

Cognitive Behavior Therapy Interventions in MS

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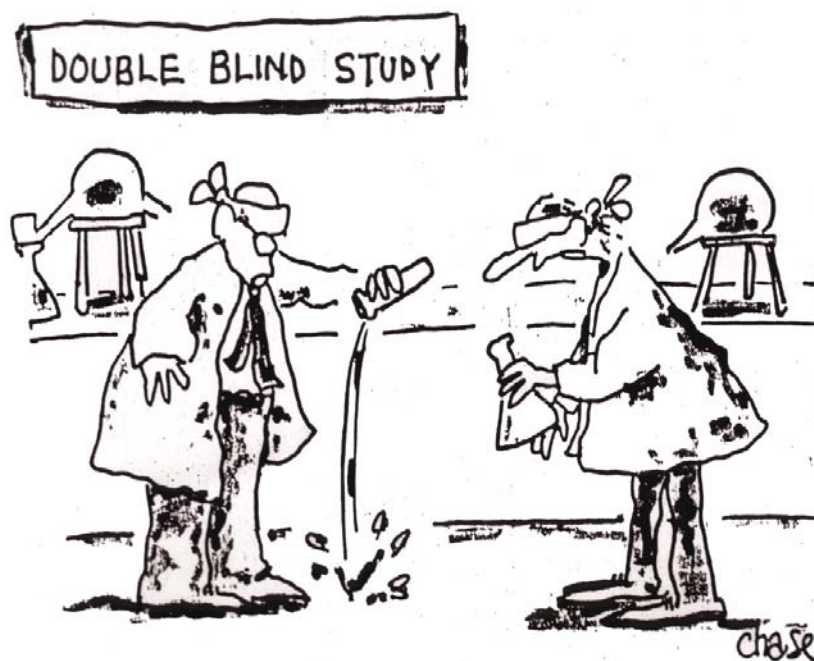
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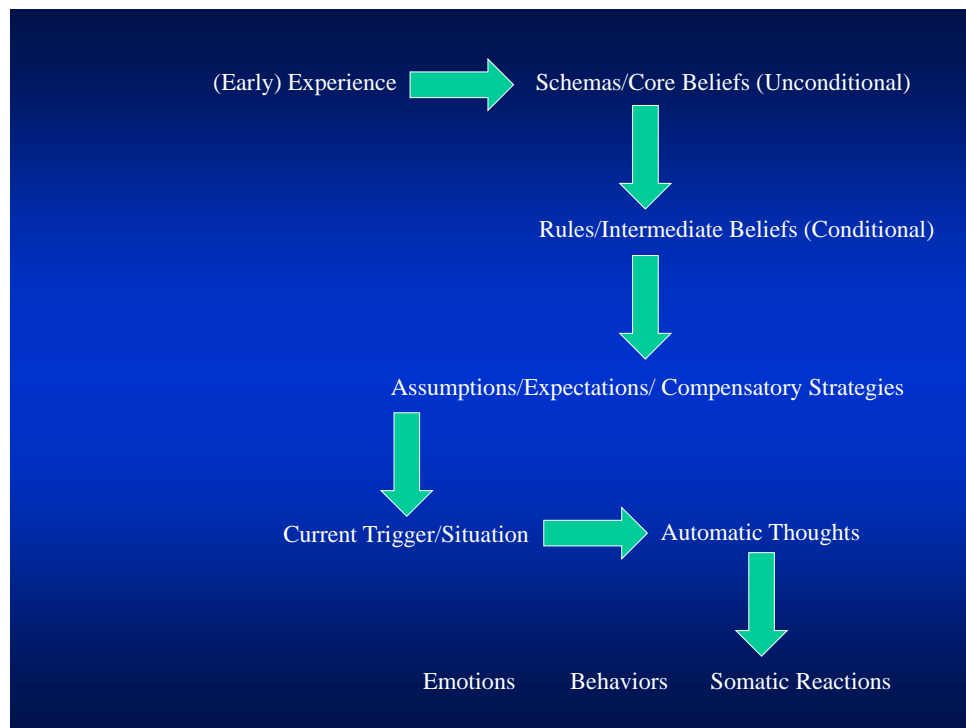
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Cognitive Behavior Therapy

- Psychotherapy that identifies patterns of thinking and behavior that change with depression
- Cognitive therapy helps people actively change these patterns of thinking and behavior
- When thinking and behavior are successfully changed, the mood disorder lessens or remits



How thinking changes in depression

- Negative views of oneself, other people, the future, and the world
- Negative perceptions and beliefs are distorted (ie, exaggerated and/or blatantly inaccurate)
- Underlying distorted beliefs are frequently activated by social contact (thus social withdrawal is a common symptom)

