

# Effective Psychosocial Treatments for Emotional and Behavior Disorders in Youth Stockholm , 2011

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Thomas H. Ollendick

Child Study Center  
Virginia Polytechnic Institute  
and State University



# Blue Ridge Mountains – Virginia

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# Virginia Tech

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# Overview of Presentation

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- Evidence-Based Treatments
- Review of the Evidence for Diverse Disorders
- Limitations of the Evidence
- Where to From Here?
- New Directions
- Conclusions and the Future that Lies Ahead of Us

# Effective Psychosocial Interventions: Evidence-Based Practice

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“The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of EBP means integrating individual clinical expertise with the best available evidence from systematic research. By individual clinical expertise we mean the proficiency and judgment that individual clinicians acquire through clinical experience and clinical practice”

Sackett et al., 1996, p. 71

# Goals of Evidence-Based Practice

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- Evidence-based practice is grounded not only in the best that scientific research has to offer but also the best clinical expertise the clinician has to offer in terms of patient-centered care
- The approach, it is hypothesized, will lead to more effective and efficient as well as more compassionate care in treating individual patients (i.e., person-centered care)

# Strength of Evidence (AHCPR)

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<u>Level</u>	<u>Description</u>
A	RCT for specific disorder
B	Open clinical trial or single case study
C	Services/naturalistic clinical study
D	Wide-spread clinical practice
E	Narrow clinical practice
F	Experimental treatment
I	Ineffective

# Categories of Empirically Supported Treatments (Div 12 – APA)

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- Well-established
- Probably efficacious
- Possibly efficacious
- Experimental



# Criteria for Empirically Supported Treatments (Type I)

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## I. Well-Established Treatments

- A. At least two good between-group design experiments demonstrating efficacy in one or more of the following ways:
1. superior to pill or psychological placebo or to another treatment
  2. equivalent to an already established treatment in experiments with adequate statistical power (30 per group; see Kazdin & Bass, 1989)

**OR**

# Criteria for Empirically Supported Treatments (Type I)

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B. A large series of single case design experiments ( $n > 9$ ) demonstrating efficacy. These experiments must have:

1. used good experimental designs, and
2. compared the intervention to another treatment as in A.1

# Criteria for Empirically Supported Treatments (Type I)

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Further criteria for Type I studies:

- C. Experiments must be conducted with treatment manuals
- D. Characteristics of the client samples must be clearly specified
- E. Effects must have been demonstrated by at least two different investigators or investigatory teams

# Criteria for Empirically Supported Treatments (Type II)

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## II. Probably Efficacious Treatments

A. Two experiments showing the treatment is more effective than a waiting-list control group

**OR**

B. One or more experiments meeting the Well-Established Treatment Criteria A, C, D, but not E

**OR**

C. A small series of single case design experiments ( $n > 3$ ) otherwise meeting Well-Established Treatment Criteria B, C, and D.

# Criteria for Empirically Supported Treatments (Type III and IV)

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- III Possibly Efficacious
  - At least one “good” study showing the treatment to be efficacious in the absence of conflicting evidence
  - More efficacious than wait list or placebo conditions
- IV Experimental Treatment
  - Treatment not yet tested in trials meeting criteria for “good” studies (e.g., open trials, routine clinical practice)

# Psychosocial Treatments for Anxious and Phobic Children and Adolescents

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- Well-established:

Cognitive Behavior Therapy (Individual, Group, With or Without Parent Involvement) for GAD; In vivo Exposure and One-Session Treatment for SP; Exposure and Ritual/Response Prevention for OCD; Trauma-Focused CBT for PTSD

- Probably/Possibly Efficacious:

Social Effectiveness Therapy for Children (SET-C) for Social Phobia; Parent-Child Interaction Therapy for SAD (PCIT); CBT for PDAG

# Psychosocial Treatments for Depressed Children and Adolescents

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- Well-established

Cognitive Behavior Therapy (Individual, Group, With or without parent involvement) and Behavioral Activation Therapy for MDD

- Probably/Possibly Efficacious

Interpersonal Psychotherapy; Self-Control Therapy; Oregon Coping with Depression Course; Penn Resiliency Program; and FRIENDS for Life Program for MDD

# Psychosocial Treatments for ADHD Children and Adolescents

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- Well-established

Behavioral Parent Training (BPT); Behavioral Classroom Management( BCM); and Peer-Focused Behavioral Summer Programs

- Probably/Possibly Efficacious

Problem Solving Communication Training (PSCT), Collaborative Problem Solving (CPS); Self-Instruction Training (SIT)



# Psychosocial Treatments for Conduct Problems in Children and Adolescents

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- Well-established

Parent Management Training (PMT); Problem Solving Skills Training + PMT; Positive Parenting Program (Triple P); Parent-Child Interaction Therapy (PCIT); The Incredible Years

- Probably/Possibly Efficacious

Social Skills Training (SST); Group Assertiveness Training; Group Anger Control Training; Collaborative Problem Solving (CPS); Rational Emotive Mental Health Program

# Psychosocial Treatments for Autism Spectrum Disorders in Children and Adolescents

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- Well-established

Lovaas's Behavioral Treatment Program (early intervention); Intensive “wrap around” programs in home, school, and community

- Probably/Possibly Efficacious

Behavioral Parent Training; Pivotal Response Training; Multidimensional Anxiety and Social Skills Intervention (MASSI); TEACCH school and home-based Program

# Psychosocial Treatments for Substance Abuse in Adolescents

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- Well-established

MultiSystemic Therapy (MST); Functional Family Therapy; Group CBT

- Probably/Possibly Efficacious

Individual CBT; Motivational Therapy; Behavioral Systems Therapy; Behavioral Contingency Management

# Psychosocial Treatments for Eating Disorders in Adolescence

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- Well-established

Maudsley Model of Family Therapy; Group CBT; Individual CBT

- Probably/Possibly Efficacious

Other family therapies; Interpersonal Psychotherapy; Behavior Management Programs

# What can We Conclude?

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- Numerous evidence-based, efficacious programs are available across a variety of disorders
- Most of these programs are embedded in Behavioral, Cognitive-Behavioral, and Systems Orientations
- There is a striking absence of evidence for humanistic, Gestalt, psychodynamic, psychoanalytic, and play therapy approaches
- Some treatments appear to work better than others
- However, the absence of evidence is not evidence of ineffectiveness; still, the findings are relatively robust and compelling

# But, Let's Take a Closer Look at Treatment Outcomes for Anxiety Disorders

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- Cartwright-Hatton et al. (2004): Remission rates for CBT higher (56.5%) than for WL and Credible Control Groups (34.8%) across numerous RCTs for anxiety disorders
- In-Albon & Schneider (2007): Meta-analytic review indicates mean effect size of CBT anxiety treatment = .86; moreover, no differences found between individual vs. group or child vs. family-focused interventions

# CBT Treatment Outcomes at Follow-up

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- Nevo and Manassis (2009): Remission rates maintained or enhanced at long-term follow-up (2 years – 7.4 years, between 51% and 81%)
- However, control groups are lacking at the time of follow-up and issues of maturation and spontaneous recovery remain

# Conclusions

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- A significant minority of youth (30-40%) do not remit with CBT
- Moreover, LTFU studies – though promising – are inconclusive due to methodological problems





# Where to go from here?

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Alice: “Would you tell me, please, which way I ought to go from here?”

