WORKSHOPS

JUN'26
LJUBLJANA

ESSTS

18th International Conference on Tourette Syndrome & Tic Disorders

Workshops 2026 | Behavioural Therapy for tic disorders

Wednesday, 17 June 2026, 9:00-12:00 | Beginner participants

Basic principles and behavioural techniques for treating tic disorders

Dr. Tara Murphy
Tara.Murphy@gosh.nhs.uk

Dr. Zsanett Tarnok
dr.tarnok.zsanett@egyenlito.com

Jolande van de Griendt, MSc
J.vandegriendt@ticxperts.com

Dr. Cara Verdellen
c.verdellen@psyq.nl

Dr. Katrin Woitecki
Katrin.woitecki@uk-koeln.de

Basic principles and behavioural techniques for treating tic disorders

09:00 The cornerstone of treatment: diagnostics, assessment and psychoeducation

09:25 Habit reversal training (HRT)

10:15 Break 

10:30 Exposure and response prevention (ERP)

11:15 Function-based interventions

11:45 Questions and closing - challenges in real life

The cornerstone of treatment: diagnostics, assessment and psychoeducation

Zsanett Tarnok, PhD

Egyenlito Diagnostic, Therapeutic and Consultancy Center, Budapest, Hungary
clinical psychologist, clinical neuropsychologist

dr.tarnok.zsanett@egyenlito.com

Diagnosis of TS & Tic Disorders

Definition of a Tic

A sudden, rapid, recurrent, nonrhythmic, motor movement or vocalization.

- Motor and vocal tics
- Simple and complex tics
- Suppressible

Simple motor tics

- **Simple motor tic:**
- Sudden, brief, ‘meaningless’ movement
- Recurs in bouts
- One muscle group

Examples:

excessive eye blinking, nose movements, head shaking, shoulder jerking

Complex motor tics

Complex motor tic:

- Sudden, stereotyped, semi-purposeful movement
- More than one muscle group
- Movement can last longer
- A constellation of movements as facial grimacing together with body movements

Examples:

Touching things, obscene gestures, facial grimacing together with body movements, at the same time sticking out the tongue, head shaking and grimacing, directly followed by a vocal noise

Simple vocal tics

Simple vocal tic:

- Fast, “meaningless” sounds

Examples:

coughing, throat clearing, sniffing,

whistling, animal noises

Complex vocal tics

Complex vocal tic:

- Language, words, sentences

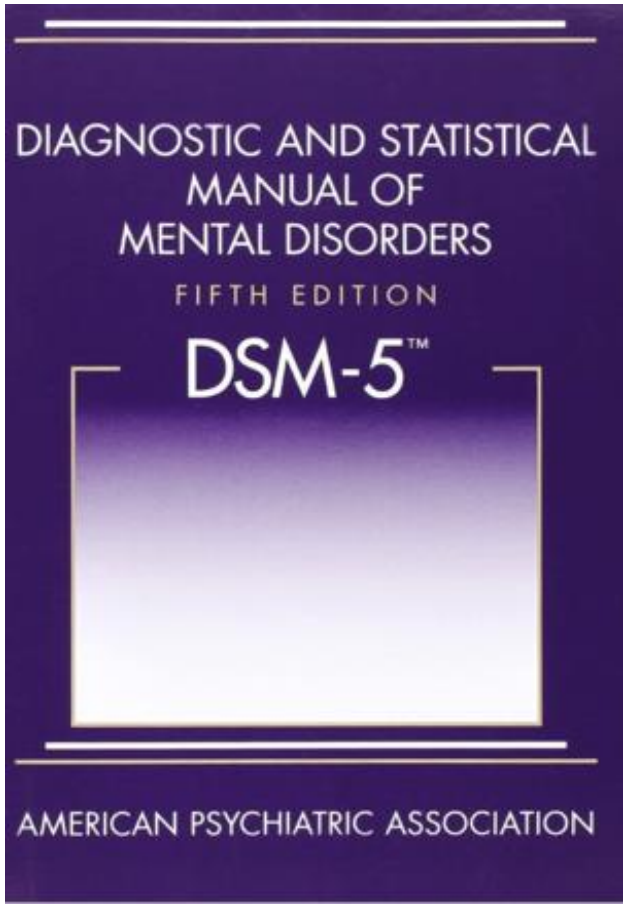
Examples:

Syllables, words, coprolalia, echolalia, palilalia, but also blocking or disinhibited speech

Tic disorders – DSM 5.

- Onset before age 18 years, not due to another medical condition/substance

- **Provisional (Transient) tic disorder**
  - Tics last less than one year
- **Persistent (Chronic) motor/vocal tic disorder**
  - Either motor or vocal tics for more than one year
- **Tourette's disorder (TS)**
  - At least two motor tics and one or more vocal tics at least one year
  - Other symptoms and comorbidity
- Tic disorder not otherwise specified
  - Criteria are not met for one of the specific tic disorders
  - E.g., onset >18 years
  - E.g., 5 months tic-free



- DSM 5 Neurodevelopmental disorders – Motor disorders

  - Tic definition: 'stereotyped' is removed
  - Maximum tic-free interval of 3 months is removed
  - Stimulant medication as example of substance induced TS is removed

Heterogeneity of tic symptoms

Significant **fluctuations** in tic severity

waxing and waning

Premonitory urges

Tendency of patients to **suppress** tics (especially when in the office with the clinician)

- Significant **influence of environmental factors** on tic expression , course & fluctuations

-**Comorbidity** makes it more complex

Assessment Guidelines for TS & Tic Disorders

European Child & Adolescent Psychiatry
https://doi.org/10.1007/s00787-021-01842-2

REVIEW

European clinical guidelines for Tourette syndrome and other tic disorders—version 2.0. Part I: assessment

Natalia Szejko[1,2,3] · Sally Robinson[4] · Andreas Hartmann[5] · Christos Ganos[6] · Nanette M. Debes[7] · Liselotte Skov[7] · Martina Haas[8] · Renata Rizzo[9] · Jeremy Stern[10] · Alexander Münchau[11] · Virginie Czernecki[5] · Andrea Dietrich[12] · Tara L. Murphy[13] · Davide Martino[14] · Zsanett Tarnok[15] · Tammy Hedderly[4] · Kirsten R. Müller-Vahl[9] · Danielle C. Cath[16]

Received: 8 March 2021 / Accepted: 30 June 2021

Abstract
In 2011 a working group of the European Society for the Study of Tourette Syndrome (ESSTS) has developed the first European assessment guidelines for Tourette syndrome (TS). Now, we present an updated version 2.0 of these European clinical guidelines for Tourette syndrome and other tic disorders, part I: assessment. Therefore, the available literature has been thoroughly screened, supplemented with national guidelines across countries and discussions among ESSTS experts. Diagnostic changes between DSM-IV and DSM-5 classifications were taken into account and new information has been added regarding differential diagnoses, with an emphasis on functional movement disorders in both children and adults. Further, recommendations regarding rating scales to evaluate tics, comorbidities, and neuropsychological status are provided. Finally, results from a recently performed survey among ESSTS members on assessment in TS are described. We acknowledge that the Yale Global Tic Severity Scale (YGTSS) is still the gold standard for assessing tics. Recommendations are provided for scales for the assessment of tics and psychiatric comorbidities in patients with TS not only in routine clinical practice, but also in the context of clinical research. Furthermore, assessments supporting the differential diagnosis process are given as well as tests to analyse cognitive abilities, emotional functions and motor skills.

Keywords Tics · Tourette syndrome · Assessment · Scales

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Yale Global Tic Severity Scale (YGTSS; Leckman et al., 1989)

The Yale Global Tic Severity Scale: Initial Testing of a Clinician-Rated Scale of Tic Severity

JAMES F. LECKMAN, M.D., MARK A. RIDDLE, M.D., MAUREEN T. HARDIN, M.S.N., SHARON I. ORT, R.N., M.P.H., KAREN L. SWARTZ, B.S., JOHN STEVENSON, PH.D., AND DONALD J. COHEN, M.D.

Abstract. Despite the overt nature of most motor and phonic tic phenomena, the development of valid and reliable scales to rate tic severity has been an elusive goal. The Yale Global Tic Severity Scale (YGTSS) is a new clinical rating instrument that was designed for use in studies of Tourette's syndrome and other tic disorders. The YGTSS provides an evaluation of the number, frequency, intensity, complexity, and interference of motor and phonic symptoms. Data from 105 subjects, aged 5 to 51 years, support the construct, convergent, and discriminant validity of the instrument. These results indicate that the YGTSS is a promising instrument for the assessment of tic severity in children, adolescents and adults. *J. Am. Acad. Child Adolesc. Psychiatry*, 1989, 28, 4:566–573. **Key Words:** clinical rating instrument, motor and phonic tics, Tourette's syndrome.