Examples of distorted thinking in persons with MS who are depressed

- “I can’t play catch with my son” [therefore I am a failure as a father]
- “I can’t work a full-day anymore” [therefore I am worthless as a husband/wife...]
- “I can’t take care of my children by myself anymore...I need help” [therefore I am a terrible mother]

Types of Cognitive Biases Associated w/ Depression and Anxiety

- Catastrophizing: Blowing things out of proportion “I am having an exacerbation...I will go completely downhill now...my life is over.”
- Overgeneralizing: Generalizing about oneself or others based on one event or mistake..”I forgot her name...I have no social skills/grace”

Cognitive Biases

- Overgeneralization, cont'd: Perfectionism: People only have value if things are done the “right” way (and perfectionists know what the one “right” way is!)

Cognitive Biases

- Personalization: Taking things personally...examples include:
- “I am worthwhile only if I have others acceptance and approval.”
- Beliefs that life should be fair...and if it's not, I am being persecuted/or it is a terrible thing.

Efficacy of Stress-Inoculation Training Coping with MS. [Foley et al, 1987.
[Journal of Consulting and Clinical Psychology.55:6, 919-922](#)]

Objectives:

- Test Efficacy of Cognitive-Behavior Therapy on Anxiety, Depression, and Coping in Randomized Single-Blind Controlled Study
- Treatment Group: Received CBT + Relaxation Training w/ written instructions + diaries for daily practice
- Usual Care Control Group: Received usual clinic care (11% antidepressant therapy; 16% individual psychotherapy; 11% family counseling; 100% 2 hours supportive counseling during wait period)
- No differences in EDSS, demographics, or disease activity bet groups

Interaction Results, Depression

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>F</u> | <u>α</u> |
|------------|-------------|-------------|----------|----------------------------|
| BDI | | | | |
| TX. | 24.4 (13.0) | 13.2 (10.5) | 5.0 | <.001 |
| CTRL | 21.7 (15.0) | 21.6 (14.2) | | |

Note: BDI=Beck Depression Inventory, TX. = Cog-Beh Therapy Grp, CTRL= Usual Care Control

Interaction Results, StateAnxiety

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>F</u> | <u>α</u> |
|------------|-------------|-------------|----------|----------------------------|
| STAI | | | | |
| TX. | 51.8 (15.6) | 37.2 (13.8) | 6.2 | <.001 |
| CTRL | 54.6 (16.9) | 50.5 (13.0) | | |

Note: STAI=State-Trait Anxiety, TX. = Cog-Beh Therapy Grp, CTRL= Usual Care Control

Interaction Results: Trait Anxiety

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>F</u> | <u>α</u> |
|------------|-------------|-------------|----------|----------------------------|
| STAI | | | | |
| TX. | 53.6 (12.8) | 46.2 (13.1) | 3.2 | ns (trend) |
| CTRL | 54.5 (13.1) | 51.9 (13.4) | | |

Note: STAI=State-Trait Anxiety, TX. = Cog-Beh Therapy Grp, CTRL= Usual Care Control

Interaction Results, Problem-Focused Coping

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>F</u> | <u>α</u> |
|------------|------------|------------|----------|----------------------------|
| PFC | | | | |
| TX. | 12.6 (4.7) | 16.2 (4.8) | 5.2 | <.001 |
| CTRL | 12.2 (5.7) | 11.8 (4.6) | | |

Note: PFC=Ways of Coping Checklist, Problem-Focused Scale, TX. = Cog-Beh Therapy Grp, CTRL= Usual Care Control



Rehabilitation of Sexual Dysfunction in Multiple Sclerosis

Frederick W. Foley, Ph.D., Nicholas LaRocca, Ph.D.,
Audrey Sorgen, Ph.D., Vance Zemon, Ph.D.

In: Multiple Sclerosis, 2001, 7(6): 417-421.

Objectives:

Test Efficacy of Structured Cognitive-Behavior Therapy
Intervention To Rehabilitate Sexual Dysfunction, Marital
Satisfaction & Marital Communication in PWMS & Their
Sexual Partners

Results, Sexual Satisfaction

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>T3</u> | <u>F</u> | <u>α</u> |
|------------|-----------|-----------|-----------|----------|----------------------------|
| SS | 12.9 | 13.2 | 16.2 | 7.1 | <.05 |
| Pt | 11.3 | 11.6 | 15.8 | | [no - |
| S | 14.4 | 14.9 | 16.6 | | interaction] |

Note: SS=Mean Sexual Satisfaction Subtest Scores of the Marital Satisfaction Inventory, Pt=Person w/ MS, S=Spouse/Partner. SS Scores were reversed to indicate satisfaction. higher scores=higher satisfaction