Cheshire Cat: “That depends a good deal on where you want to get to.”

Alice’s Adventures in Wonderland

# Relatively New Directions

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- Self-help Treatments
- Bibliotherapy
- Computer-assisted Interventions
- Virtual Reality Approaches
- Attention Retraining Strategies\*
- Intensive Treatments
- Enhanced Family Approaches
- Treatments for Comorbid Disorders\*
- Transdiagnostic Approaches

# One Example: Psychosocial Treatment of ODD and its Comorbidities

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- Compare Parent Management Training (PMT) to Collaborative Problem Solving (CPS) and Wait-List Control (WLC) in the treatment of children and adolescents with ODD.
- Study conducted in Virginia with 150 families (60 each treatment condition; 30 waitlist control condition)
- **Examine comorbidity as moderator of treatment outcome**

# Inclusion/Exclusion Criteria

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## Inclusion Criteria

- Diagnosis of ODD according to DSM-IV
- Severity of ODD of at least 4 on a 0-8 scale
- Age 7-14 years
- Duration of ODD at least 6 months
- Accept random assignment to study conditions
- Exclusion Criteria
  - Primary major depression, but only if suicide intent
  - Drug or alcohol abuse, chronic
  - Psychotic symptoms/childhood schizophrenia
  - Developmental disorder (e.g., ASD)

# Current Status of Project Enrollment

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- 90 families enrolled to date; all youth have ODD
- 56 boys, 34 girls; average age = 9.58 years
- 56 of 90 (62.2%) families are from two-parent families; income is highly variable
- 75 Caucasian, 8 African American, 4 Hispanic, 2 Asian American, 1 other
- Approximately 55% are comorbid with ADHD and about 45% with an Anxiety Disorder; over 94% are comorbid with at least one other disorder

# What is Oppositional Defiant Disorder?

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- Often loses temper
- Often argues with adults
- Often defies or refuses to comply with adult requests
- Often deliberately annoys people
- Often blames others for own mistakes
- Often touchy or easily annoyed by others
- Often angry and resentful
- Often spiteful or vindictive

# Assessments

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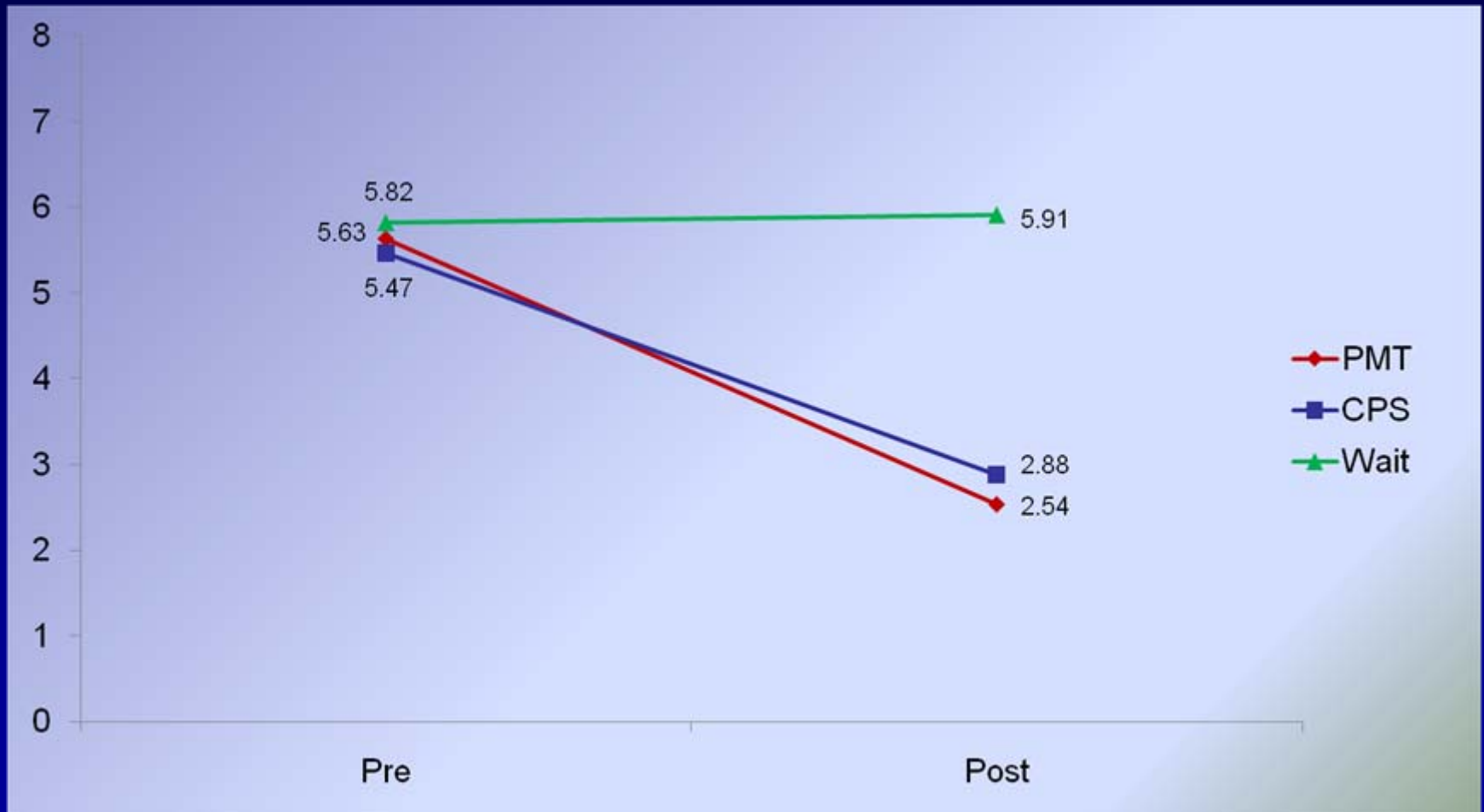
- Diagnostic Screening Interview
  - Anxiety Disorders Interview Schedule (ADIS C/P)
  - Diagnostic Interview Schedule for Children (DISC)
- Independent Assessor Rating
  - Severity of ODD and other disorders (0-8)
  - Children's Global Assessment Scale (1 – 100)
- Self-Report: Beck Youth Inventory, Disruptive Behavior Disorders Rating Scale, Behavioral Assessment System for Children (parent, teacher, self)
- Laboratory-Based Measures: Problem Solving Task, Tangram Task, Stroop, Emotion Coaching Task