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Administration

- A semi-structured interview
- The YGTSS assesses symptoms over the **last week** (and also assesses symptoms from the past)
- The **clinician-administered measure** can be conducted with the parent and child together or separately
- It usually takes 20-30 minutes
- The clinician weigh information from multiple respondents and adjust ratings based on behavioral observations, clinical judgement and other sources of information
- **Total Tic Score** , (number,frequency,intensity, complexity, interference) **GTS** (impairment)
- Home video use
- *Social context significantly affects tic expression*
  - *Tic suppression is greater in social situations;*
  - *Standard clinic ratings likely underestimate real-world tic burden*

Premonitory Urge for Tics Scale-PUTS

Right before I do a tic, I feel like my insides are itchy				
Right before I do a tic, I feel pressure inside my brain and body				
Right before I do a tic, I feel 'wound up' or tense inside				
Right before I do a tic, I feel like something is not 'just right'				
Right before I do a tic, I feel like something isn't complete				
Right before I do a tic, I feel like there is energy inside my body that needs to get out				
I have these feelings almost all the time before I do a tic				
These feelings happen for every tic I have				
After I do a tic, the itchiness, energy, pressure, tense feelings or feelings that something isn't 'just right', at least for a little while				
I am able to stop my tics, even if only for a short period of time				

- 7 validated PU instruments identified (Dabrowski et al., 2025)

Other tic-related instruments

- GTS- Quality of Life (GTS-QOL, Cavanna et al., 2008; Su et al., 2016)
- 28 items, 5-point scale

In the last 4 weeks have you	No Problem	Slight Problem	Moderate Problem	Marked Problem	Extreme Problem
1. Been unable to control all your movements?					
2. Had difficulty with daily life activities or hobbies (e.g. cooking, writing)?					
3. Suffered from pain or physical injuries as a result of your tics?					
4. Felt troubled by noises you could not stop making?					
5. Been worried about using swear words you did not mean to say?					

Measuring comorbidity

- **OCD**
  - (Childrens) Yale-Brown Obsessive-Compulsive Scale (C)Y-BOCS

- **ADHD**
  - Swanson, Nolan and Pelham questionnaire (SNAP, Harlan et al., 1999)
  - (Children's version of the) Connors ADHD Rating Scale (CAARS, Conners et al., 1999)

- **Autism**
  - Social Responsiveness Scale (SRS, Constantino et al., 2003)
  - Autism Questionnaire (AQ, Baron-Cohen et al., 2006)
  - ASSQ Screening for Autism Spectrum Disorders (Ehlers & Gilberg, 1993)

Psychoeducation

Recommendation

European Child & Adolescent Psychiatry (2022) 31:403–423
https://doi.org/10.1007/s00787-021-01845-z

REVIEW

European clinical guidelines for Tourette syndrome and other tic disorders—version 2.0. Part II: psychological interventions

Per Andrén[1] · Ewgeni Jakubovski[2] · Tara L. Murphy[3] · Katrin Woitecki[4] · Zsanett Tarnok[5] · Sharon Zimmerman-Brenner[6] · Jolande van de Griendt[7] · Nanette Mol Debes[8] · Paula Viefhaus[4] · Sally Robinson[9] · Veit Roessner[10] · Christos Ganos[11] · Natalia Szejko[12,13,14] · Kirsten R. Müller-Vahl[2] · Danielle Cath[15] · Andreas Hartmann[16] · Cara Verdellen[17]

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The European guidelines recommends embedding each treatment within a psychoeducational and supportive context

Child: care, health and development
Review Article

How does psychoeducation help? A review of the effects of providing information about Tourette syndrome and attention-deficit/ hyperactivity disorder

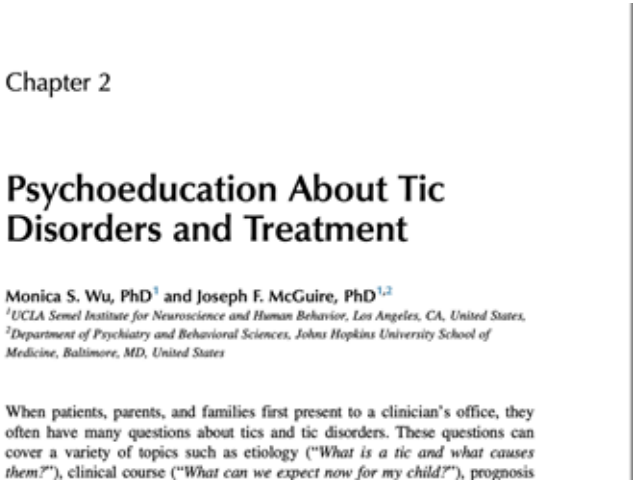
C. Nussey,* N. Pistrang† and T. Murphy‡
*Brent Older Adult Service, London, UK
†Department of Clinical, Educational and Health Psychology, University College London, London, UK, and
‡Tourette Syndrome Clinic, Great Ormond Street Hospital NHS Trust, London, UK

Accepted for publication 3 December 2012

Abstract
Tourette syndrome (TS) and attention-deficit/hyperactivity disorder (ADHD) are common neurodevelopmental disorders that often co-occur. They are both stigmatized and misunder- conditions. This review critically appraises studies examining inte- approaches in TS and ADHD. Studies examinin-

Keywords
-4 ADHD

Effectiveness of PE



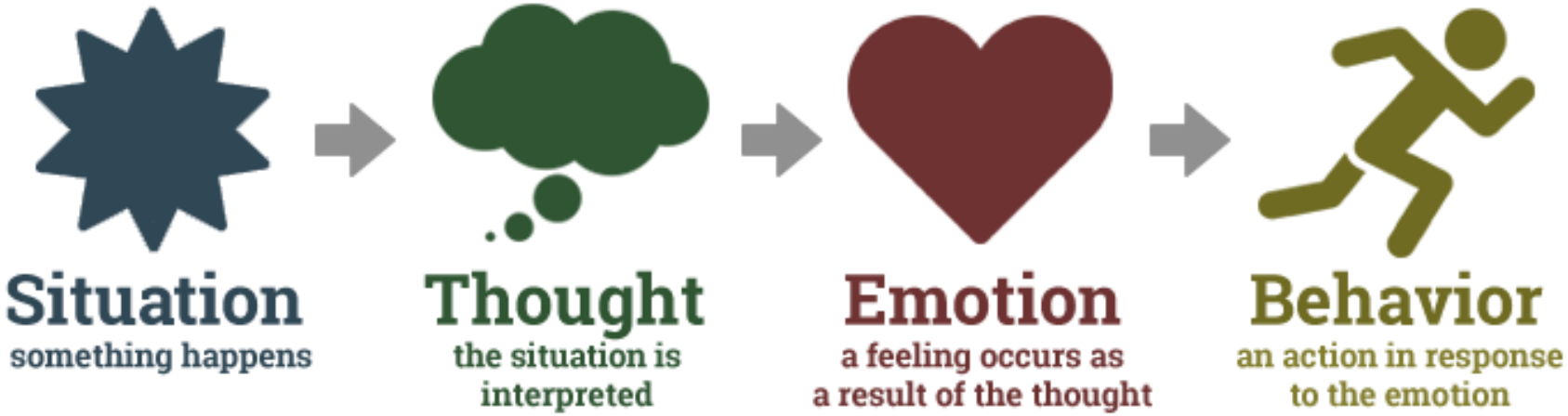
Chapter 2

Psychoeducation About Tic Disorders and Treatment

Monica S. Wu, PhD[1] and Joseph F. McGuire, PhD[1,2]
[1]UCLA Semel Institute for Neuroscience and Human Behavior, Los Angeles, CA, United States,
[2]Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore, MD, United States

When patients, parents, and families first present to a clinician's office, they often have many questions about tics and tic disorders. These questions can cover a variety of topics such as etiology (*"What is a tic and what causes them?"*), clinical course (*"What can we expect now for my child?"*), prognosis

- Needs to be measured differently
- Has nontypical effects
- not directly affect tic severity
- But is essential in therapy
- Evidence of what specific elements to address is missing



Treatment of tics is severity-dependent

In case of very mild tics or lack of services psychoeducation alone may also be useful

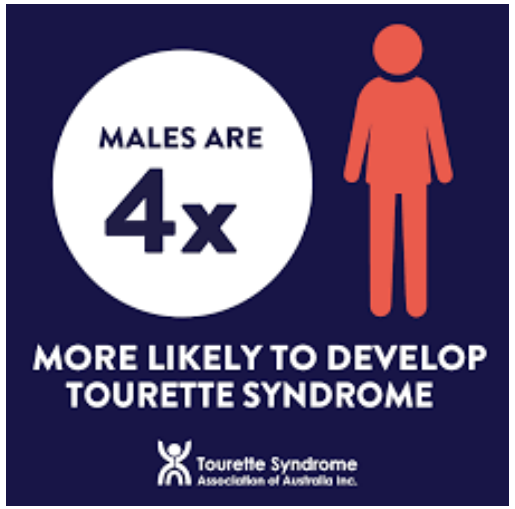
Not all tics need to be treated!

When?

- Right after the diagnosis

For who?

