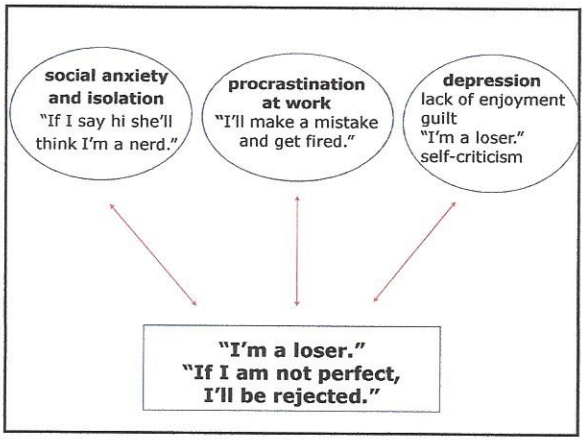


Most clients have multiple disorders and problems



To treat multiple problems, target common mechanisms





case formulation-driven CBT helps the therapist solve these problems

✓Multiple disorders and problems

✓No ESTs for many disorders

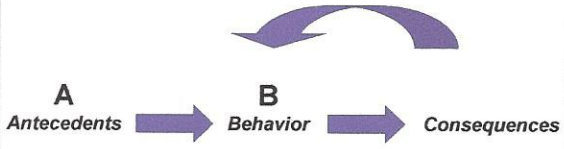
No empirically-supported treatment (EST) is available for many disorders and problems

- Dysthymia
- Most personality disorders
- Asperger's syndrome
- Somatization disorders
- Dissociative disorders
- "I want to get married and have a family."

Case Formulation-driven CBT can guide treatment when no EST exists

- Steve, a young man who had psychogenic vomiting and mental retardation

I used the OPERANT CONDITIONING model to develop a formulation (functional analysis) and treatment plan



Functional Analysis

Antecedents (A)	Behaviors (B) (actions, thoughts, or emotions)	Consequences (C)

Functional Analysis of Steve's Vomiting Behavior

Antecedents (A)	Behaviors (B)	Consequences (C)
Boredom Nothing to do No meaningful relationships	Vomiting	Father cleans up vomit, takes patient to hospital and stays there with him for hours. TV, couch, pampering at home.

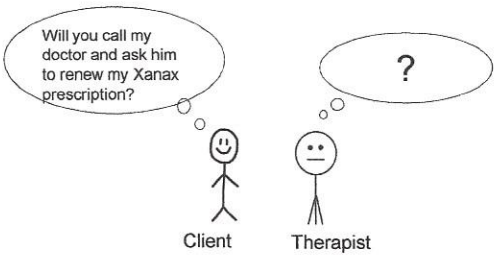
Treatment of Steve's Vomiting Behavior Based on the Functional Analysis

Antecedents (A)	Behaviors (B)	Consequences (C)
Day treatment program	Vomiting	Clean up own vomit. Father takes to hospital, then leaves. No pampering at home after vomiting.

case formulation-driven CBT helps the therapist solve these problems

- ✓Multiple disorders and problems
- ✓No ESTs for many disorders
- ✓Problem behaviors impede treatment

Use the Conceptualization to Identify a Therapeutic Response to Clinically Relevant Behavior



Adapted from Kohlenberg, R. J., & Tsai, M. (1991). *Functional analytic psychotherapy.*

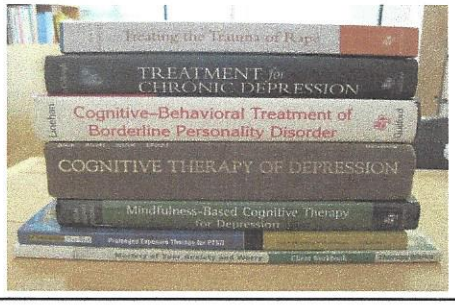
case formulation-driven CBT helps the therapist solve these problems

- ✓Multiple disorders and problems
- ✓No ESTs for many disorders
- ✓Problem behaviors impede treatment
- ✓Nonresponse is common