# Outcomes: ODD Clinician Severity Ratings





# Outcomes: DBDRS ODD Symptom Totals (Parent Report)



# Mediators, Moderators, and Predictors of Treatment Outcome

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- Moderators of Treatment Outcome: A variable that is measured prior to the treatment assignment and implementation of the treatment that *differentially* predicts treatment outcomes. Moderator variables can identify subgroups of individuals *for whom* a specific treatment is more or less effective
- Mediators of Treatment Outcome: A variable that occurs during the period of treatment, signifying a process through which treatment “works.” Mediator variables can help explain *how* and *why* the treatment works

# What about Mediators/Moderators of Change: Comorbidity and Gray's Neuropsychological Theory (1996)

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I. Behavioral Activating System

II. Behavioral Inhibition System

# I. Behavioral Activating System

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- System is sensitive to signals of reward (hope) and nonpunishment (relief)
- Increases in responding brought about in positive reinforcement and in both active avoidance and escape paradigms
- The BAS is in those brain pathways responsible for the rewarding effects of electric self-stimulation - medial forebrain bundle, lateral hypothalamus, and lateral septum
- These pathways are catecholaminergic (with dopamine as principal transmitter)
- Reward dominant

# II. Behavioral Inhibition System

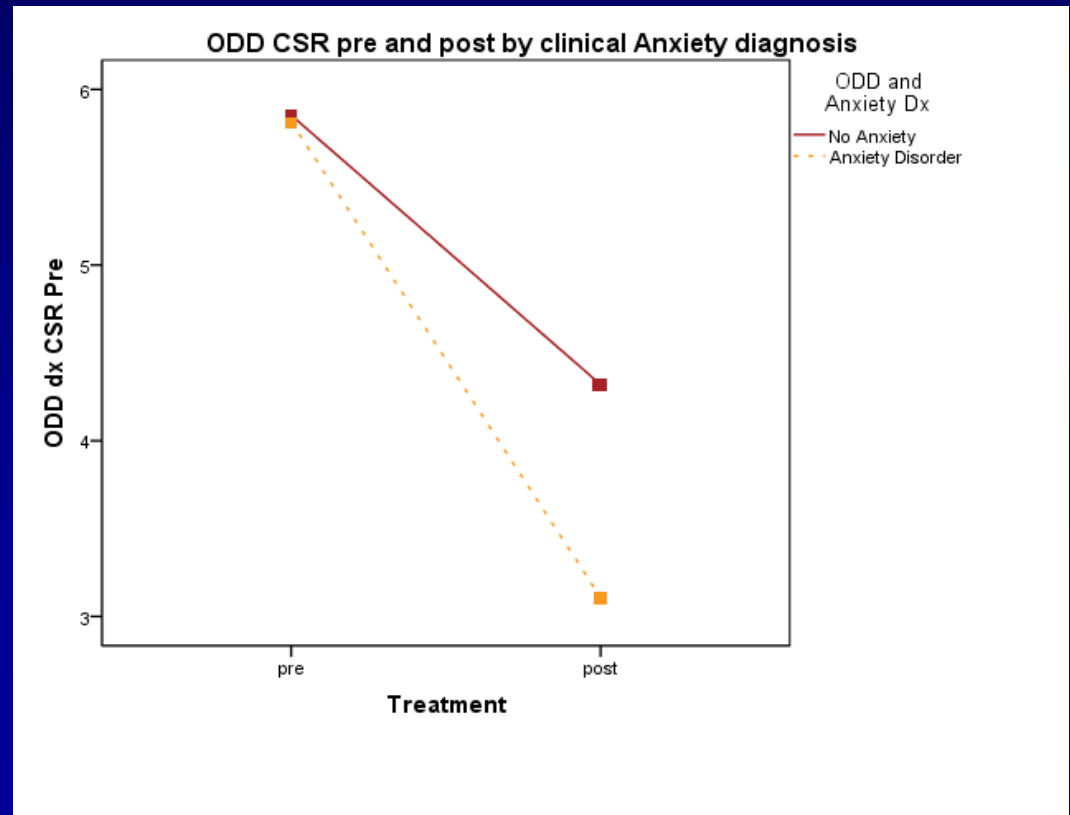
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- System is responsive to signals of impending punishment (fear or frustrative non-reward)
- Decreases in responding brought about in punishment and in passive avoidance and extinction paradigms
- The BIS is in those pathways responsible for the effects of passive avoidance and extinction - medial septum, hippocampus, and orbito-frontal cortex
- These pathways are noradrenergic (with noradrenaline as the principal transmitter)
- Punishment avoidant

# Does the Presence of Anxiety Affect the Outcomes?

- CSRs changed over time. Anxiety predicted treatment outcome for ODD CSR ( $p < .015$ )

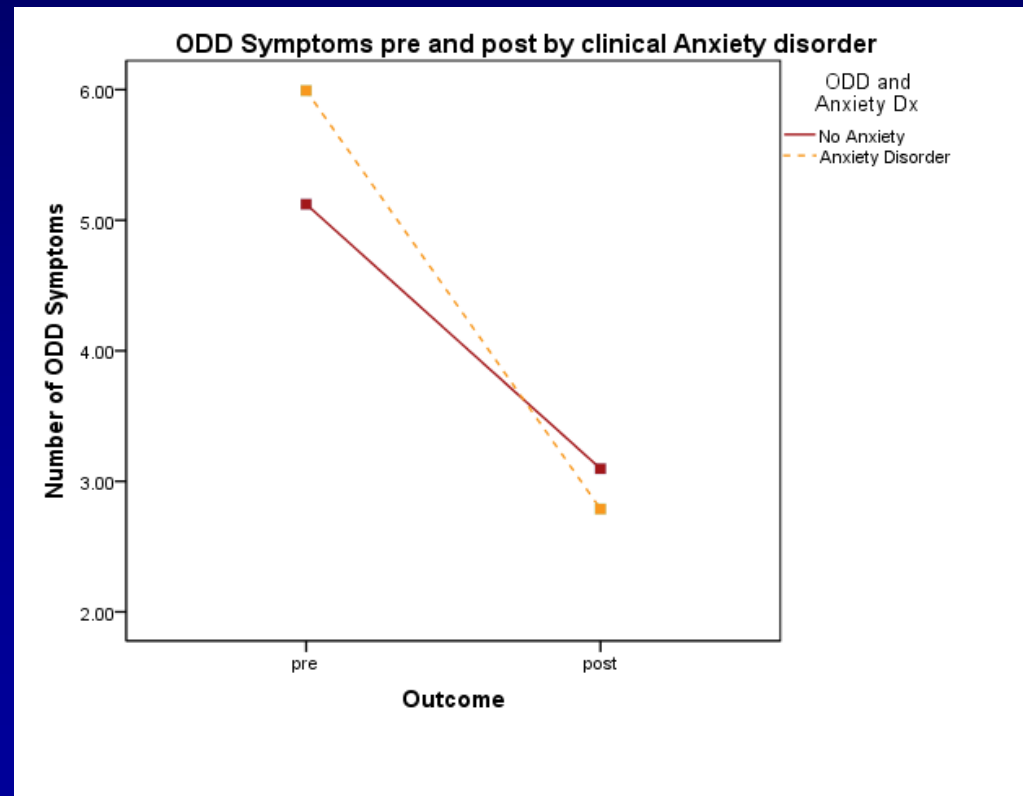
	ODD CSR Pre	ODD CSR Post
No Anxiety	5.86	4.31
Anxiety	5.81	3.12
Overall	5.83	3.67



# Did Anxiety Affect Other Outcomes?

- Mother report on the DBDRS showed significant reduction from pre to post. However, anxiety did not moderate treatment outcome.

