Motivational Enhancement in CBT for Adult ADHD

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Commercial Disclosure Requirement

I, (Dr. J. Russell Ramsay), have the following commercial relationship(s) to disclose:

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Adult ADHD: Symptoms and Impairments

What are the underlying problems
that provide targets for treatment?

Postulated Mechanisms of ADHD

- Inhibition deficit (Barkley)
- Cognitive-energetic model (Sergeant)
- Executive control deficit (Brown)
- Working memory deficit (Kofler et al)
- Dopamine transfer deficit (Tripp, Wickens)
- Prefrontal cortex dysfunction (Arnsten, Rubia)
- Reward deficiency syndrome (Blum et al)

What are executive functions(EFs)?

- “(T)hose self-directed actions of the individual that are being used to self-regulate”

Barkley (1997). *ADHD and the nature of self-control*. New York: Guilford. (p. 56)

- EF is self-regulation **across time** to choose, enact, and sustain **actions toward a goal** usually in the **context of others** and often relying on **social and cultural means** for the maximization of one’s **long-term welfare** as the **person defines that to be**.

Barkley (2012). *Executive functions: What they are, what they do, how they evolved*. New York: Guilford.

Clinical Implications

- Planning, prioritization, organization
- Initiation, activation
- Sustained, repeated efforts
- Follow through to completion
- Motivation, emotional management, distress
- “Engagement”

Procrastination

MOTIVATION ENHANCEMENT IN CBT FOR ADULT ADHD

Procrastination

"(T)o procrastinate is to voluntarily delay an intended course of action despite expecting to be worse off for the delay." (p. 66)

Steel (2007). *Psychological Bulletin, 133*, 65-94.

CBT for Adult ADHD

Conceptualize patterns

- WHY don't I change? (Educate)

Consider alternatives / gain skills

- HOW can I change?
  (Execute)

Gain novel experiences / face challenges

- WHEN do I change? (Experience-Endurance)

Coping Domains for Adult ADHD

- To Do List
- Daily Planner/Planning
- Prioritize/Choreograph
- Break down tasks
- Get started (Procrast.)
- Keep going
- “Manufacture” motivation
- Thoughts, emotions, escape behaviors
- Outsource coping
- Data management
- Materials mgt.
- Environmental Eng.
- Prob mgt./Dec. making
- College, Work
- Relationships
- Health, well-being
- Technology

Ramsay & Rostain (in press). *The Adult ADHD Tool Kit*. Routledge: New York.

Summary of CBT for Adult ADHD: Motivational Enhancement Interventions

- Cognitive modification
  - Magnification/minimization distortion
  - “Defense Attorney” metaphor
- Behavioral modification and coping skills
  - Old vs New Behavioral Script (functional analysis)
  - Point of engagement

Ramsay & Rostain (in press). *Cognitive-behavioral therapy for adult ADHD: An integrative psychosocial and medical approach* (2nd ed.). New York: Routledge.

Summary of CBT for Adult ADHD: Motivational Enhancement Interventions (2)

- Implementation strategies
  - Delegate EF to pre-specified contextual cues
  - If X, Then Y coping rehearsal/reminders
- Acceptance, mindfulness, persistence
  - Recognize emotional reactions
  - Tolerate time-limited discomfort AND engage in task

Summary of CBT for Adult ADHD: Motivational Enhancement Interventions (3)

- Strategies + TACTICS
- Implementation (“I know what I need to do…”)
- Graduated exposure
- “Engagement”

Cognitive Interventions

- Cognitive error = magnification/minimization
  - Magnify – discomfort, inability, futility, time on task
  - Minimize – tolerate, efficacy, value, process-outcome
  - Change the negative-to-positive ratio
- "Defense Attorney"
  - Conclusions based on one-sided review of evidence
  - Challenge the evidence
  - Not power of positive thinking, but adaptive thinking

Behavioral Interventions

- Break down task into component steps
  - Identify “old” behavioral script, escape behaviors
  - Develop “new” script for task
- Starting point
  - Smallest point of engagement (“Zeno’s Paradox”)
  - Move from “off task” to “on task”
- Behavior > emotion
  - Make the task manual, start time + end time
  - “What do you have to do?” “How would you program a robot?”