Large Proportions of Depressed Patients Who Receive ESTs Do Not Respond

Driessen et al., 2013 (< 50% reduction in HAM-D)	CBT 37% Psychodynamic 42%
Luty et al., 2007 < 60% change in Montgomery-Asberg Depression Rating Scale)	Interpersonal Therapy 59% CBT 49%
DeRubeis et al., 2005 16-wk HAM-D score of 12 or lower & either 14-wk score of 14 or lower or a 10- and 12-wk score of 12 or lower	42% CBT 42% Antidepressant Medication
Persons et al., 2006 Naturalistic CBT (<50% reduction in BDI)	45%

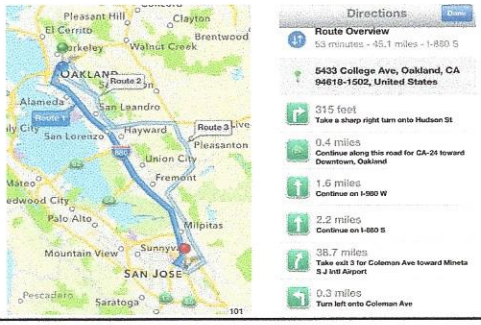
When the patient does not respond to the empirically-supported protocol, it is difficult to know what to do next.



The case formulation approach offers the therapist a way to address treatment failure

- Collect more assessment data
- Consider whether a different formulation might lead to different interventions that might lead to a better outcome

A protocol is like a list of directions, whereas a formulation is like a map (if one route is blocked, the map helps you find others)



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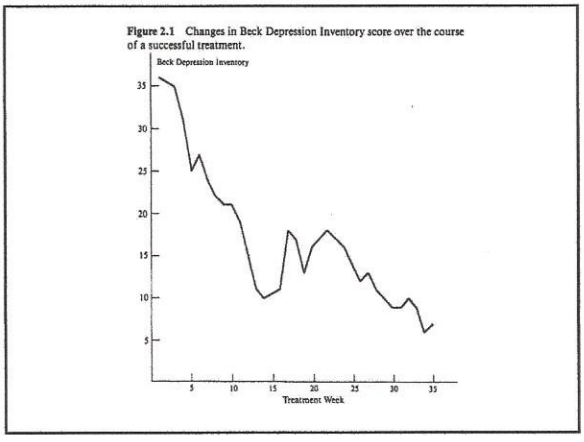
Empirical foundations of a case formulation approach to CBT

- Evidence-based formulations
- Interventions from ESTs
- Controlled studies show that outcome of formulation-driven treatment is not inferior and sometimes superior to protocol treatment
- Single case studies show that outcome is better when treatment is guided by an accurate formulation
- Progress monitoring improves outcomes

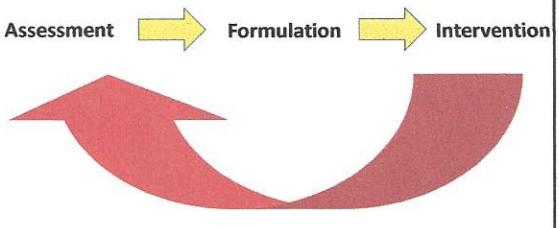
See Persons & Hong, in press

The most important data are

progress monitoring data collected from every patient during treatment.



A Case Formulation-driven Approach to Cognitive-behavior Therapy



PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	**Somewhat difficult**	**Very difficult**	**Extremely difficult**
☐	☐	☐	☐

PATIENT HEALTH QUESTIONNAIRE PHQ-9 FOR DEPRESSION

USING PHQ-9 DIAGNOSIS AND SCORE FOR INITIAL TREATMENT SELECTION

A depression diagnosis that warrants treatment or treatment change, needs at least one of the first two questions endorsed as positive (*little pleasure, feeling depressed)* indicating the symptom has been present more than half the time in the past two weeks.

In addition, the tenth question about difficulty at work or home or getting along with others should be answered at least "somewhat difficult."