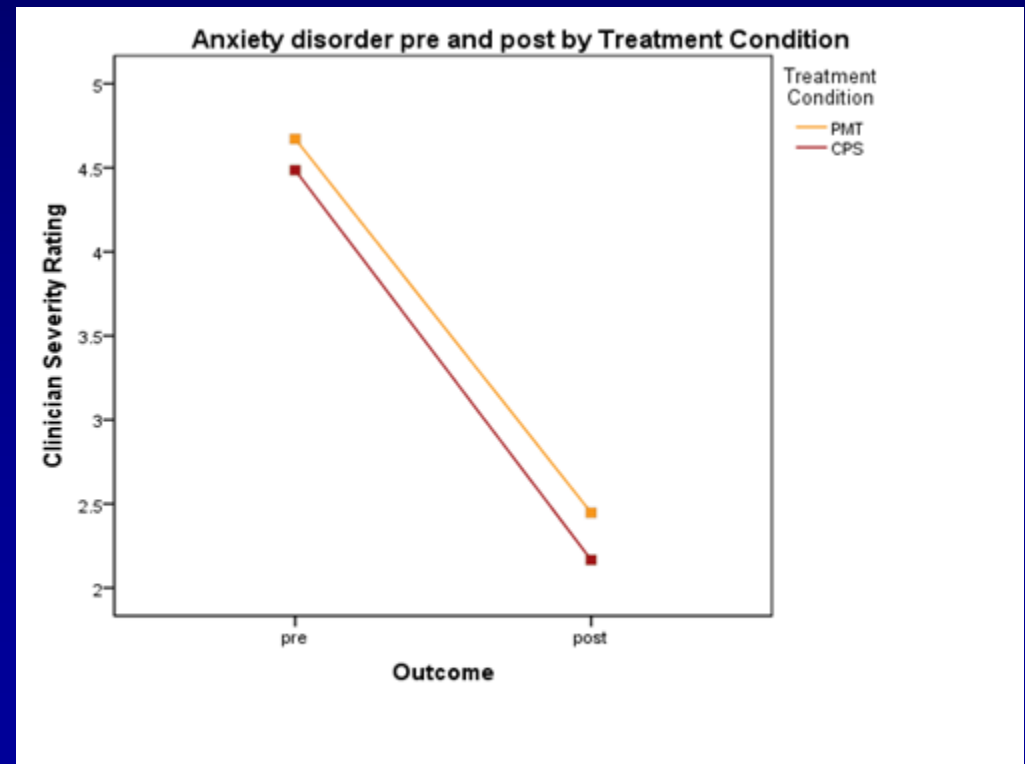
	ODD Symptoms Pre	ODD Symptoms Post
No Anxiety	5.12	3.04
Anxiety	6.00	2.85
Overall	5.56	2.94



# Did the ODD Treatments Differentially Alter the Anxiety CSR Ratings?

- Yes, there was a significant reduction in Anxiety CSR. However, the change from pre to post did not differ between CPS or PMT.

	Mean Anxiety CSR Pre	Mean Anxiety CSR Post
PMT	4.68	2.41
CPS	4.47	2.21
Overall	4.59	2.32



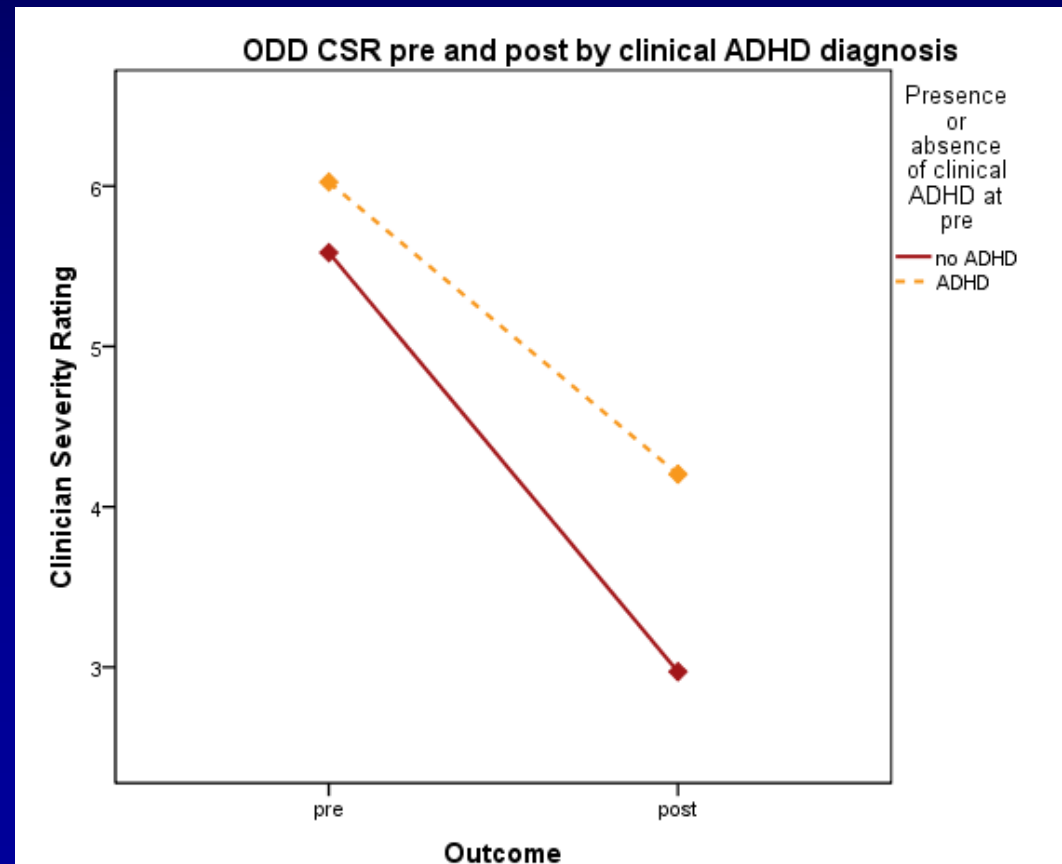


# What about the Presence of ADHD?

## Does it Moderate Treatment Outcomes?

- ADHD did not predict treatment outcome when examining ODD CSR pre and post treatment; however, a trend was present ( $p=.137$ ).

