

COMPREHENSIVE BEHAVIORAL INTERVENTION FOR TICS (PART 1)

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X This information in the presentation is based upon:

- X **Managing Tourette Syndrome: A Behavioral Intervention for Children and Adults** by Douglas W. Woods, John C. Piacentini, and colleagues
- X **CBIT Training**



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TOPICS

- Rationale for CBIT?
- Who is it a good fit for?
- Does it Work?
- Treatment Structure
- Tic Symptom Tracking/Selecting Tics to Target
- Functional Behavior Assessment
- Functional-Based Interventions

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X What is Comprehensive Behavior Intervention for Tics (CBIT)?

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RATIONALE FOR CBIT

- X External environment can increase tics
 - o New
 - o Stimulating

- X Internal states can increase tics
 - o Anxiety
 - o Excitement

- X We cannot control the neurology, but we teach people to control their internal and external environments

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How CBIT WORKS

BEHAVIOR
THERAPY
(FUNCTIONAL
BEHAVIORAL
INTERVENTIONS)

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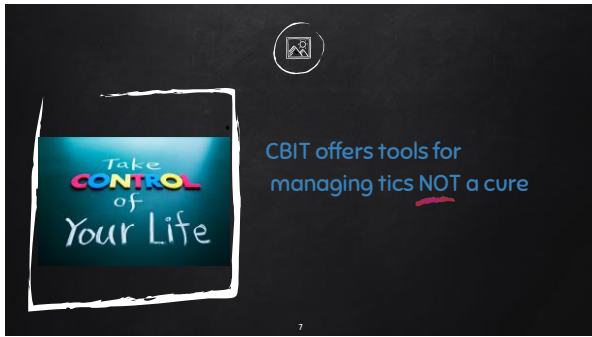
HABIT
REVERSAL

Figure out what makes tics worse
Find ways to **manage** those situations

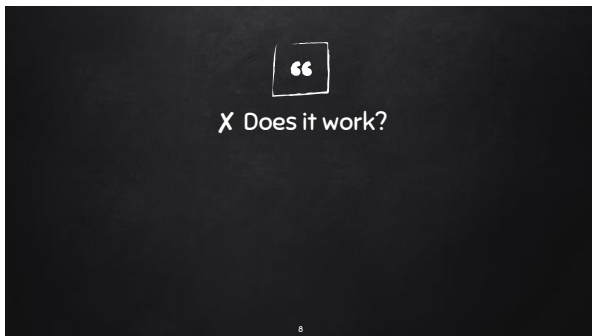
Teach people how to manage tics

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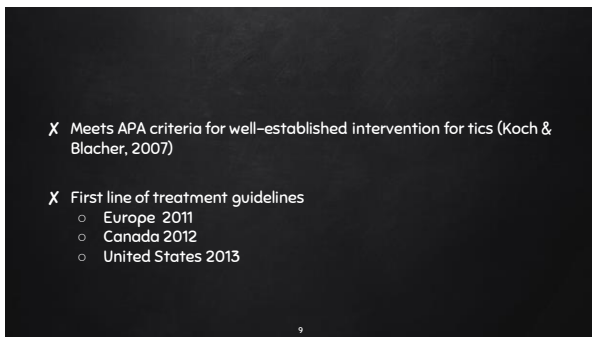
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EVIDENCE FOR EFFECTIVENESS OF CBIT

X Espil et al. (2022). Long-term outcomes of behavior therapy for youth with Tourette disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 61(6), 764-771.

- o 126 youth initial study; 80 completed long-term follow up 11+ years later
- o Of those who initial responded with CBIT, 67% demonstrated at least partial remission
- o 0% of those in supportive therapy demonstrated at least partial remissions

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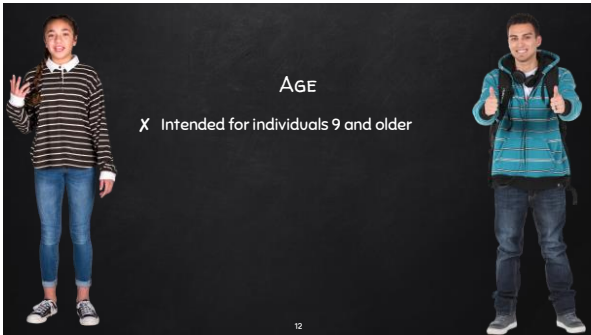
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TREATMENT CONSIDERATIONS