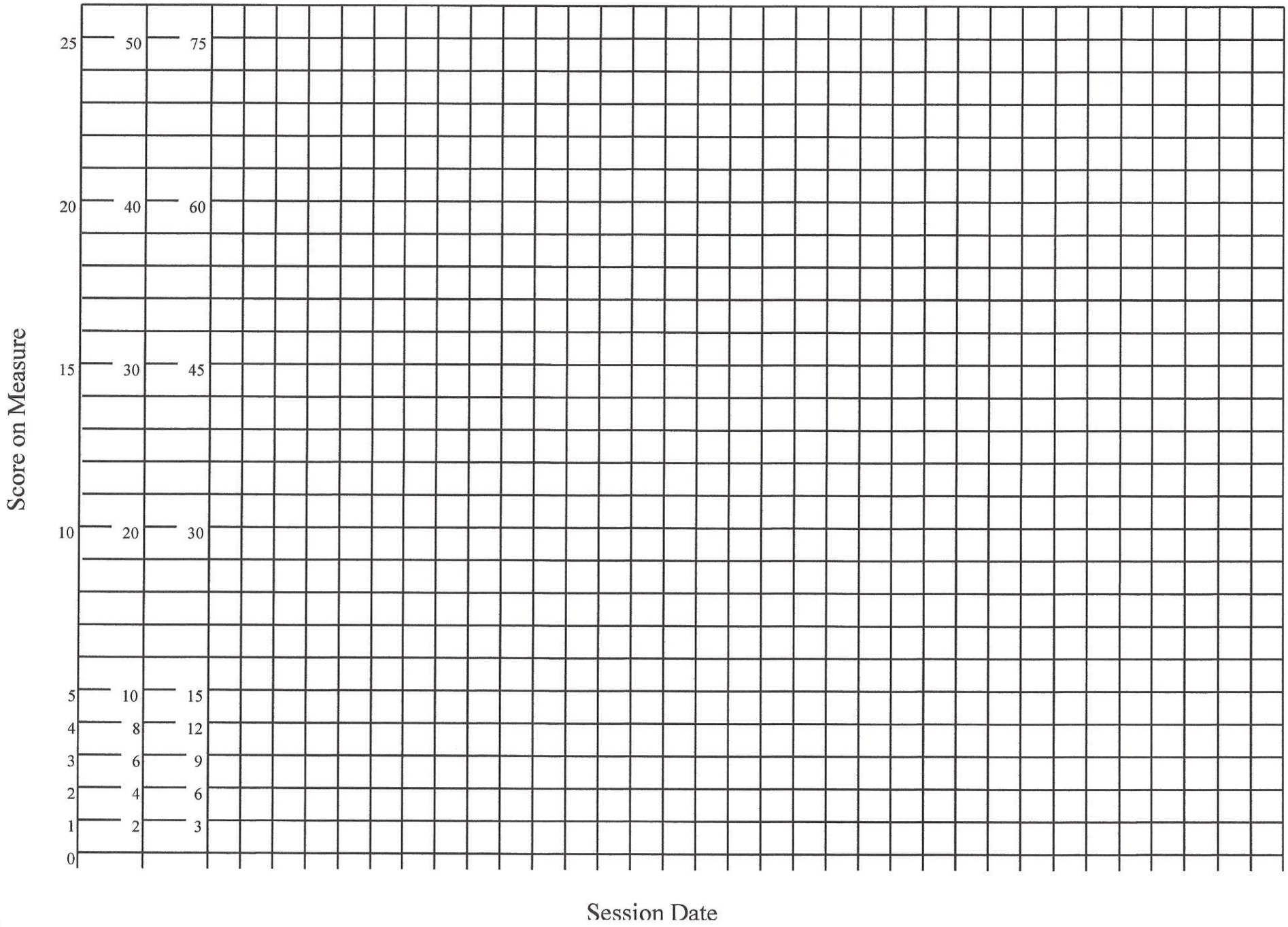
When a depression diagnosis has been made, patient preferences should be considered, especially when choosing between treatment recommendations of antidepressant treatment and psychotherapy.

PHQ-9 Score	Provisional Diagnosis	Treatment Recommendation
5-9	Minimal symptoms*	Support, educate to call if worse; return in 1 month.
10-14	Minor depression ††	Support, watchful waiting
	Dysthymia*	Antidepressant or psychotherapy
	Major depression, *mild*	Antidepressant or psychotherapy
15-19	Major depression, *moderately severe*	Antidepressant or psychotherapy
≥ 20	Major depression, *severe*	Antidepressant and psychotherapy (especially if not improved on monotherapy)

* If symptoms present ≥ two years, then probable chronic depression which warrants antidepressant or psychotherapy (ask, *"In the past 2 years have you felt depressed or sad most days, even if you felt okay sometimes?"*).