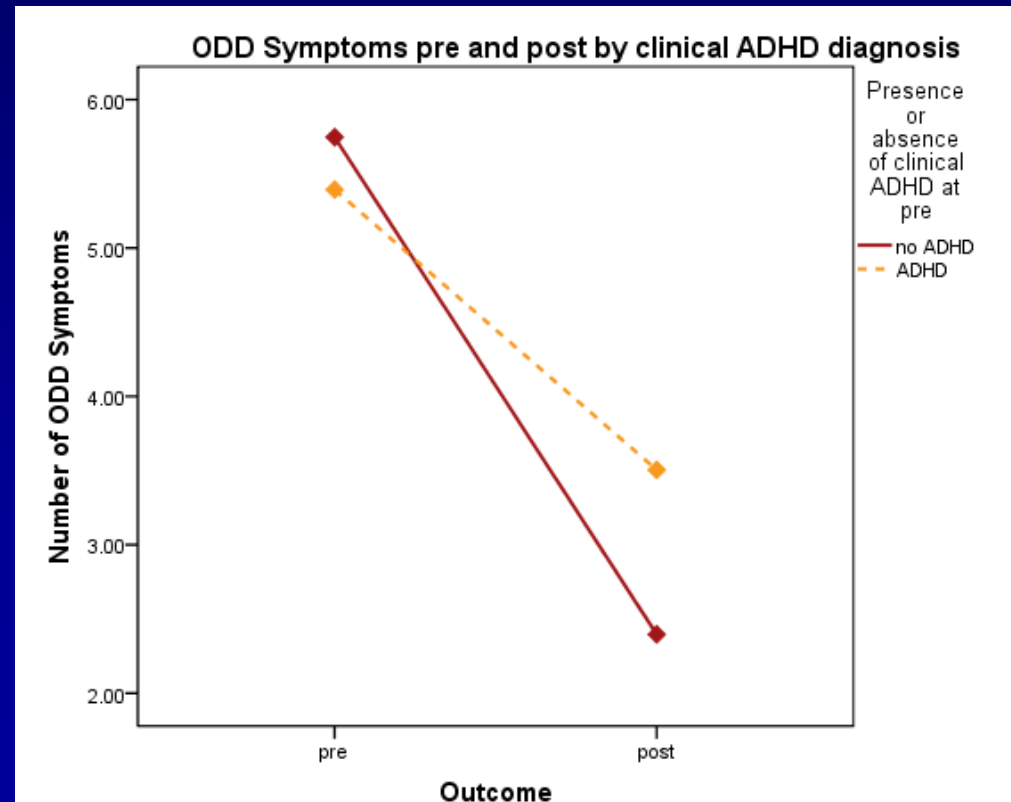
	ODD CSR Pre	ODD CSR Post
No ADHD	5.65	3.00
ADHD	5.98	4.18
Overall	5.83	3.67



# Did ADHD Moderate Other Outcomes?

- ADHD predicted treatment outcome based on maternal reported ODD symptoms on the DBDRS,  $p < .05$

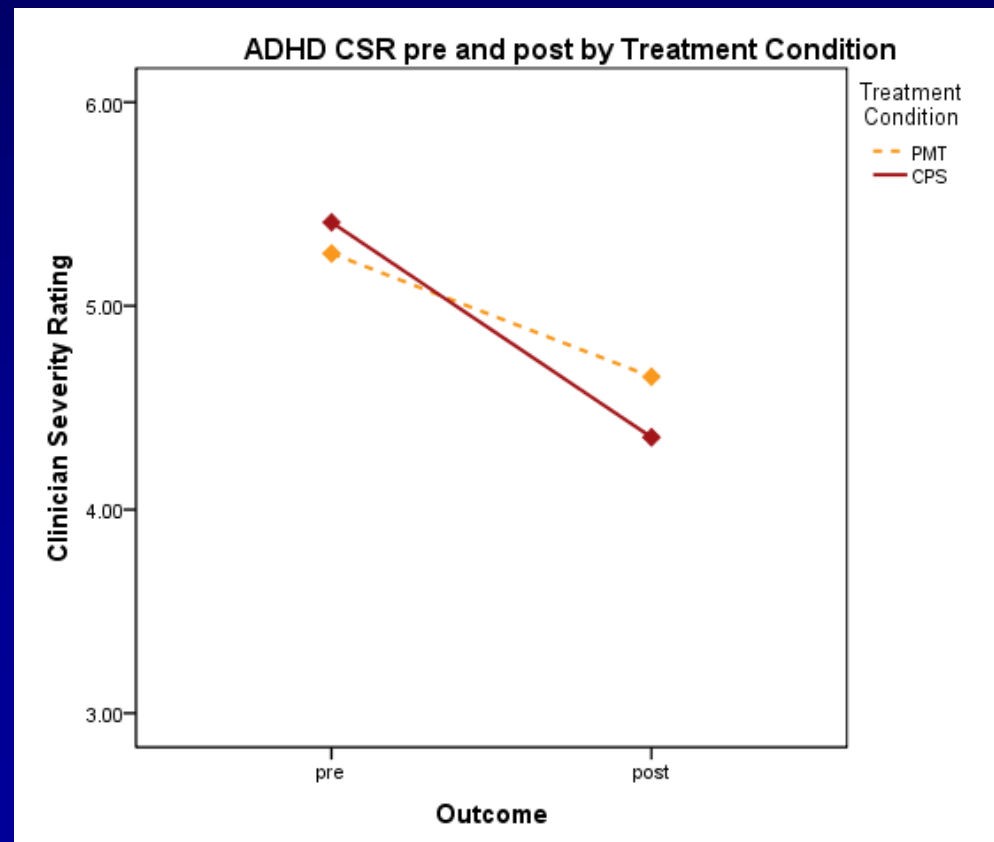
	ODD Symptoms Pre	ODD Symptoms Post
No ADHD	5.67	2.08
ADHD	5.46	3.68
Overall	5.56	2.94



# Did the ODD Treatment Differentially Alter ADHD CSR Ratings?

- In both treatment conditions, there was a significant change in ADHD CSR from pre- to post treatment ( $p < .05$ ); however, the interaction between outcome and treatment condition was not significant ( $p = .310$ ).