- X Age
- X Client commitment
- X Comorbidity
- X Clinician

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AGE

- X Intended for individuals 9 and older

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CLIENT/PARENT COMMITMENT

X CBIT takes an investment of time and effort if the parent and the child are not willing to do the homework, then it will not be helpful

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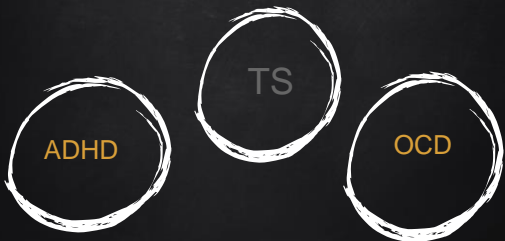
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COMORBIDITY
CONSIDERATIONS

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TOURETTES TRIAD



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ADHD

- X Can negatively impact treatment if ADHD symptoms are not managed

- X Consider
 - o Shorter more frequent sessions
 - o Additional, separate parent sessions
 - o Minimize distractors
 - o Extra reinforcers

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DIFFERENTIATING BETWEEN TICS AND OBSESSIONS/COMPULSIONS

<ul style="list-style-type: none">x OCD<ul style="list-style-type: none">o Specific cognitions<ul style="list-style-type: none">■ Something bad will happen if I don't engage in the behaviouro Physiological arousal	<ul style="list-style-type: none">x Tics<ul style="list-style-type: none">o Vague sensory discomforto No cognitions about something bad happening
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OCD

- X Need to differentiate some tics from compulsions
- X OCD requires exposure prevention therapy (ERP)

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OTHER CO-MORBIDITY CONSIDERATIONS

- x **Developmental Disabilities**
 - o More direct
 - o More rule specific
 - o More reinforcers
 - o More concrete reinforcers
- x **Depression/Anxiety**
 - o Treat depression before CBIT
 - o If not secondary to tics, treat anxiety before CBIT
- x **Anger**
 - o 20%-30% of kids with TS have rage outbursts (intense, sudden, remorse after)
 - o Typical support for children with anger

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CLINICIAN QUALIFICATIONS

- FAMILIAR WITH **CBIT** PRINCIPLES
- FAMILIAR WITH **TS** PRESENTATION
- FAMILIAR WITH **COMORBIDITIES**

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- X Treatment Structure
- X Core Components of CBIT

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- X Rationale for CBIT
- X Overall Structure
- X Psychoeducation
- X Create Tic Hierarchy
- X Create an Inconvenience Review
- X Behavioral Reward Program

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OVERALL STRUCTURE CBIT

- X **Core Elements**
 - o Habit reversal therapy
 - Awareness
 - Premonitory urge
 - Competing response
 - o Function-based assessment and intervention
- X **Additional Elements**
 - o Psychoeducation
 - o Relaxation training
 - o Relapse prevention
 - o Motivation
 - Rewards
 - Inconvenience

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PSYCHOEDUCATION

- X Rationale
- X Diagnoses
- X Phenomenology
- X Natural history of tics
- X Social difficulties and co-morbidities
- X Genetics and neurological basis
- X Prevalence

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TIC HIERARCHY




- X List all tics
- X Rate severity on subjective units of distress scale (SUDS: 1-10)
- X Use to choose order of tics addresses
- X Address weekly
- X Add to the list as necessary each week

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INCONVENIENCE REVIEW



- X Have patients list all of the things they hate about tics
- X Use this as a motivator for the hard work that is required for habit reversal

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BEHAVIORAL REWARD PROGRAM

- X Rationale
 - o To motivate by rewarding EFFORT not SUCCESS
- X Points for:
 - o Attending
 - o Participating in sessions
 - o Completing homework

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X Functional Behavior Assessment & Intervention