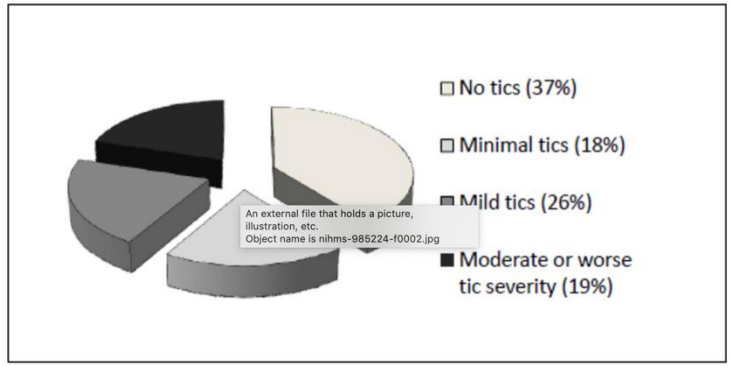
- Patient (child,adult)
- Parents / partner
- Siblings
- Teachers
- Classmates
- Relevant others



What?

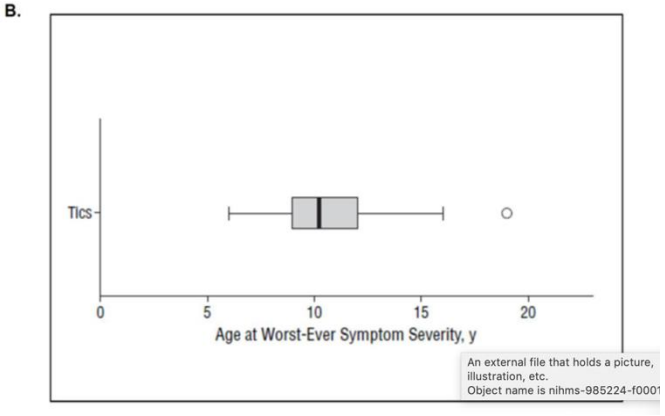
- Prevalence

Figure 2.

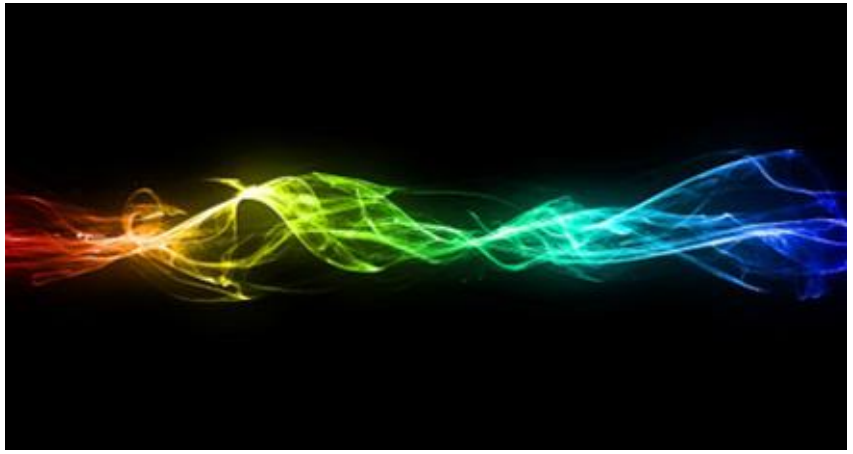


Tic Outcomes in Early Adulthood.

Tic severity in early adulthood (N=82). Adulthood tic severity class is defined by Yale Global Tic Severity Scale [Total Tic Score] (YGTSS): no tics (YGTSS: 0), minimal tics (YGTSS: 1–9), mild tics (YGTSS: 10–19), moderate or greater tics (YGTSS: ≥20). By contrast, all individuals had moderate or greater severity tics in childhood. Less than 5% of individuals reported having worse adulthood tics than in childhood. Adapted from Fig 2. in Bloch & Leckman [7].



What?



- Symptoms and natural history of TS
- Explain that tics can wax and wane over time, and the role of stress and fatigue in moderating these fluctuations

(Leckman, 2014)

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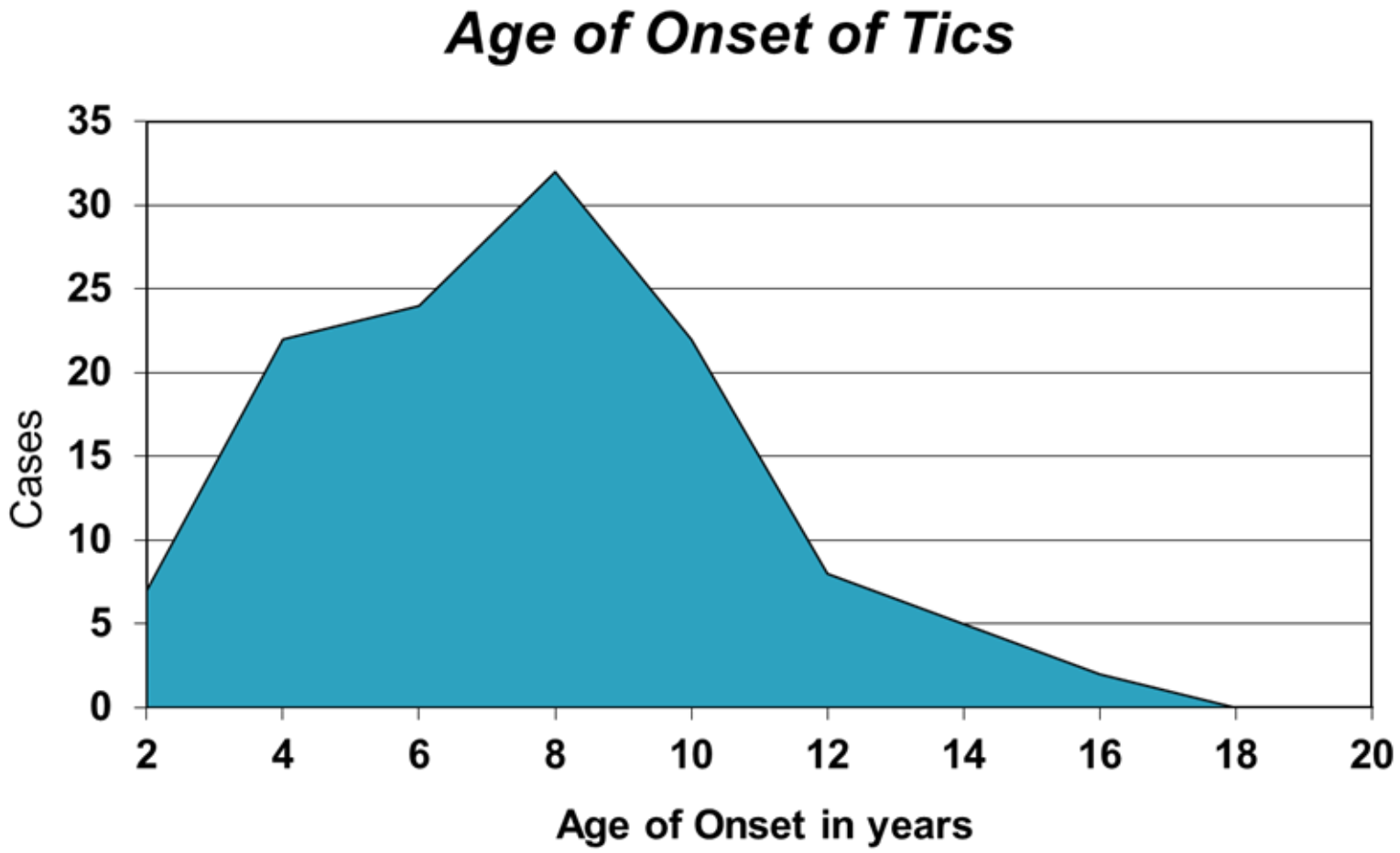


(Leckman, 2000)

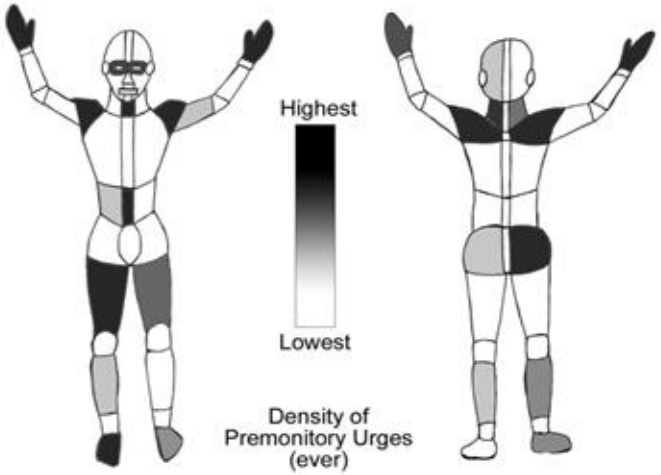
What?

- Types of tic disorders (DSM-5)
- Types of tics
- Differential diagnosis of repetitive behaviors

What?