	Mean ADHD CSR Pre	Mean ADHD CSR Post
PMT	5.25	4.64
CPS	5.42	4.37
Overall	5.32	4.53



# What can We Conclude?

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- Tentatively, anxiety serves to mitigate the effects of ODD whereas ADHD appears to exacerbate the effects of ODD
- Anxiety and ADHD can serve to predict outcomes – differentially so!
- Replication is needed and other comorbidities need to be examined (e.g., depression, substance use)
- Moreover, mediators of change need to be studied

# A Second Example: Comorbidity of ADHD and Anxiety

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- Limited attention to comorbidity of ADHD and internalizing disorders
- 25% of children with ADHD will have a comorbid anxiety disorder
  - 30% - 40% in clinical samples
- Presence of anxiety may alter the treatment plan for this subgroup

# ADHD Comorbid Subgroups

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- Interest is narrowing the ADHD phenotype
  - Neuropsychological characteristics
  - Comorbidity patterns
- Comorbid ADHD Subgroups (Jensen et al., 2001; Ollendick et al, 2008)
  - ADHD Only
  - ADHD + Anxiety
  - ADHD + ODD/CD
  - ADHD + ODD/CD + Anxiety

# ADHD and Anxiety

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- Enhanced response to behavioral treatment if both Anxiety and ADHD present (MTA Cooperative Groups, 1999)
  - In absence of anxiety, medication was superior
  - In presence of anxiety, medication and behavioral treatments did not differ
- What if behavioral treatment targeted anxiety in this subgroup? Might the intervention be even more robust?

# ADHD and Anxiety Treatment

## Jarrett & Ollendick, JCCP, in press

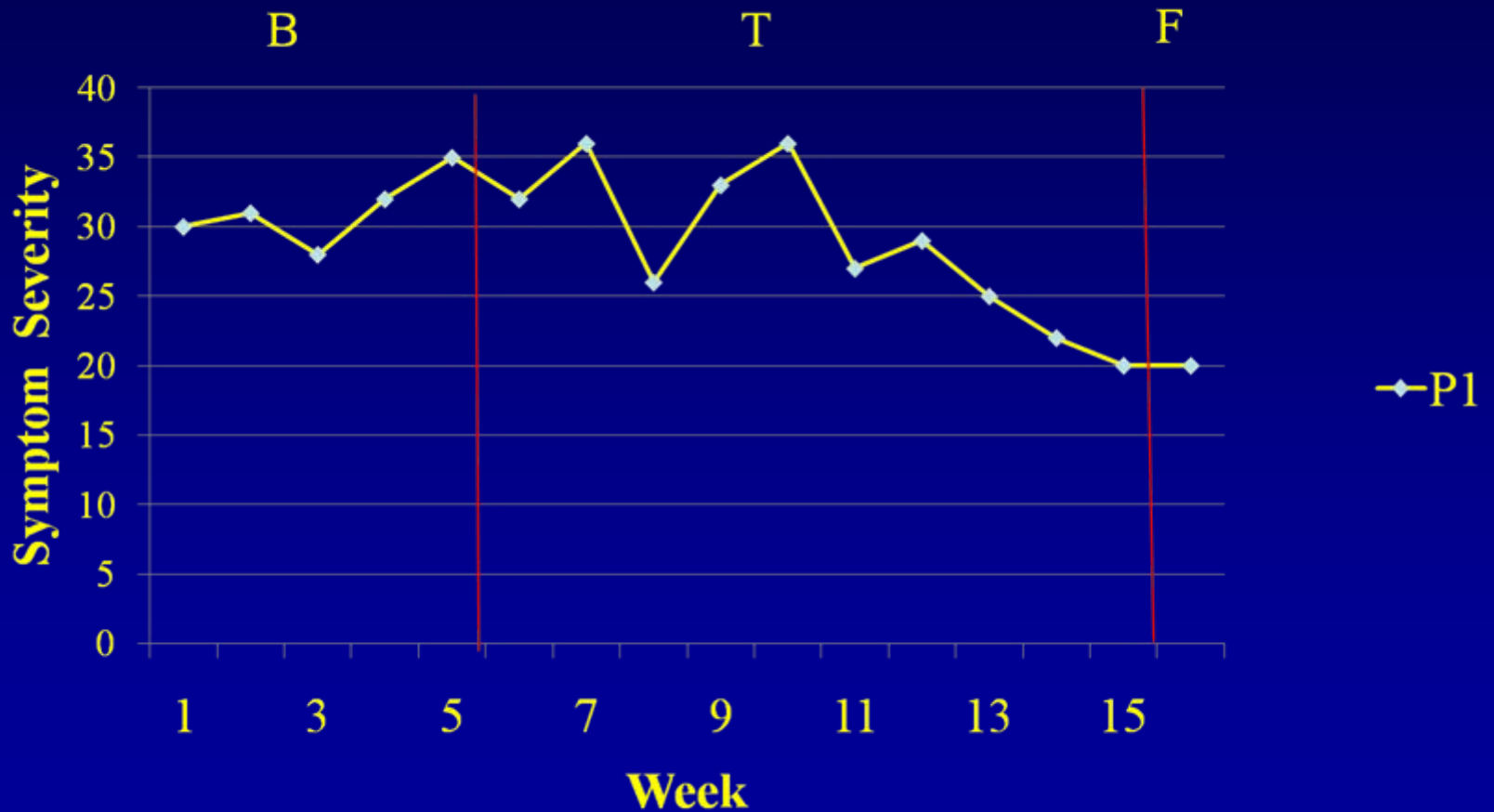
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- Family-based treatment for ADHD and anxiety
  - Modified parent management training for ADHD
  - Family-based cognitive-behavioral treatment for child anxiety
- Integrated protocol
  - 10 sessions at 1.5 hours/session
    - 50 minutes – parent
    - 30 minutes – child
    - 10 minutes – parent and child