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STEPS

1. Functional assessment
2. Developing interventions
3. Develop plan for implementing interventions

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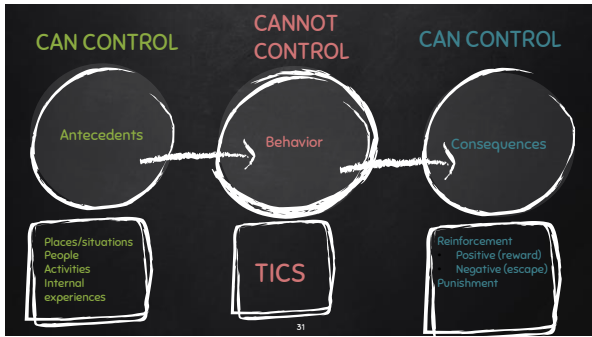
FUNCTIONAL BEHAVIOUR ASSESSMENT

- X Determine factors that make tics worse
 - o People
 - o Places
 - o Demands
 - o Situations

- X Through interview with parent and child

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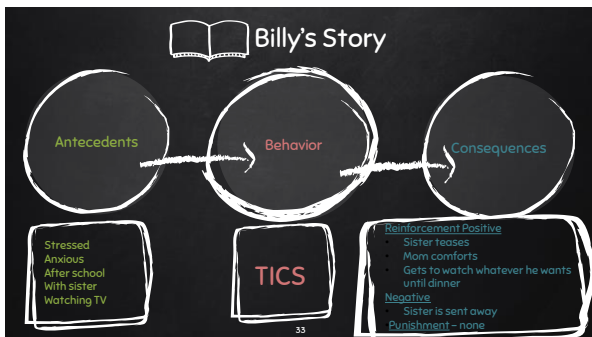
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EXAMPLES ANTECEDENTS THAT CAN AFFECT TICS

x Emotional states	x Activities
<ul style="list-style-type: none">o Upseto Anxiety	<ul style="list-style-type: none">o Being aloneo Being in groupso Watching TVo Talking about ticso Stressful life events

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EXAMPLES OF CONSEQUENCES THAT CAN AFFECT TICS

x Increase	x Decrease
<ul style="list-style-type: none">o Adult reactions<ul style="list-style-type: none">■ Comfort■ Attentiono Escape<ul style="list-style-type: none">■ Leave the classroom■ Get out of task at homeo Peer attention<ul style="list-style-type: none">■ Positive or negative	<ul style="list-style-type: none">o Avoid teasingo Avoid embarrassmento Increase positive participation

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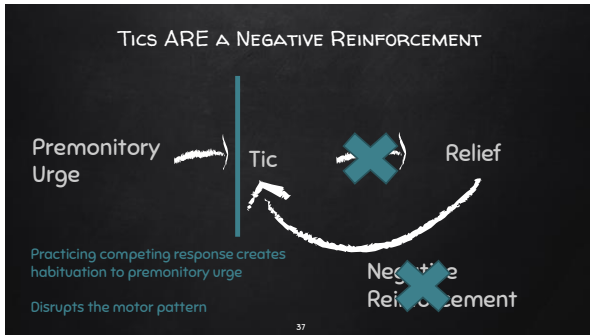
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TICS ARE A NEGATIVE REINFORCEMENT

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graph LR; A[Premonitory Urge] --> B[Tic]; B --> C[Relief]; C --> D[Negative Reinforcement]; D --> A;
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- ### FUNCTIONAL BEHAVIORAL INTERVENTIONS
- X Helps to control the environment to manage tics

 - X Remove reinforcing consequences
 - X Minimize or avoid antecedents and exacerbating situations
 - X When these situations are unavoidable
 - o Take scheduled breaks when possible
 - o Practice habit reversal
 - X Educate teachers and others about tics
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- ### FUNCTION-BASED INTERVENTIONS FOR BILLY
- | | |
|--|---|
| <p>Antecedents</p> <ul style="list-style-type: none"> X Anxiety <ul style="list-style-type: none"> o Teach relaxation strategies X Watching TV after school in den with sister <ul style="list-style-type: none"> o Change setting/activity/ person | <p>Consequence Reinforcers</p> <ul style="list-style-type: none"> X Sister teases <ul style="list-style-type: none"> o Antecedent intervention addresses this X Mom comforts <ul style="list-style-type: none"> o Mom does not comfort <i>at this time</i> X Billy gets to watch what he wants <ul style="list-style-type: none"> o TV turned off and Billy practices tic management X Sister sent away <ul style="list-style-type: none"> o Sister apologizes and stays |
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EXAMPLE INTERVENTIONS FOR ANTECEDENTS