- Internal factors: premonitory urges, stress, anxiety
- External factors: fatique, motor activities, social situation

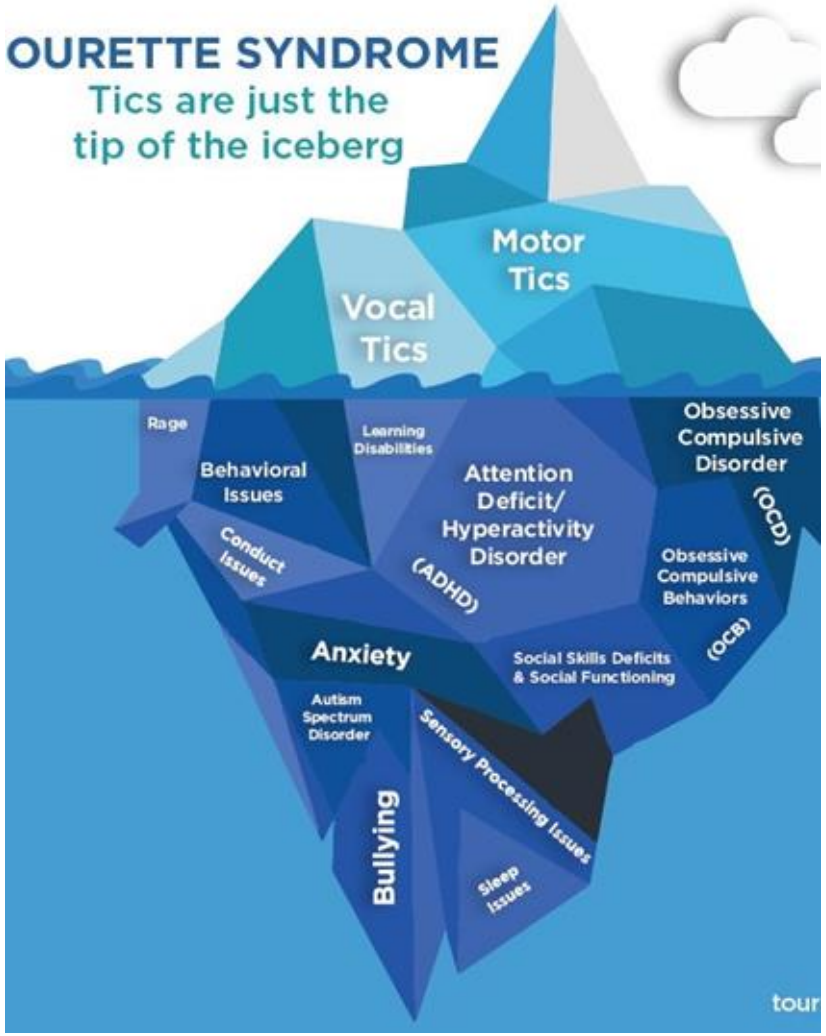
(Leckman 1993)



Tourette syndrome and other tic disorders. Graphic shows the relative likelihood of lifetime sensory tics in a given region, as based on self-report of patients with Tourette syndrome. Overt tics are distributed similarly.

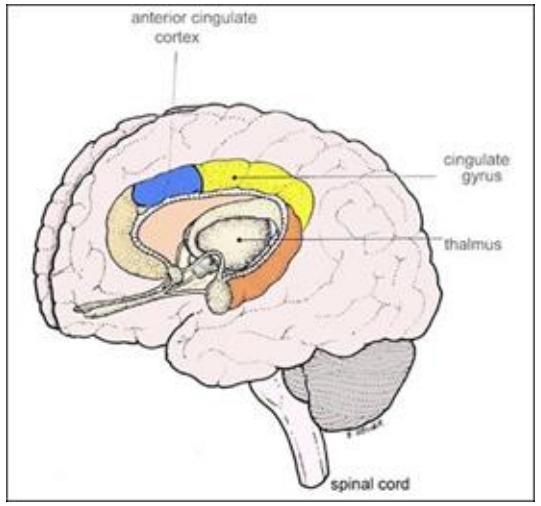
What?

- Comorbidity



What?

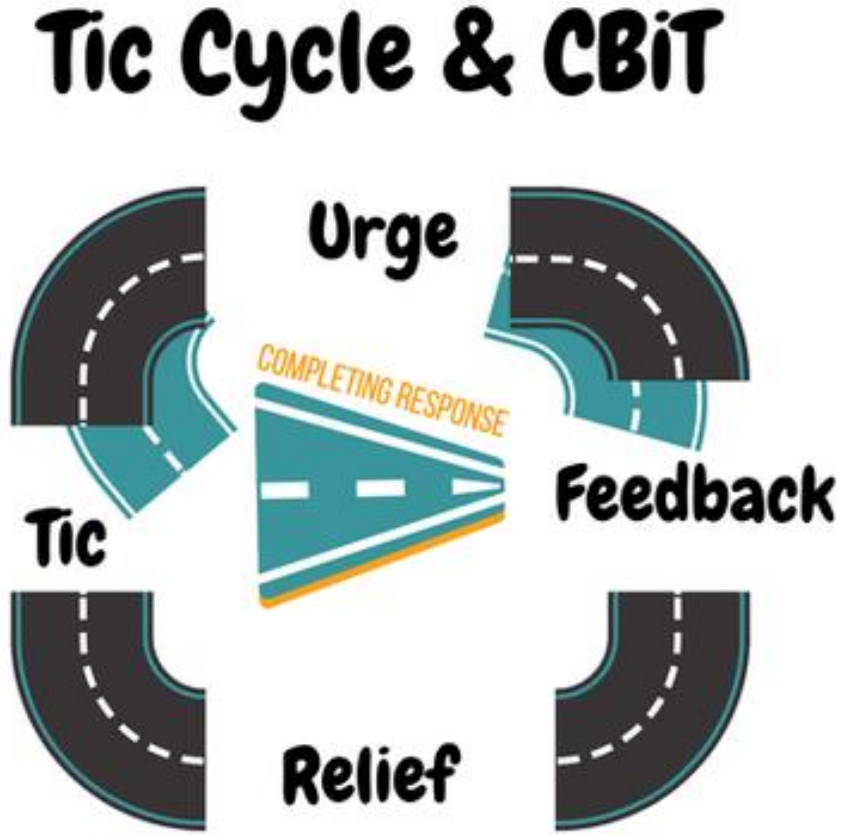
- Causes of Tourette Syndrome



Am J Psychiatry. 2019 Mar 1;176(3):217-227

What?

- Treatment
  - Provide patients and families with a clear understanding of the natural history and therapeutic options available for tics
  - Pharmacotherapy
  - Behavioral therapy

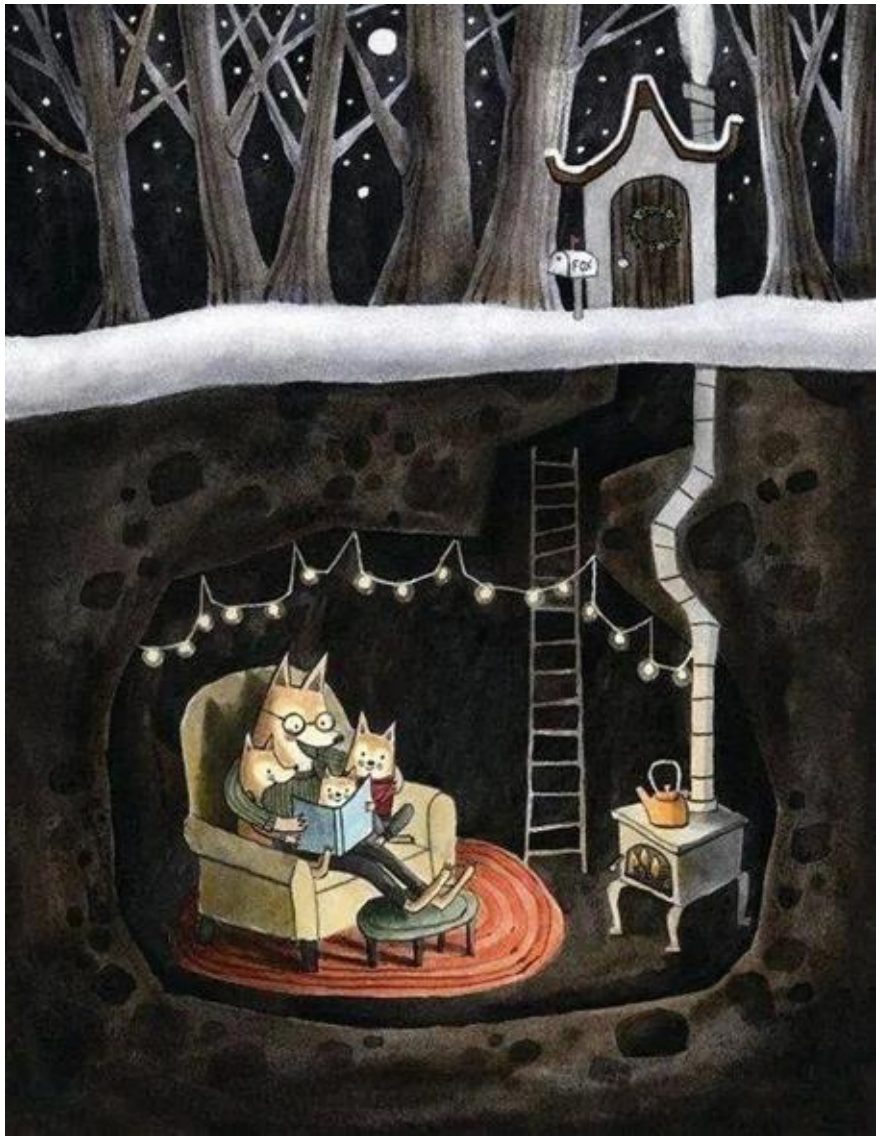


How?