Results, Marital Satisfaction

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>T3</u> | <u>F</u> | <u>α</u> |
|------------|-----------|-----------|-----------|----------|----------------------------|
| MAT | 43.6 | 44.1 | 53.8 | 20.2 | <.001 |
| Pt | 43.6 | 45.8 | 54.8 | | [no inter- |
| S | 43.6 | 42.4 | 52.8 | | action] |

Note: MAT=Marital Adjustment Test, Pt=Person w/ MS, S=Spouse/Partner

Results, Affective Communication

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>T3</u> | <u>F</u> | <u>α</u> |
|------------|-----------|-----------|-----------|------------|----------------------------|
| AC | 13.0 | 12.2 | 16.3 | 12.1 | <.001 |
| Pt | 12.0 | 11.2 | 16.6 | [no inter- | |
| S | 14.0 | 13.3 | 16.2 | action] | |

Note: AC=Affective Communication Subtest of the Marital Satisfaction Inventory, Pt=Person w/ MS, S=Spouse/Partner

Results, Problem-Solving Communication

| <u>Var</u> | <u>T1</u> | <u>T2</u> | <u>T3</u> | <u>F</u> | <u>α</u> |
|------------|-----------|-----------|-----------|------------|----------------------------|
| PSC | 15.7 | 16.8 | 22.1 | 21.4 | <.001 |
| Pt | 13.9 | 14.9 | 20.4 | [no inter- | |
| S | 17.6 | 18.6 | 23.8 | action] | |

Note: PSC=Problem-Solving Communication Subtest of the Marital Satisfaction Inventory, Pt=Person w/ MS, S=Spouse/Partner

Applications of CBT to MS Persons w/ Cognitive Disorders to Improve Marital Communication

Foley, F.W., Dince, W., Bedell, J.R., LaRocca, N.G., Kalb, R., Caruso, L., Smith, C.R. & Shnek, Z. (1994). Psychoremediation of communication skills for cognitively impaired persons with multiple sclerosis. *Journal of Neurologic Rehabilitation*, 7, 6, 165-176.

- Developed templates for patients and partners to communicate
- Taught listening skills
- Taught how to empathize with partner via templates
- Taught how to make positive requests & resulting consequences if request granted
- Taught how to provide feedback to others when their behavior is not acceptable, and make positive (non-critical) requests for behavior change
- LIMITATIONS: ONLY TESTED WITH A SERIES OF CASE STUDIES: NO RTC

Comparing Psychotherapies and Anti-Depressant Tx

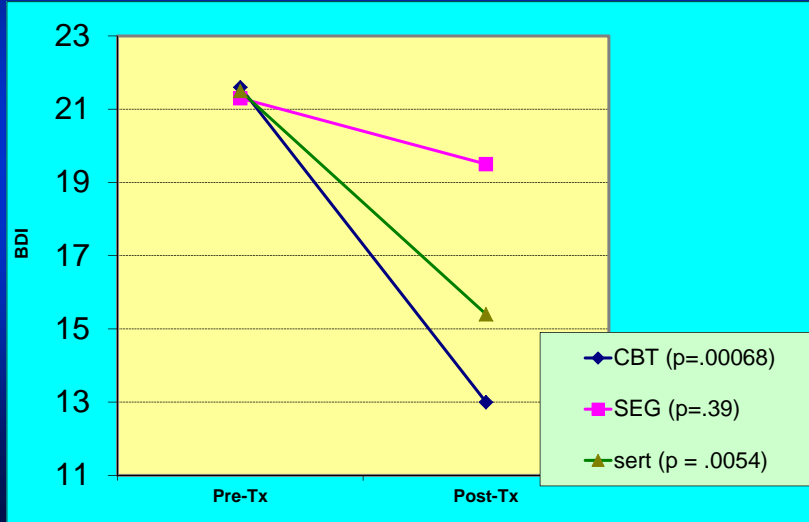
[Mohr et al (2002)]: 63 patients with MS and MDD randomly assigned to 16 weeks of:

- **Individual Cognitive Behavioral Therapy (CBT)**
 - 50 min. weekly sessions (5% dropout)
- **Supportive-Expressive Group Therapy (SEG; Spiegel & Classen, 2000)**
 - 90 min. weekly groups (18% dropout)
- **Sertraline**
 - Mean end dose 88.75 mg (M = 139 mg for completers; 29% dropout)

ITT Analysis: BDI as Outcome

Effect for Time: $p < .000001$; Time X Tx: $p = .019$

[Slide courtesy of David Mohr, PhD]