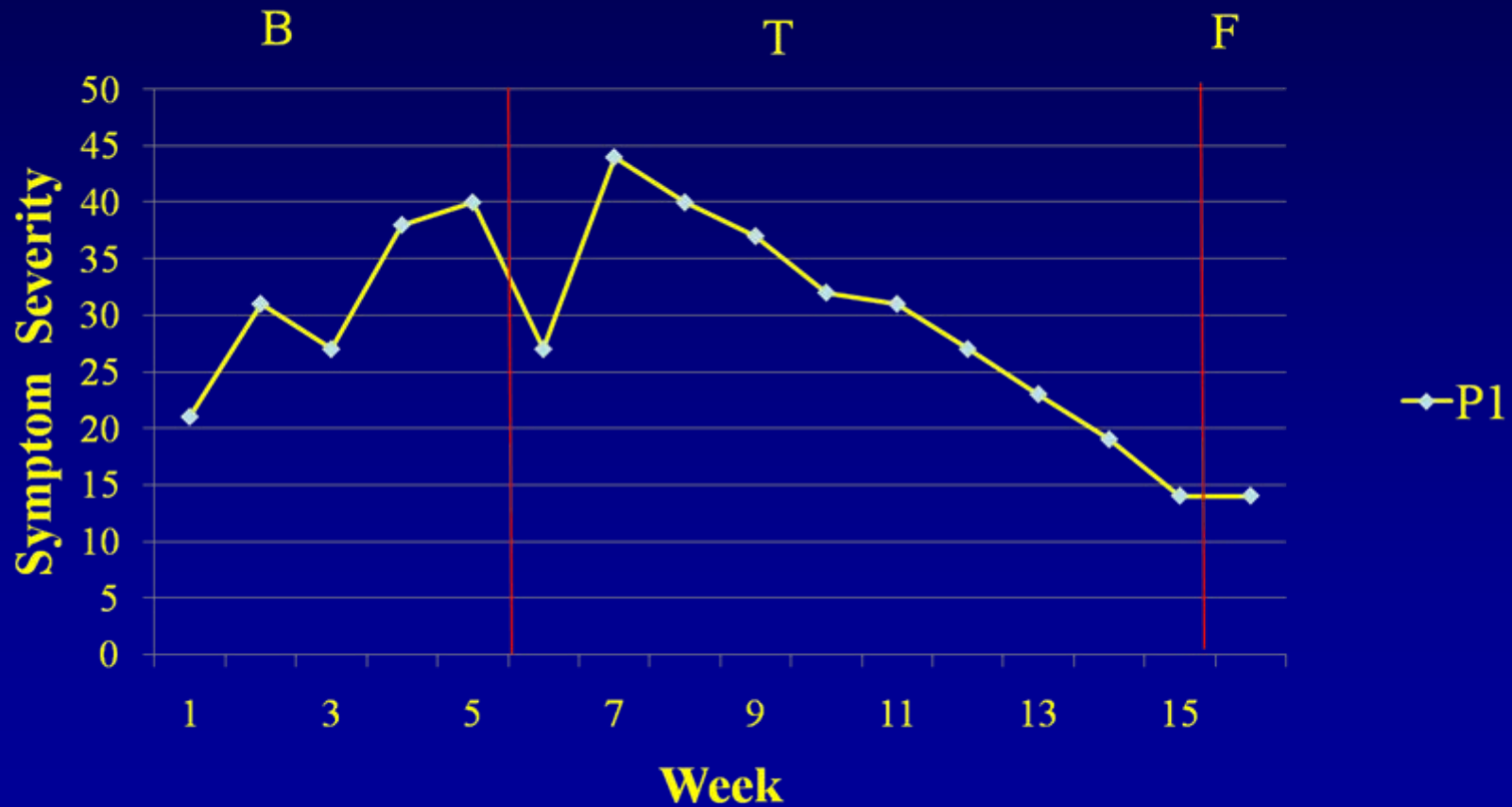
# Participant 1 – ADHD Symptoms (DBDRS)

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# Participant 1 – Anxiety Symptoms (SCAS-P)

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# Aggregate Outcomes ( $n = 8$ )

Measure	<u>Pre-treatment</u>		<u>1 Week Post</u>		<u>6 Months Post</u>		<u>Percentage Improved</u>		<u>Percentage with RCI &gt; 1.96</u>		<u>Percentage Subclinical (CSR &lt; 4)</u>	
	M	SD	M	SD	M	SD	1W	6M	1W	6M	1W	6M
ADIS ADHD	6.25	.71	5.25	.89	4.25	1.58	25	50	75	100	0	25
ADIS Anxiety Treated	5.31	.65	3.60	1.06	3.19	1.31	88	88	100	100	63	63

# What Can We Conclude?

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- Tentatively, combined programs address both forms of psychopathology, and might produce synergistic effects
- As with ODD and the presence of anxiety, so too with ADHD the presence of anxiety signals better treatment outcome
- Is anxiety good, bad, or indifferent? In what form?

# A Third Example: Attention Training

- A large body of evidence has established an association between anxiety and biases of attention
  - Vigilant to threatening stimuli, and difficulty disengaging from such stimuli
  - Recent evidence suggests that attentional biases may play a role in the etiology and maintenance of anxiety

Therefore, elimination of these biases should prove powerful in the treatment of anxiety disorders

# Attention Training (ATT)

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- Experimental task designed with neutral stimuli as targets, and anxious stimuli as distractors
  - Commonly modified probe detection tasks
- Has been successfully utilized with a variety of anxious adult populations
  - E.g., GAD, subclinical OCD, trait anxiety
  - Most commonly with social anxiety disorder

# Attention Training - Continued

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- Goal of such training is to learn the tendency to disengage attention from anxiety-related stimuli in favor of attention to neutral stimuli
- Dot-probe task in which probe follows neutral stimulus (vs. anxiety-related stimulus) in 80% - 90% of trials
- Treatment consisted of ten, 30-minute sessions
  - 15 minutes of computer-based ATT
  - 15 minutes of rapport-building and questionnaires

# ATT Task

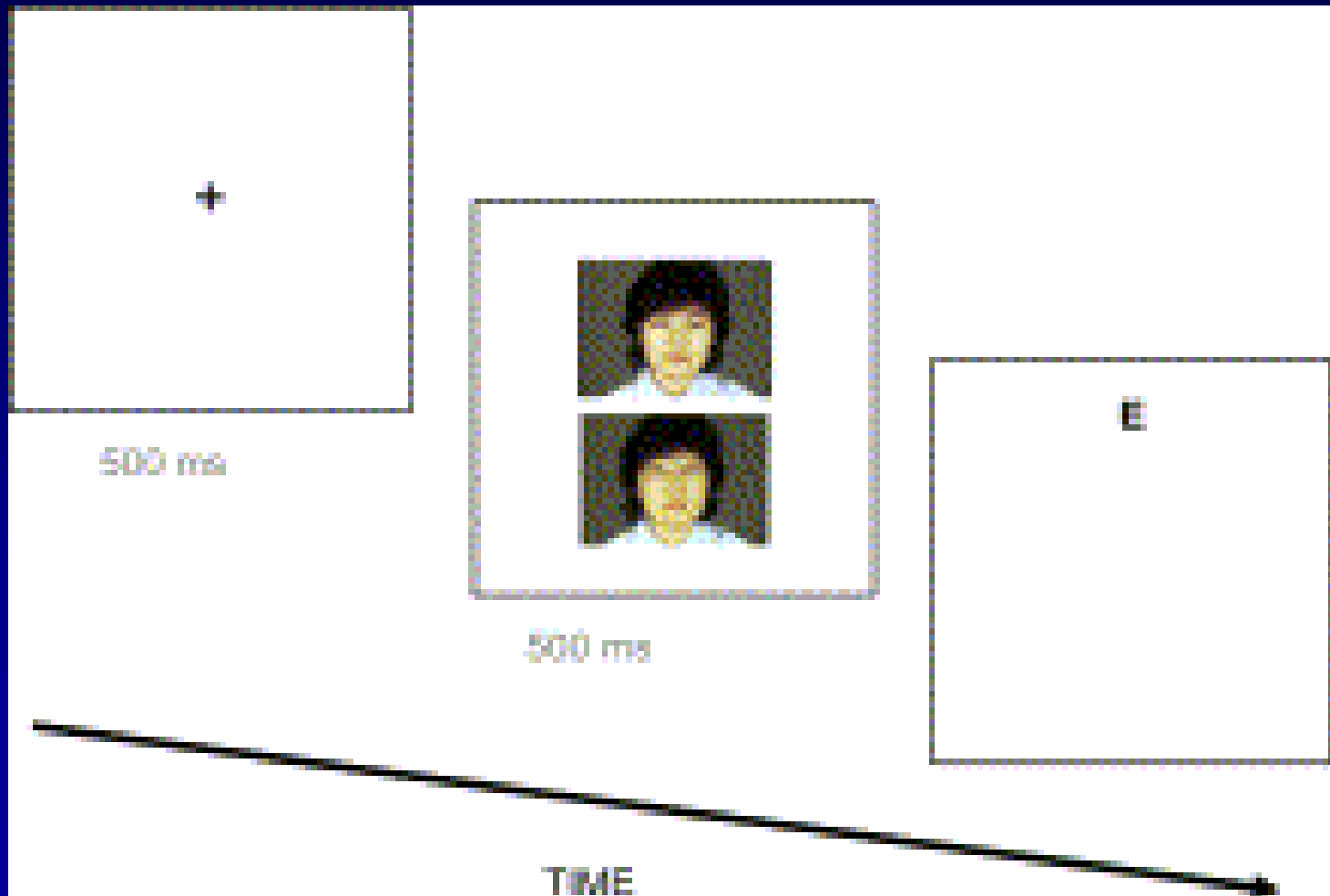
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- Designed by Amir (see Amir et al., 2008)
- Modified dot-probe task, 160 trials
  - Probe replaced neutral stimulus in 80% of trials
  - 8 angry and 8 disgust, matched with 16 neutral
  - Pictorial facial stimuli