- Discuss the **impact of tics** on social, academic, or professional activities

How?

- Educate parents on the effects of different emotional reactions to their children's tics.
- Concept of **„tic-neutral environment"**
- Incerase awareness of **stigmatisation**



How?

- Encourage patients and families to focus on the **individual's strengths** and interests while sustaining efforts to better manage tics and related disorders

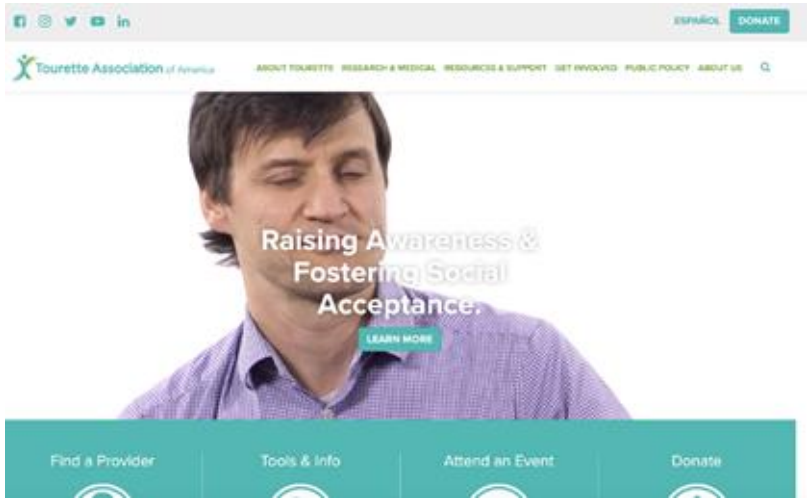
Common misconceptions

- Not all children with TS curse.
- Talking about tics or focusing attention on tics does not makes tics worse.
- Tic suppression does not lead to an increase in tic frequency.
- If one can suppress his/her tics, then he/she shouldnot be able to do it all the time.
- Targeting tics with behavior therapy will make other tics or symptoms worse.
- Behavior therapy and pharmacotherapy will make tics go away.
- Once the tics go away, one will no longer have any more problems.

Wu and McGuire, 2018

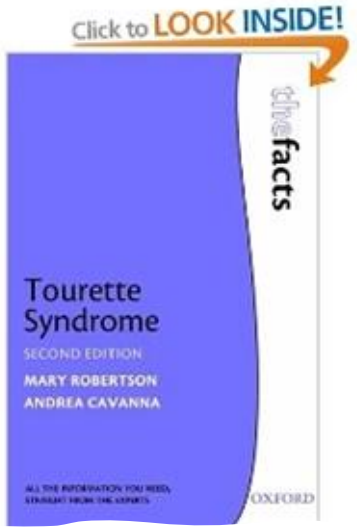
Forms of PE

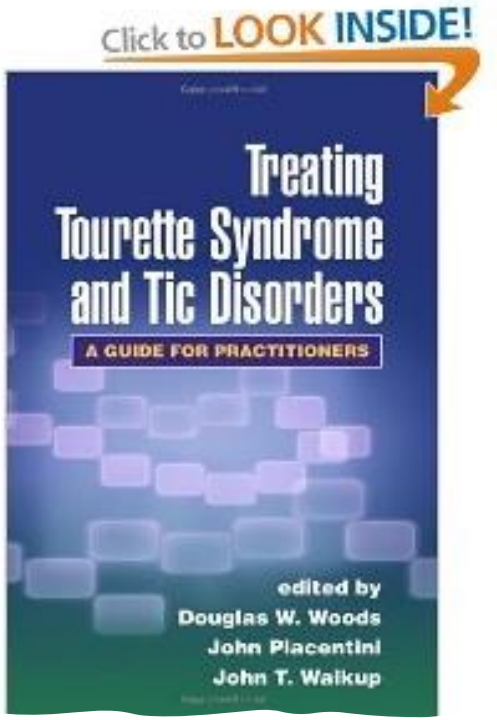
- Individually to patient / family
- Group
- Presentation

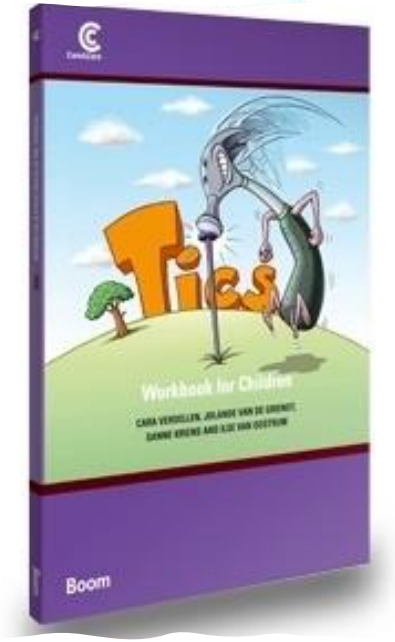


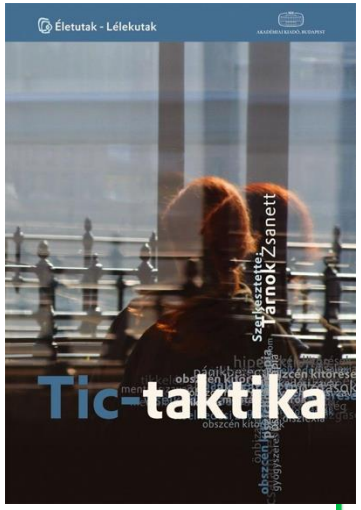
Forms of PE

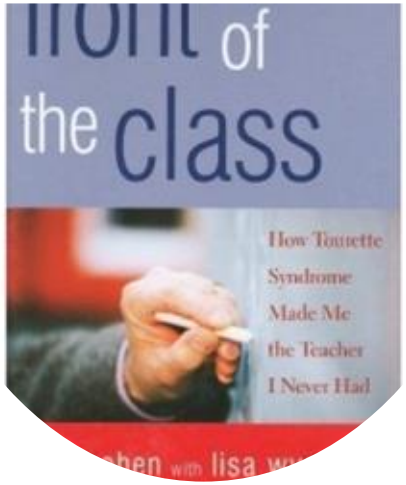
- With workbooks – also as the first phase of CBIT (Cara Verdellen, Jolande Van De Griendt et al.: Tics)