THE FAR SIDE

Gary Larson

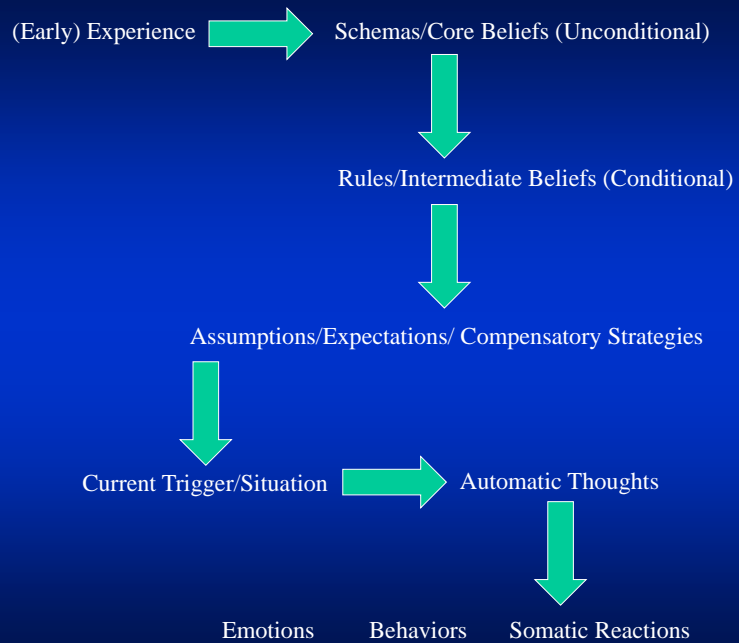
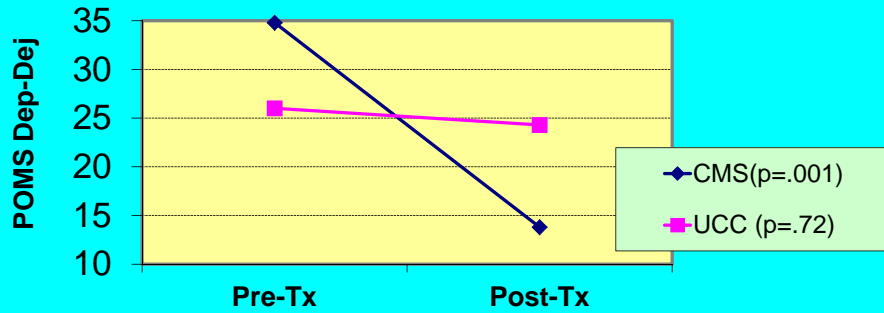


"C'mon, c'mon — it's either one or the other."

Telephone Treatment for Depression Study

[Mohr et al, 2000: Slide Courtesy of David Mohr]

Effect for time $p=.003$
Time X Treatment, $p=.01$



CBT Case Conceptualization

- Getting a list of problems, issues and goals
- Diagnosis
- Key core beliefs (global statements about self, world and future)
- Key dysfunctional assumptions (life rules, shoulds, musts)
- Vicious cycles and maintaining factors (things that keep the problem going, safety behaviors, compensatory strategies)
- Triggers (things that set the problem off now)
- Modifiers (things that make it better or worse)
- Vulnerability factors (childhood experiences, genetic factors)
- Critical Incidents (what started the big problem recently)
- Alternative core beliefs, assumptions and policies
- Typical cycle of event, thought, mood, physiology and behavior
- All of the above used to formulate treatment plan

“Gloria”

- Underlying negative self-image
- Compensatory beliefs that she can be “OK” as a person as long as she can control her life
- If she “does all the right things” then she can control her MS
- Underlying beliefs about ‘fairness’ help regulate her self-esteem

CBT Case Conceptualization

- **Key core beliefs:**
 - I am helpless; I am worthless; life is fair; people will not take care of me
- **Intermediate beliefs (Conditional coping beliefs):**
 - If I do all the right things in life, I can be OK as a person and good things will happen to me
 - If I take good care of myself, I can control my health
 - If my doctors are competent, my MS will not progress
- **Key dysfunctional assumptions:**
 - I can control my MS by doing the right things; if I get a relapse it is my fault; if I get a relapse my doctors have done something wrong; if I do all the right things and get a relapse, life is not fair



Structure Communication to Compensate for Cognitive Problems

2. **Feedback Statement.** (If feedback will be Given, Describe the Undesirable Behavior of the Other Person from Thinking Step 7).

When you (describe behavior _____)

Next, describe the consequences of this behavior for your situation (your thoughts, feelings, or behaviors in response to this behavior from Thinking Step 7).

I (think, feel, act _____)