†† If symptoms present ≥ one month or severe functional impairment, consider active treatment.

Progress Plot for _____



9

Standardized Scales for Assessing Problems and Mechanisms

Collections of Measures, including Progress Monitoring Tools

Antony, M. M., Orsillo, S. M., & Roemer, L. (2001). *Practitioner's guide to empirically based measures of anxiety.* New York, NY: Kluwer Academic/Plenum Publishers.

Fischer, J., & Corcoran, K. (2007). *Measures for clinical practice and research: A sourcebook* (Vol. 1 (Couples, Families, Children). Oxford: Oxford University Press.

Fischer, J., & Corcoran, K. (2007). *Measures for clinical practice and research: A sourcebook* (Vol. 2 (Adults). Oxford: Oxford University Press.

Nezu, A. M., Ronan, G. F., Meadows, E. A., & McClure, K. S. (2000). *Practitioner's guide to empirically based measures of depression.* New York, NY: Kluwer Academic/Plenum Publishers.

Mechanism Assessment Tools

Frost Multidimensional Perfectionism Scale (FMPS). Reprinted in Antony et al. above.

The Pleasant Events Schedule. Reprinted in Nezu et al., above.

Obsessive Compulsive Questionnaire – 44. OBQ44 and an excel scoring document are posted at www.cbtscience.com. Go to Training, and then to Training Resources.

Anxiety Sensitivity Index. ASI and ASI-revised are reprinted in Antony et al., above.

Intolerance of Uncertainty Scale. Reprinted in Antony et al., above.

Dysfunctional Attitude Scale. Reprinted in Fischer & Corcoran, Vol. 2 above.

Progress Monitoring Tools

- PHQ9 and graph paper are in handouts
- For additional tools:
  - Go to: www.cbtscience, then to Training, then to Resources, then to Clinical Tools
  - See "Standardized Scales for Assessing Problems and Mechanisms" in handouts

- The case formulation approach to CBT
- **Exercise: Developing a case formulation**
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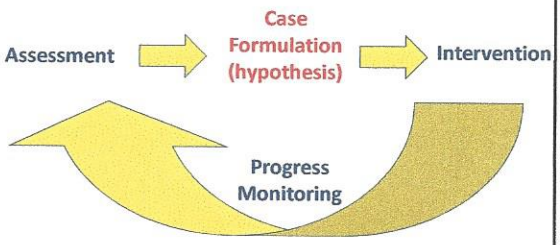
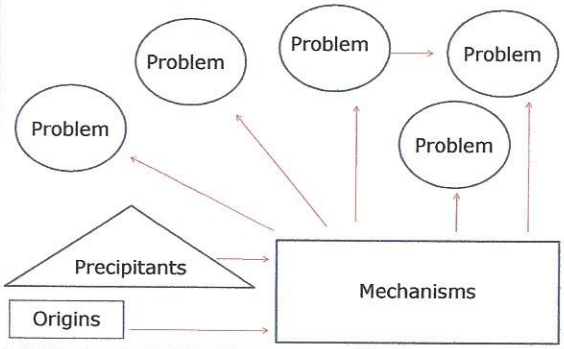
A Case Formulation-driven Approach to Cognitive-behavior Therapy



Elements of a Case Formulation



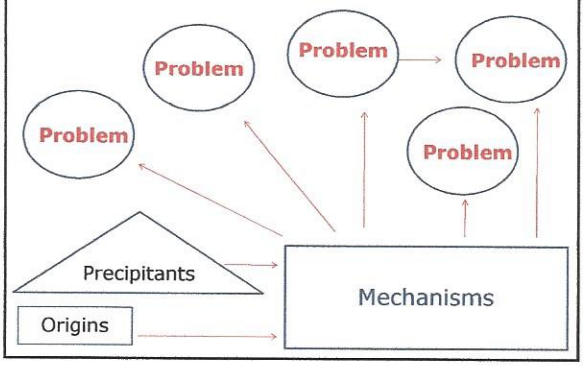
A problem is

. . . a symptom, set of symptoms, disorder, or difficulty that is observable/behavioral. E.g., suicidal rumination, OCD, marital fighting and other difficulties, substance abuse, panic attacks.