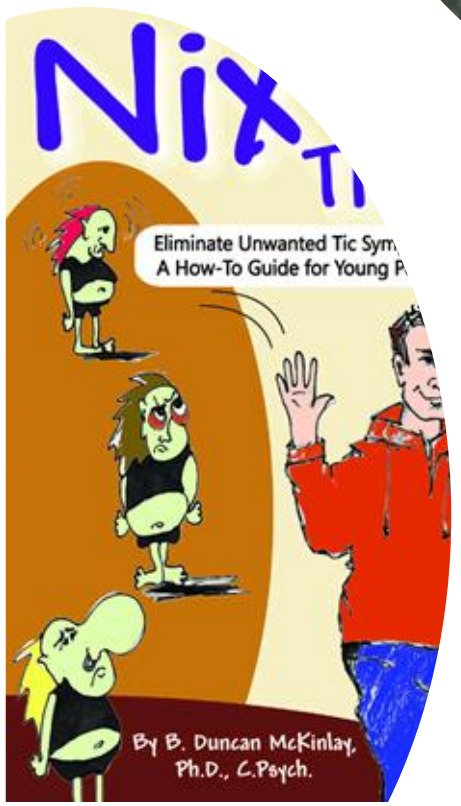


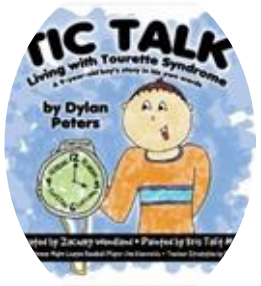


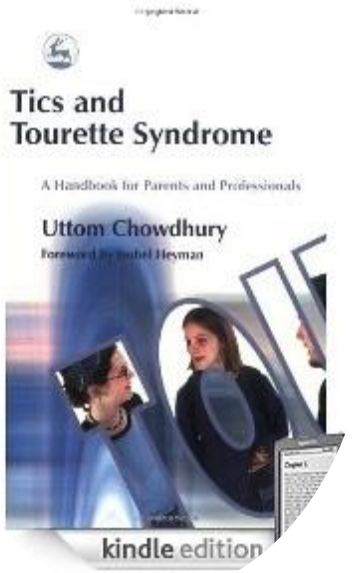


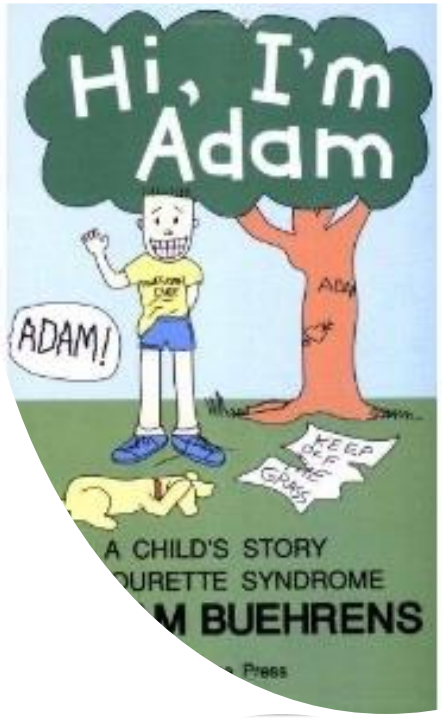


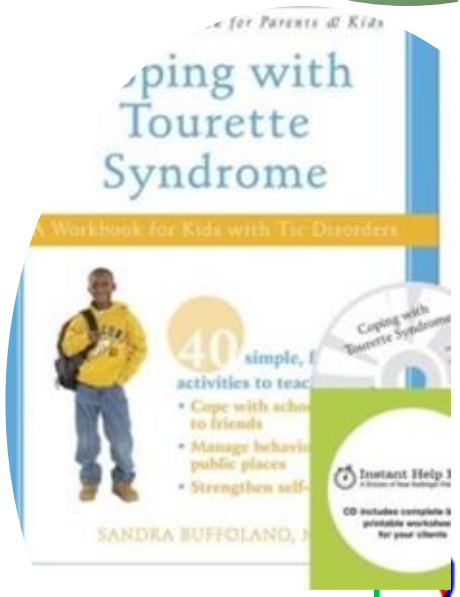

front of
the class
How Tourette
Syndrome
Made Me
the Teacher
I Never Had


Nix
Eliminate Unwanted Tic
A How-To Guide for Young
By B. Duncan McKinlay,
Ph.D., C.Psych.


TIC TALK
Living with Tourette Syndrome
by Dylan
Peters


Tics and
Tourette Syndrome
A Handbook for Parents and Professionals
Uttom Chowdhury
kindle edition


Hi, I'm
Adam
ADAM!
A CHILD'S STORY
URETTE SYNDROME
M BUEHRENS


ping with
Tourette
Syndrome
A Workbook for Kids with Tic Disorders
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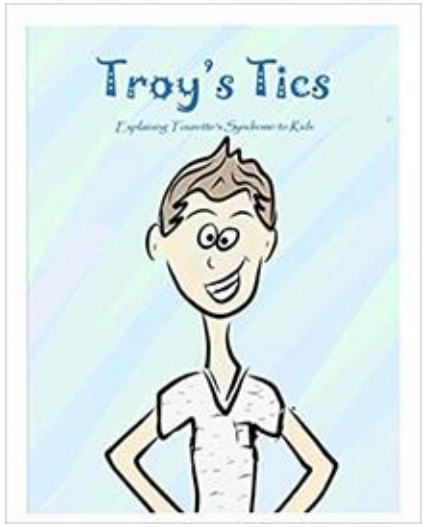
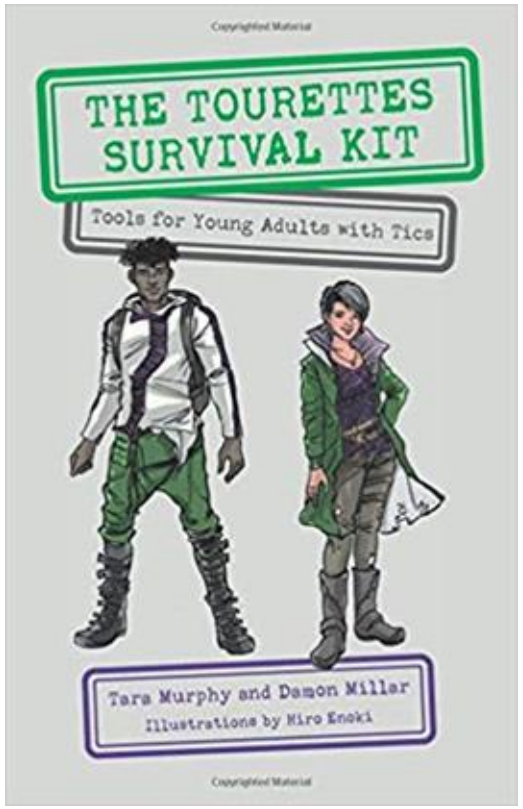
SANDRA BUFFOLANO,

Forms of PE


Troy's Tics
Explaining Tourette's Syndrome to Kids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THE TOURETTES SURVIVAL KIT
Tools for Young Adults with Tics
Tara Murphy and Damon Millar
Illustrations by Hiro Enoki
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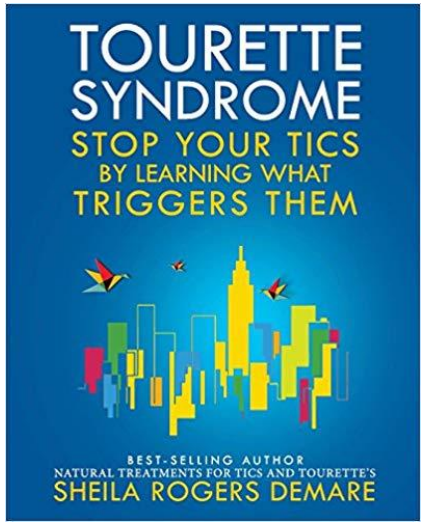
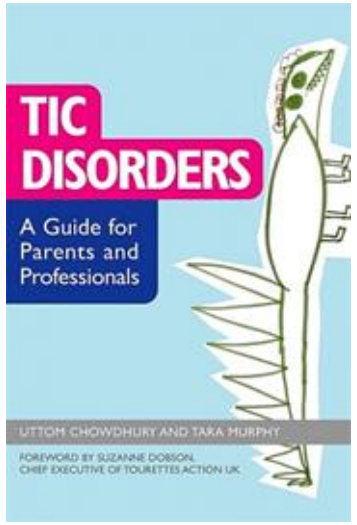
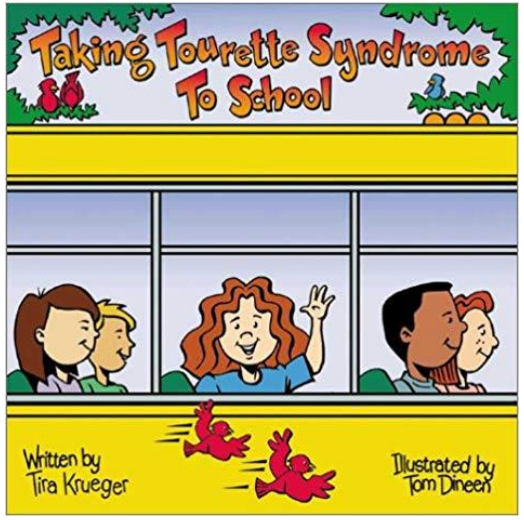
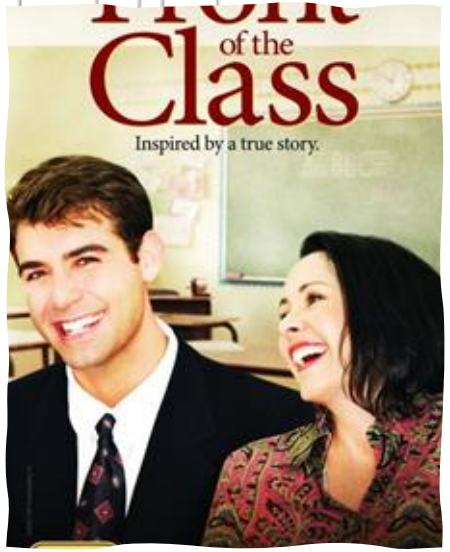

TOURETTE SYNDROME
STOP YOUR TICS BY LEARNING WHAT TRIGGERS THEM
BEST-SELLING AUTHOR
NATURAL TREATMENTS FOR TICS AND TOURETTE'S
SHEILA ROGERS DEMARE