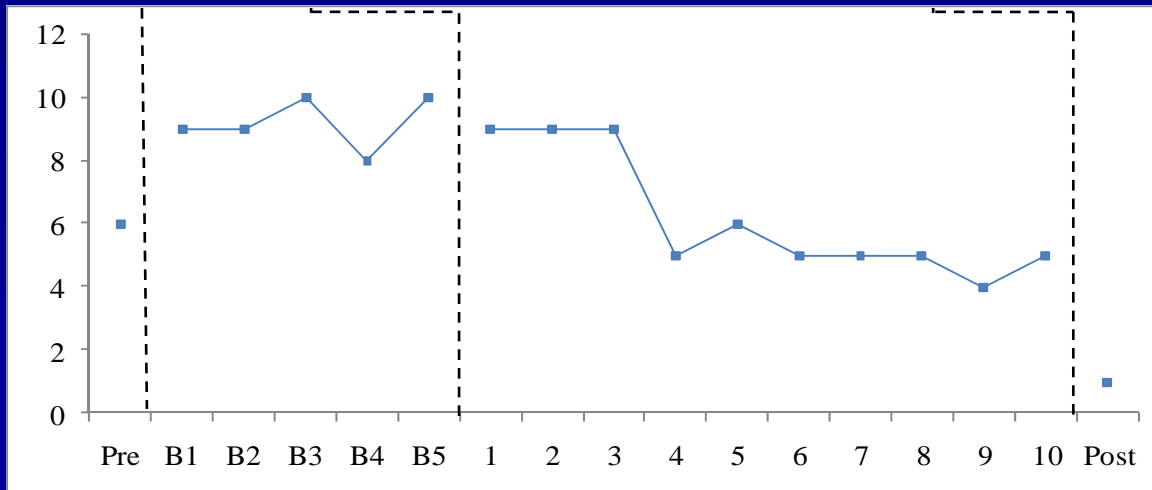
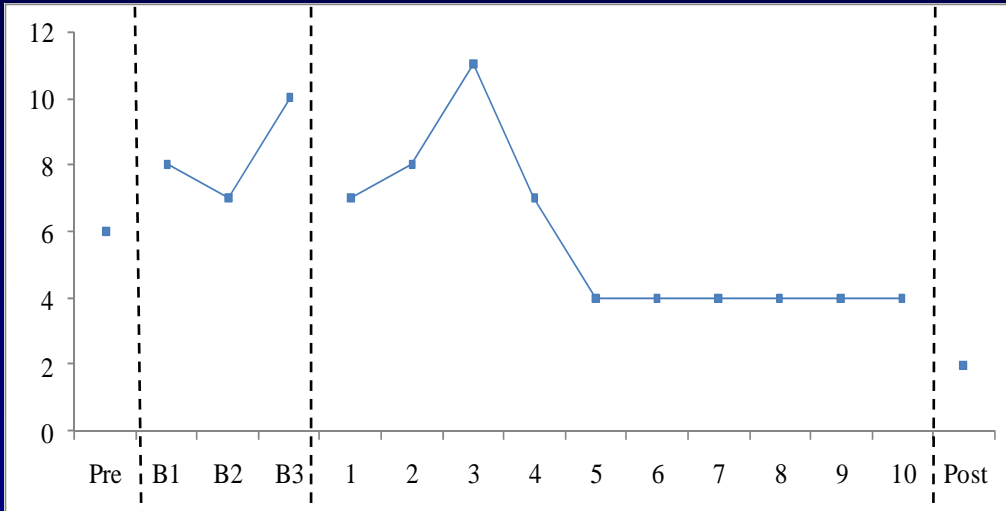


# Example from Attention Modification Program

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# SCAS-SP Scores for Both Children over the Course of Treatment (Coward & Ollendick, JAD, in press)



# What Can We Conclude?

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- Attention Training appears to be helpful
- Might it be combined with well-established treatment protocols to enhance treatment outcomes, perhaps leading to the recovery of some of the 30% - 40% of youth who do not respond to these efficacious treatments?
- Might there be certain youth for whom this “adjunctive aid” might be more useful – identifying the youth for whom the treatments work!

# New Directions

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- EBP becomes the “default” option in treatment selection and planning
- Prescription treatments (Treatment Matching)
  - Attribute x treatment interventions
  - Idiographic treatment approaches
    - expression of problem/disorder
    - pathogenesis
    - characteristics of sample  
(e.g., age, sex, ethnicity)

# New Directions (Continued)

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- Stages of Treatment Paradigm
  1. Selection of Initial Treatment
  2. The Management of the Partial Responder
  3. The Treatment of the Refractory Patient
  4. The Maintenance of Treatment

(March & Ollendick, 2004)

# Practical Considerations

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- Should we use treatments in the absence of evidentiary support?
- If so, how long should we continue to use them in the absence of such support?
- If not, what do we do until such support is available?

# Ethical Considerations - I

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- We need “Reasonable evidence that they (treatments) will ameliorate impairment and symptoms” (Pelham et al., 1998)
- APA ethics: “psychologists should rely on scientifically and professionally derived knowledge when making scientific or professional judgments”

# Ethical Considerations - II

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- Ollendick & Davis (2004): “We assert that the ongoing practice of invalidated treatments is not only bad practice, it is unethical. It is our responsibility as practicing professionals to keep abreast of developments about which treatments work and which ones do not and if we are not proficient in those strategies that do work to refer children with these problems to professionals who are. Surely, the children, adolescents, and families we serve deserve the very best of what we have to offer them”



# Parting Comment

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“A man who carries a cat by the tail learns something he can learn in no other way.”

Mark Twain