A mechanism is

. . . A psychological construct (e.g., maladaptive schemas, problematic contingencies, perfectionism, intolerance of uncertainty, anxiety sensitivity) that causes and/or maintains the problems

Developing a Problem List



Domains Assessed to Create a Comprehensive Problem List

- Psychological/psychiatric disorders and symptoms
- Medical disorders and symptoms
- Interpersonal
- Work
- Finances
- Housing
- Legal
- Leisure
- Healthcare difficulties

Intake Measures Used at the Cognitive Behavior Therapy & Science Center

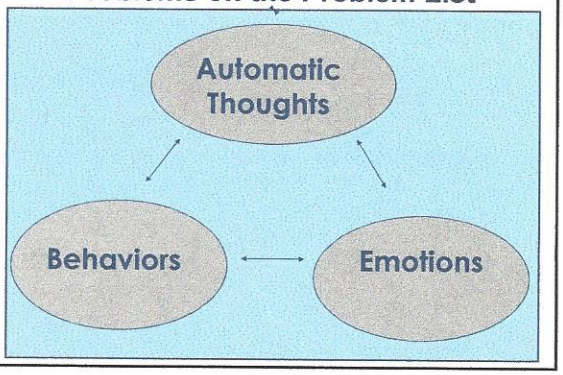
- Adult Questionnaire
- Diagnostic Screen
- Depression Anxiety Stress Scales (DASS)
- Functioning and Satisfaction Inventory (FSI)
- Obsessive Beliefs Questionnaire
- Two scales assessing social support

Go to www.cbtscience.com, click on Treatment, then on Intake Forms

Guidelines for Developing a Problem List

- Develop a comprehensive list.
- Name each problem in one or two words. "Work dissatisfaction."
- Describe emotion, behavioral, and cognitive components. "Feels worthless, avoids work and thinks, 'I'm going to fail at that project.'"
- Strive for a mutually agreed-upon Problem List.

A useful format for describing Problems on the Problem List



Priority Order of Problems

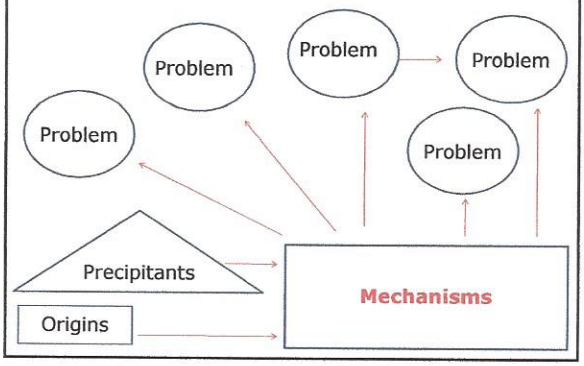
1. Suicidal and self-harming behaviors
2. Therapy-interfering behaviors
3. Quality-of-life interfering behaviors
4. Other problems

Quality-of-life-interfering Behaviors

- Severe substance abuse
- High-risk sexual behavior
- Criminal behaviors that may lead to jail
- Serious dysfunctional interpersonal behaviors (choosing abusive partners, ending relationships prematurely)
- Employment – or school-related dysfunctional behaviors (quitting jobs or school; inability to look for or find a job)
- Illness-related dysfunctional behaviors (inability to get proper medical care; not taking medications)
- Housing-related dysfunctional behaviors (living in shelters, cars, or overcrowded housing)
- Mental-health-related dysfunctional behaviors (going into psychiatric hospitals)
- Mental-disorder-related dysfunctional patterns (behaviors that meet criteria for other severe mental disorders)

Adapted from Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder.

Developing a Mechanism Hypothesis



Strategies for developing mechanism hypotheses

Extend a symptom or disorder formulation to account for all problems and disorders

Look for themes of the problems on the problem list

Examine relationships among the problems

Use assessment scales (e.g., Anxiety Sensitivity Inventory, Obsessive Beliefs Questionnaire)