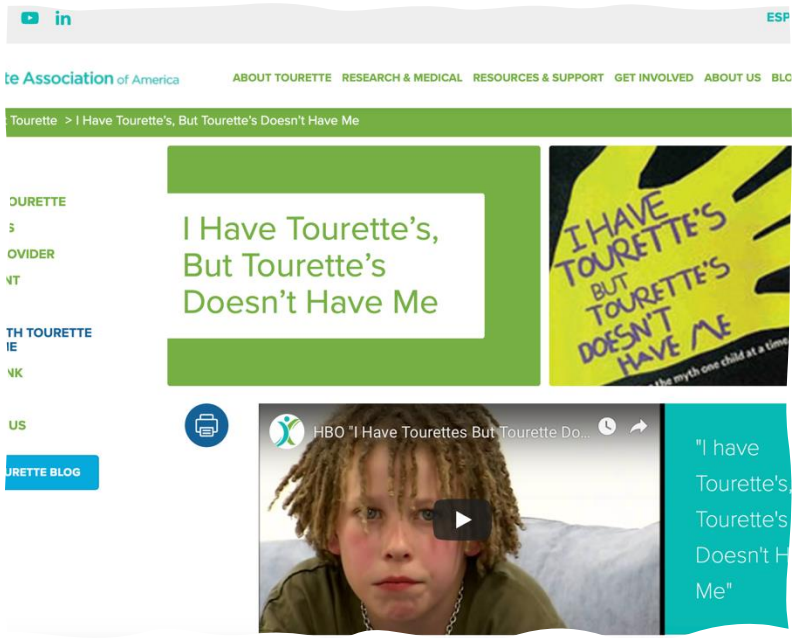

TIC DISORDERS
A Guide for Parents and Professionals
UTTOM CHOWDHURY AND TARA MURPHY
FOREWORD BY SUZANNE DOBSON,
CHIEF EXECUTIVE OF TOURETTES ACTION UK

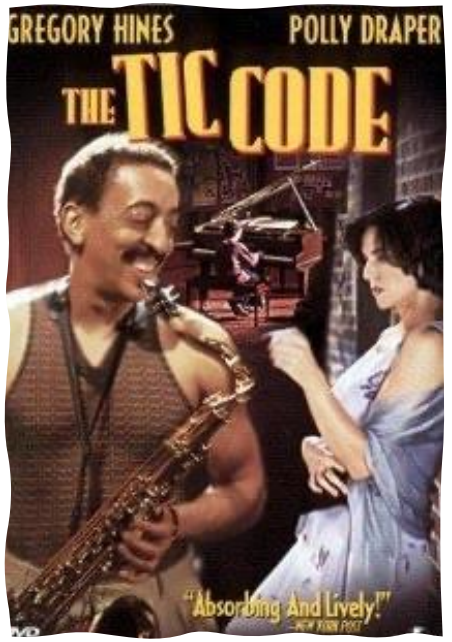

Taking Tourette Syndrome To School
Written by Tira Krueger
Illustrated by Tom Dineen

Forms of PE

- Videofootage

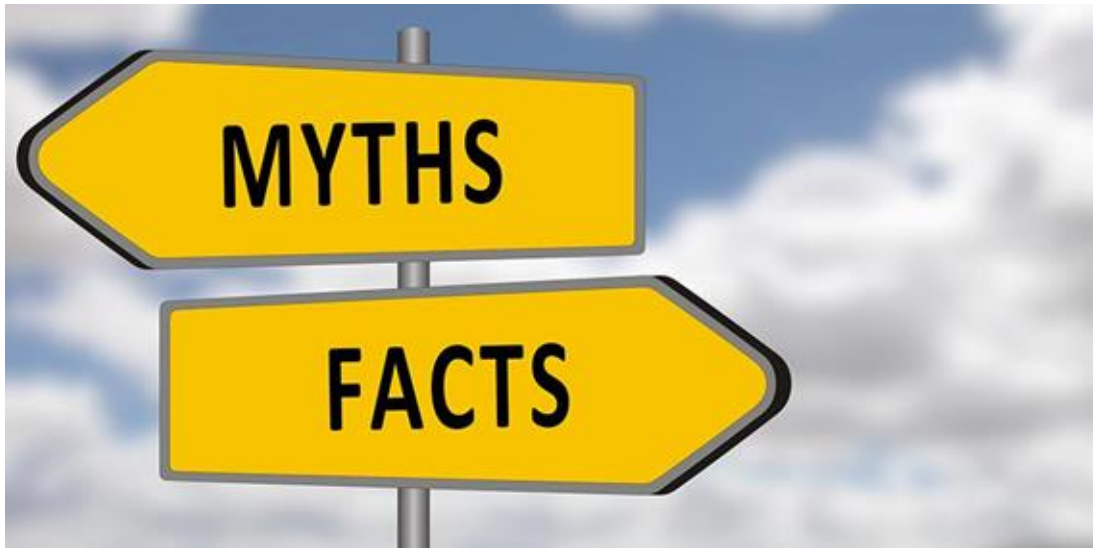






Main message

- Give **information** about the natural course of TS and complex etiology
- **Reduce guilt** about the symptoms
- **Provide support** (therapy, patient organizations)
- **Dispel myths** in order to reduce stigma and uncertanity about TS