- Bedtime**
 - Bedtime routines
 - Relaxation practice
- Car Rides**
 - Decrease safety risks (put on child safety locks, have child sit in middle seat)
 - Schedule car rides during low tic times when possible
 - Practice CR
- Classroom**
 - Preferred seating
- After School**
 - 15 minutes of down time before any demands
- Watching TV**
 - Limit time watching TV

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EXAMPLE CONSEQUENCE INTERVENTIONS

- x Social Attention**
 - o Do not tell the patient not to tic
 - o Do not comfort patient during tics
 - o Do not laugh at patient
 - o Encourage peers not to react to tics
- x Escape**
 - o Do not ask patient to leave
 - o Require homework/seatwork completion
 - o Remind to use CR
 - o Must stay in room at bedtime

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DEVELOP PLAN FOR IMPLEMENTATION

- x** Discuss with parents when and how the intervention will be implemented
- x** Discuss potential challenges and make plans for those
- x** Provide any training/support necessary for parents to implement the intervention

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RELAXATION TECHNIQUES

- x This is **NOT** part of competing response; it is used to manage anxiety
- x Diaphragmatic Breathing
- x Progressive Muscle Relaxation

- x More about this in session 2



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X Habit Reversal Training

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AWARENESS TRAINING

- X **Rationale**
 - o Cannot change behaviours we are unaware of
- X **Process**
 - o Self-monitoring
 - o Response description
 - o Response detection
 - o Early warning (premonitory urge)

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SELF-MONITORING

- X Necessary but not sufficient
- X Frequency
- X Day/time
- X Situation



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RESPONSE DETECTION

- X Have patient define tic in great detail
 - o All body parts involved, some are far away
 - o Order of movements
- o Sensations
- o Tic signals/premonitory urge

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RESPONSE DETECTION & EARLY WARNING

<p>Response Detection</p> <ul style="list-style-type: none"> X Therapist can simulate if necessary X Lift forefinger to acknowledge that they have engaged in a tic X Client practice with praise and correction 	<p>Early Warning</p> <ul style="list-style-type: none"> X Patient identifies when they have the urge to tic
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CHOOSE A COMPETING RESPONSE

1. Incompatible with the tic or make it harder to do
2. Less noticeable and less interfering than the tic
3. Can to the competing response anywhere (even in the shower)

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SOCIAL SUPPORT/COACH ROLE

- X Reinforce and prompt use of competing response
- X Praise use of competing response



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SOCIAL SUPPORT STEPS

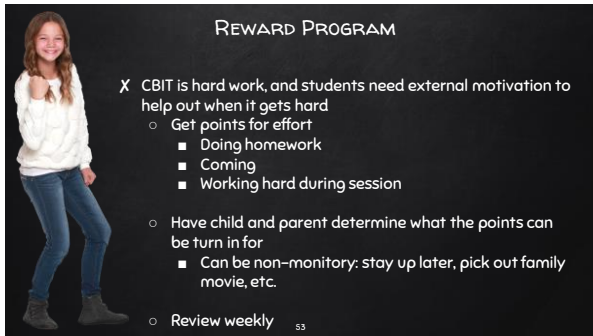
- X Identify support person
 - o Usually mom for kids, spouse, housemate, sibling
- X Training to be encouraging not punitive
 - o Permitted one reminder per setting
 - o "don't forget your exercise!"
- X Remember that it is the patient's treatment!!
- X **Praise the practice not the success**

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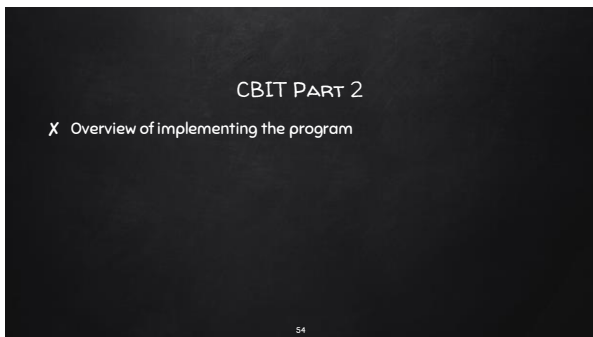
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