Ask patient to collect self-monitoring data

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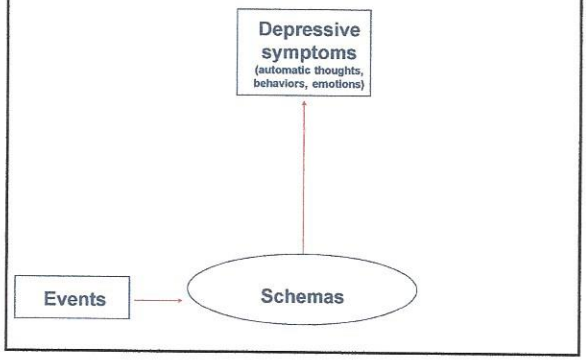
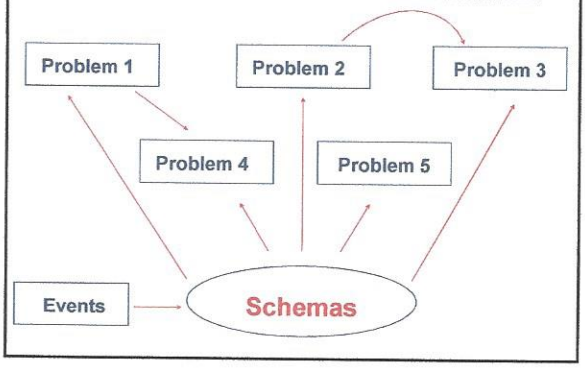
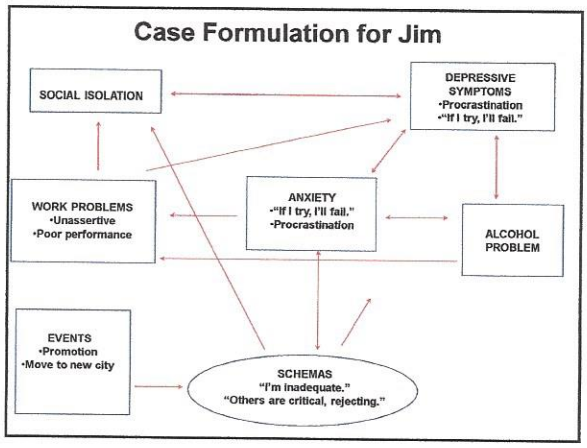
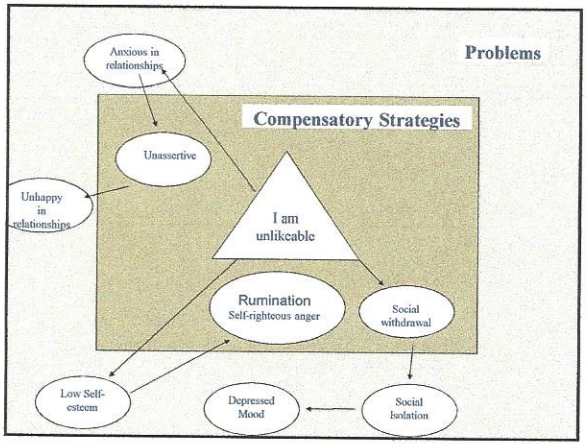
BECK'S COGNITIVE MODEL OF DEPRESSION



APPLYING BECK'S COGNITIVE MODEL TO THE MULTIPLE-PROBLEM CASE







Functional Analysis of Steve's Vomiting Behavior

Antecedents (A)	Behaviors (B)	Consequences (C)
Boredom Nothing to do No meaningful relationships	Vomiting	Stimulation, activity Special treatment (TV, couch) Attention from father