Behavioral Interventions (2)

- Time Management involves:
  - Tracking the flow of time
  - Tracking behavior across time
  - Managing effort
  - Managing energy

- Break down tasks
  - Starting point for engagement / re-engagement
  - Prioritize
  - Choreograph

Implementation Intention Strategies

"Self-regulation by IMPLEMENTATION INTENTIONS *entails delegating action control to pre-specified critical environmental cues*. In other words, by planning out in advance when, where, and how a goal is to be transformed into action, implementation intentions disencumber executive functions. As a result, deficits in executive functioning should no longer be apparent in the quality of task performance." (p. 263)

Gawrilow & Gollwitzer (2008). *Cognitive Therapy and Research, 32,* 261-280.

Gawrilow (2011). *The ADHD Report, 19*(6), 4-8.

Gawrilow et al. (2011a). *Journal of Social and Clinical Psychology, 30,* 615-645.

Gawrilow et al. (2011b). *Cognitive Therapy and Research, 35,* 442-455.

Implementation Strategies

- Identify task goal and new behavioral script
- Identify “tipping points” for starting/maintaining task
- “Knowing yourself as you do, what could disrupt the plan?”
- “Knowing this could happen, how do you plan to handle it?”
- “If X happens, then I can/will do Y.”
- Ideal is task goal + implementation plan

Acceptance, Mindfulness, Persistence

- "Acceptance" of discomfort to maintain "commitment" to a valued task. (i.e., Do not have to be "in the mood")
- "Mindful" recognition of ADHD symptoms, emotional discomfort without escape reaction
- State/acknowledge what you are feeling.
- Feel discomfort AND persist on task

Hayes et al. (1999). *Acceptance and commitment therapy*. New York: Guilford.

Zylowska (2012*). The mindfulness prescription for adult ADHD*. New York: Trumpeter.

Open study

Non-randomized, open study

N = 29 consented; 12 followed through with CBT

Completed comprehensive diagnostic evaluation

Primary ADHD diagnosis, met inclusion/exclusion criteria

Pre-treatment / Follow-up measures of impairment (WFIRS) and/or life quality (AAQoL) at end of treatment

Demographic summary of participants in CBT who completed follow up ratings of functioning (N=12)

Demographic variable	n	%	M (SD)
Gender			
Male	7	58.3%	
Female	5	41.7%	
Age			32.8 years (12.7)
Marital status			
Single	7	58.3%	
Married	5	41.7%	
Years of education			15.6 years (2.2)
Race			
Caucasian	11	91.6%	
Hispanic	1	8.4%	
ADHD Diagnosis			
Combined	8	66.7%	
Inattentive	4	33.3%	
Comorbid Diagnosis			
Depression	4	33.3%	
Anxiety	8	66.7%	
Adjustment Disorder	1	8.4%	(Exceeds 100% due to multiple diagnoses)
Number of CBT sessions at follow-up			22.3 (9.12) (range 10-37)

Note: ADHD = Attention-Deficit/Hyperactivity Disorder; CBT = Cognitive Behavioral Therapy.

Comparison of Pre-Treatment and Follow-Up AAQoL Scores (N=10)

Outcome measure	Pre-Treatment M (SD)	Follow-Up M (SD)	t statistic	*p*
Life Productivity	41.4 (17.1)	65.5 (22.1)	-7.14	.00*
Psychological Health	48.6 (24.4)	63.8 (17.8)	-2.27	.049*
Life Outlook	46.4 (19.3)	61.4 (19.5)	-2.92	.02*
Relationships	61.1 (24.4)	71 (16.3)	-1.29	.23
Overall Total	47.9 (17.5)	64.7 (17.5)	-4.77	.00**

Note: AAQoL = Adult ADHD Quality of Life Scale - 29.

* $p < .05$; ** $p < .01$

Comparison of Pre-Treatment and Follow-Up WFIRS Scores (N=5)

Outcome measure	Pre-Treatment M (SD)	Follow-up M (SD)	t statistic	*p*
Home	12.6 (3.4)	5.0 (3.4)	2.82	.047*
Your Self-Concept	9.2 (1.6)	4.0 (0.71)	6.5	.00**
Learning & Work	16.6 (7.4)	7.0 (7.1)	2.52	.07
Activities of Daily Living	23.6 (10.1)	10.4 (10.3)	2.19	.09
Social Activities	9.4 (4.6)	4.4 (2.1)	2.06	.11
Risky Activities	6.4 (6.6)	1.2 (2.2)	2.21	.09
Total	77.8 (25.32)	32.0 (23.9)	3.01	.04*

Note: WFIRS = Weiss Functional Impairment Rating Scale.

* $p < .05$; ** $p < .01$

Summary

- Limitations
- Future directions
- Continue to refine psychosocial treatments in order to help adults with ADHD to compensate for underlying neurobiological deficits that interfere with self-regulation

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