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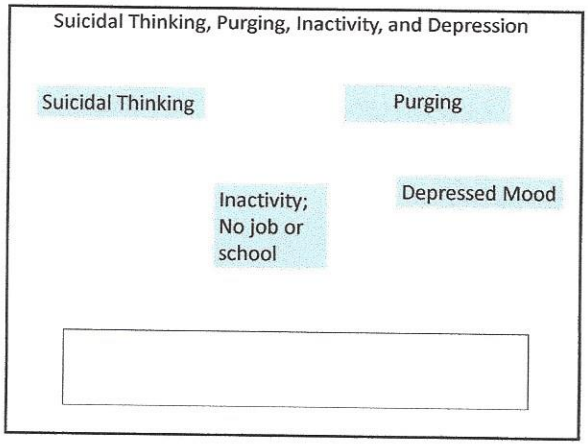
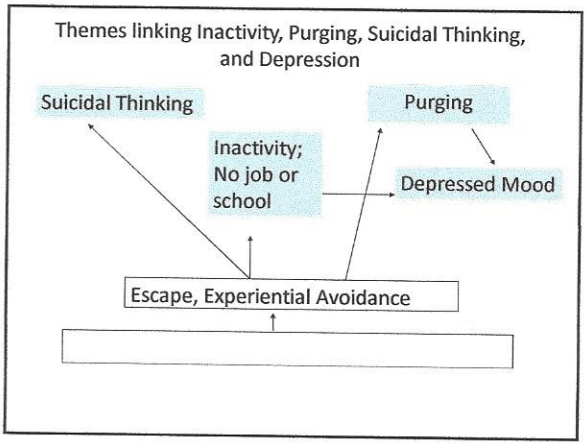
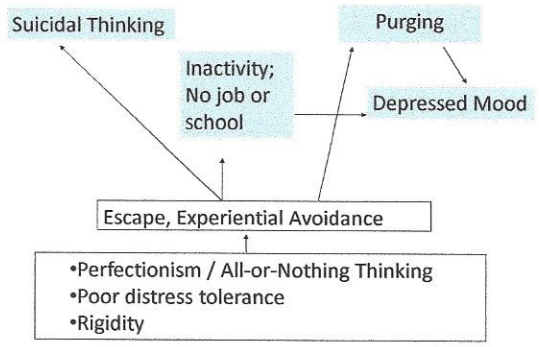




Inactivity, Purging, and Suicidal Thinking Resulting from Experiential Avoidance and Other Mechanisms



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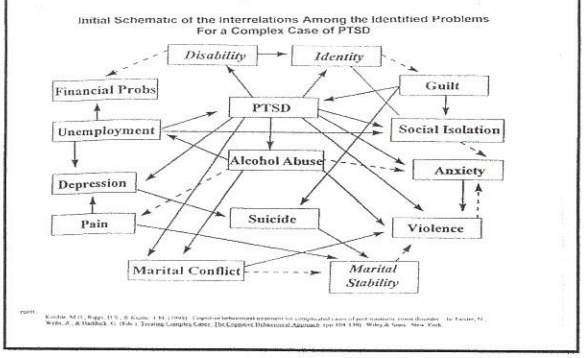
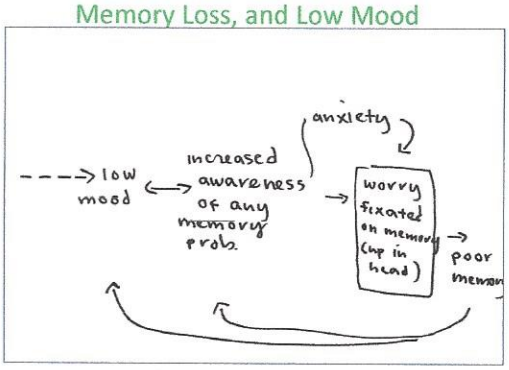
Interrelations among the identified problems for a complex case of PTSD



Formulation of Relationships among Worry, Memory Loss, and Low Mood



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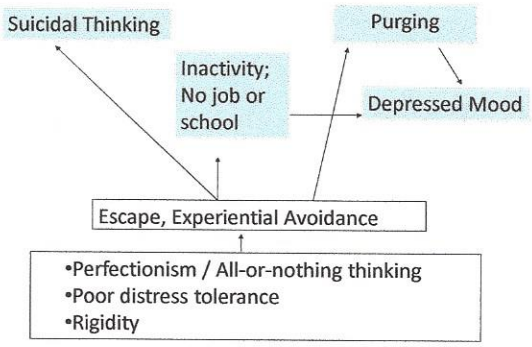

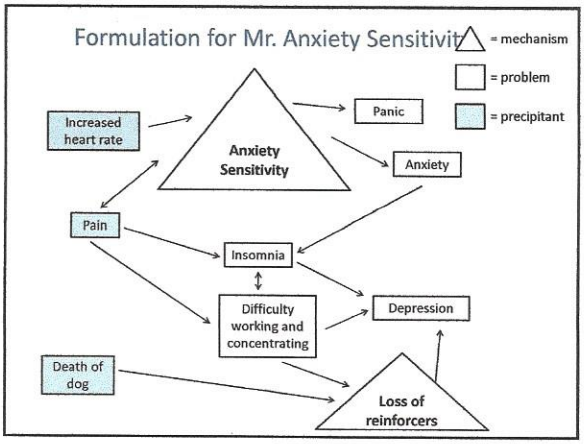

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THANK YOU!

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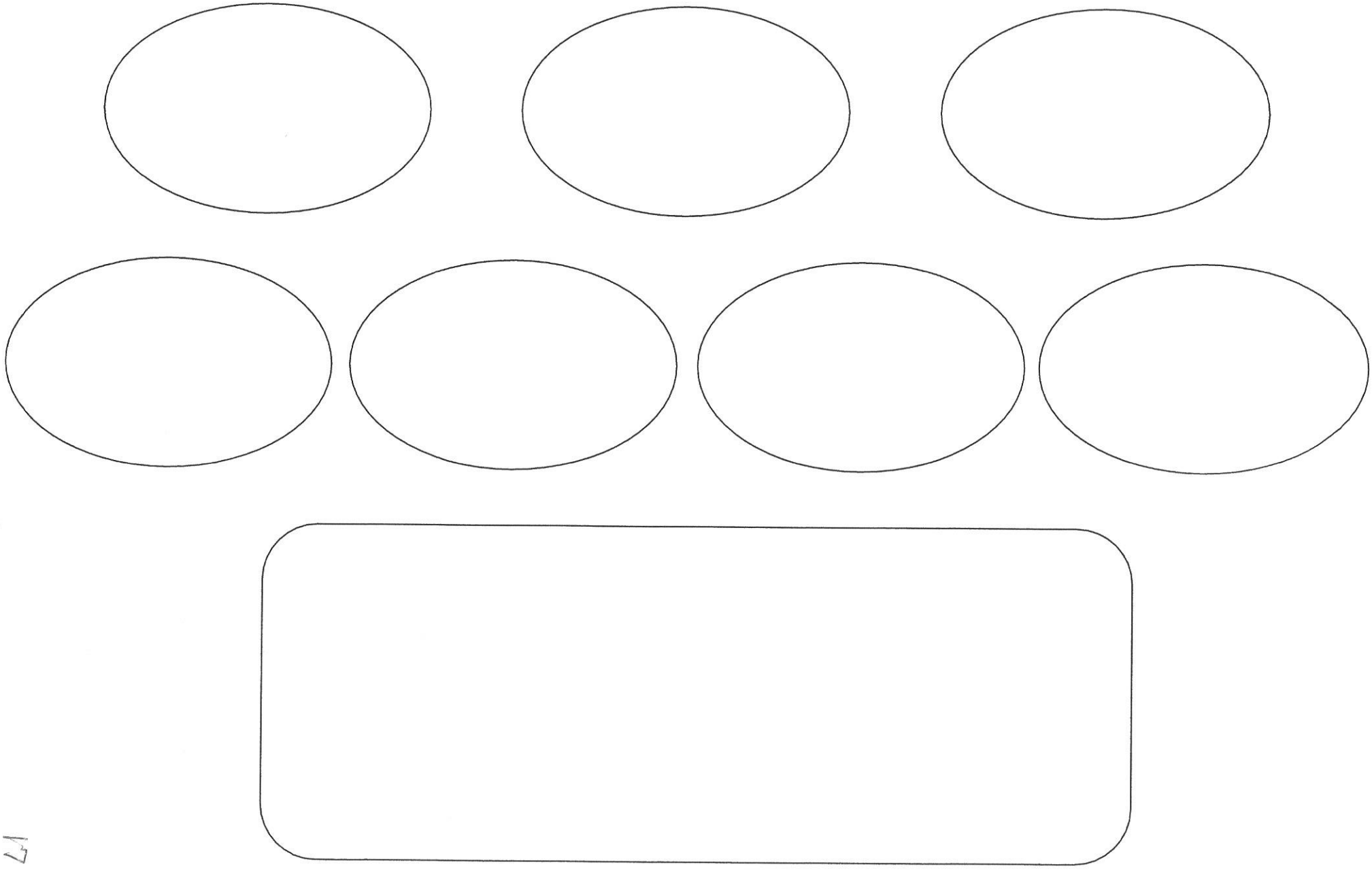
Cognitive Behavior Therapy & Science Center

Case Formulation for _____



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5625 College Avenue | Oakland, CA 94618 | Tel 510.992.4040 | www.cbtscience.com

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