Workshops 2026 | Behavioural Therapy for tic disorders

Habit Reversal Training

Dr Cara Verdellen

Clinical psychologist

Parnassia Group, PsyQ Nijmegen, the Netherlands

c.verdellen@psyq.nl

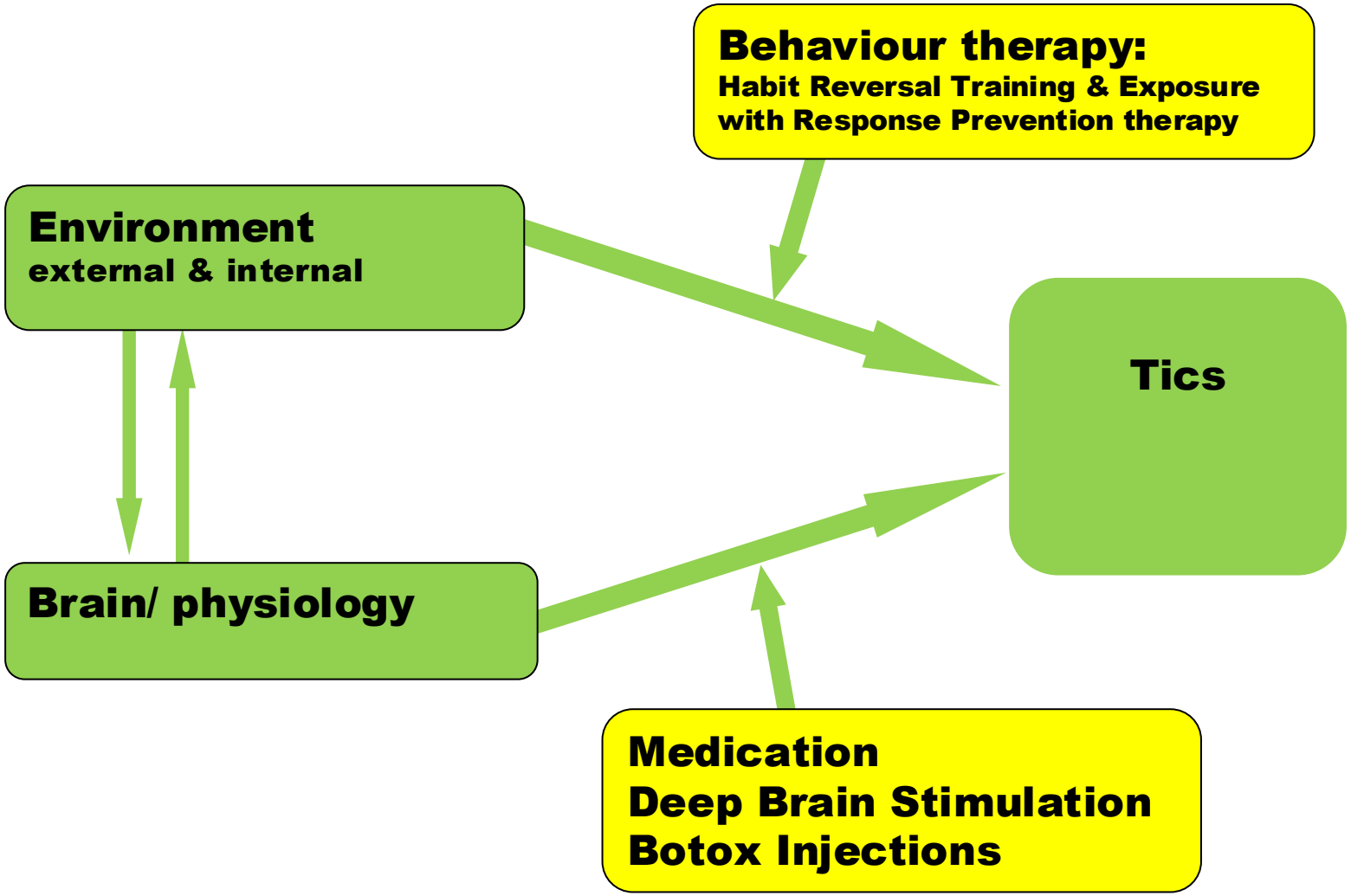
Dr Katrin Woitecki

Clinical psychologist for children and adolescents

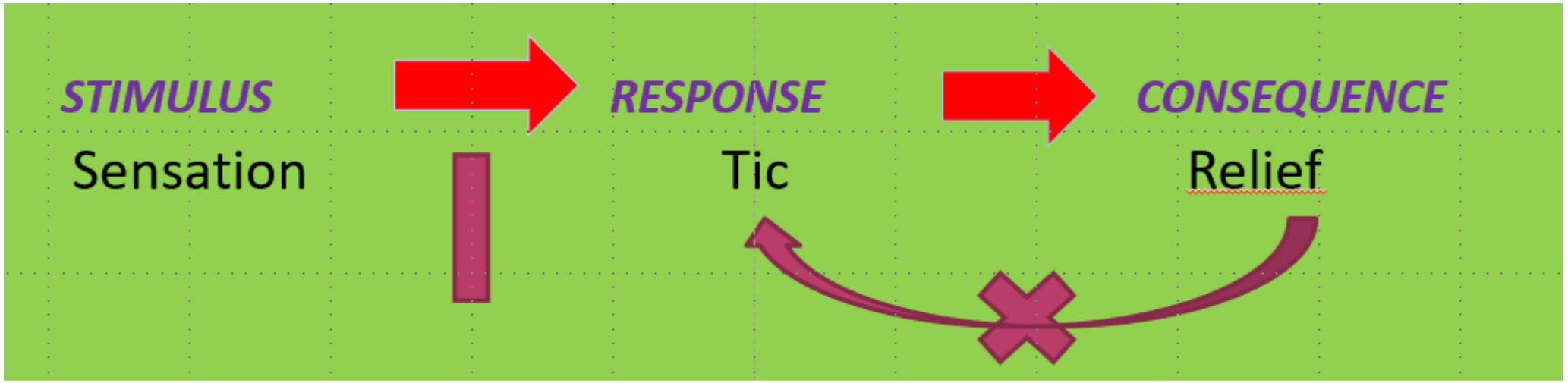
University hospital of Cologne, Cologne, Germany

Katrin.woitecki@uk-koeln.de

Treatment of tics



Negative Reinforcement Theory



- Habit reversal training (HRT):
  - Treats tics one by one
  - Awareness training and competing response training

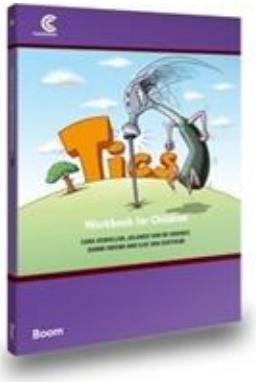
- Exposure and Response Prevention (ERP)
  - Treats all tics at once
  - Prolonged exposure to the sensations while controlling all tics

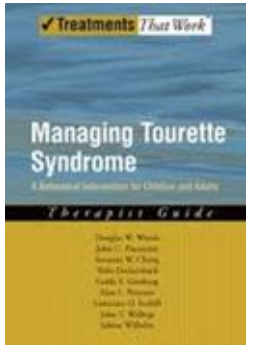
Habit reversal

Habit Reversal Training (HRT/CBIT)

- Theory:
  - Awareness of the tic
  - Incompatible response to interrupt or prevent the tic

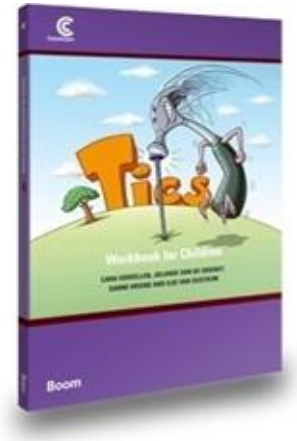
- Intervention: multi-component (Azrin & Nunn, 1973; **CBIT** Woods et al, 2008; Verdellen et al 2011; Woitecki et al 2015)
  - Awareness training
  - Training the incompatible response
  - Relaxation training
  - Social support
  - Generalisation

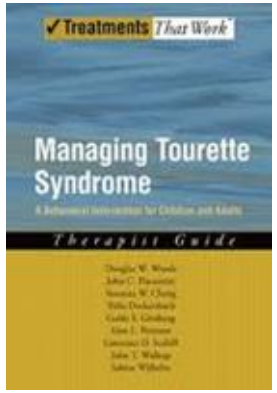




Elements of HRT

- Tic selection
- **Awareness training**
- **Competing response training**
- Functional analyses
- Social support
- Motivational strategies





Tic selection

eye blinking,
head jerks,
facial grimace,
beating oneself,
touching,
sticking out tongue,
coughing,
raising middle finger

Discuss together

Which tic is to be treated as first, second, third?

Why in this order?

Make a Tic Hierarchy

- Make a list of tics (use the YGTSS)
- Select the **most bothersome** tic from the list
- Understand **why** it bothers the patient

Select the first tic

Which tic bothers the most? Why?

Consequences/impact?

- Physical: pain/ danger?
- Social: embarrassing/ bullying?

Frequency / intensity

- A tic that occurs frequently
- A tic that is noticeable/visible

Complexity

- Simple or complex?

Treatability

- Eye blinking?
  - Automatic, urge, natural
- Easy to apply a CR?
  - Sticking out tongue, spitting, middle finger

The importance of a first success!

Awareness Training

- **Purpose**
  - Help client be aware and discriminate the tic

- **Three techniques**
  - Tic Description
  - Tic Detection
  - Early warning (premonitory urge)

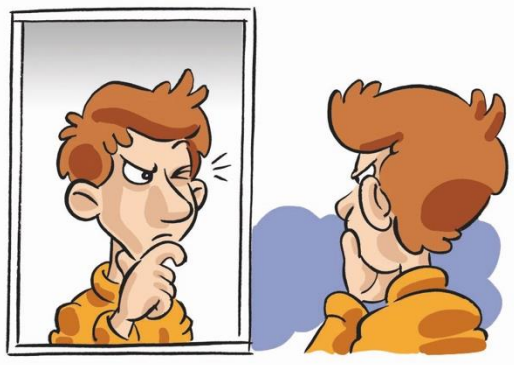
Tic Description

Purpose

- To ensure therapist and patient are clear on the tic

Process

- Get the patient to describe the tic in a high level of detail
- What happens first?
- Then what happens?
- Have we missed anything?



Tic description

- Analyse the tic
- Study the first signs
  - In great detail
  - Paying attention to muscular sensation
- Ask for tic-alerts
- Find out what the tic looks like exactly, which muscles are involved
- If necessary, use a mirror or camera
- Copy the tic

Get practicing

- In pairs
- Think of a tic
- Describe in much detail as possibel

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Self-observation at home

6.4-K-E Daily Observation of My Tics

Name of the child/adolescent: Tim Review date: 12.6.26

What do I do during the observation: having dinner; doing homework

How long do I observe: 20 min

Reviewer: ☒ Patient ☐ Parents

Tics	Observation of my tics: Situation alone	Observation of my tics: Situation with parents	Daily assessment of my tics: Burden	Daily assessment of my tics: Intensity	Daily assessment of my tics: Control
1. Shoulder tic	𝍸 II	III	0 1 2 3 ~~4~~ 5	0 1 2 3 ~~4~~ 5	0 ~~1~~ 2 3 4 5
2. arm tic	𝍸 I	𝍸 II	0 1 2 3 ~~4~~ 5	0 1 2 3 ~~4~~ 5	0 ~~1~~ 2 3 4 5
3.			0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5
4.			0 1 2 3 4 5	0 1 2 3 4 5	0 1 2 3 4 5

0 = not at all 1 = hardly 2 = something 3 = medium
4 = clearly 5 = extreme

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Tic detection

- **Purpose**
  - Help client to be aware of the tic
- **Technique**
  - Client learns to recognize the occurrence of a tic as often as possible
  - signal the occurrence

6.5-K Competition "Tic Detection"

You now know how the individual tics work! You have also already observed your tics at home. Now you always give a sign when you have noticed that a tic has just occurred. Agree with your therapist on a signal that you always make when you perform a tic or have just performed it. If you can do this quickly enough and detect the tic, you will get a point for it. But watch out, the tic always gets a point if you haven't detected it. Since the tic in this case needs a helper, your parents or therapist will also pay attention to the tic and also give the agreed signal if they detect a tic you have not been able to detect.

At the beginning of the competition, determine which tic you will start with and choose an easy situation in which you can also notice the tic well. If you can be the first to detect as many tics as possible, add another tic or compete in a more difficult situation.

My signal: 

Which tic should be unmasked: _____

Date	What did I do during the observation period?	So many times I've detected the tic myself	So many times the tic was detected by _____

Early warning

- **Purpose**
  - Help client to be aware of the premonitory urge
- **Technique**
  - Ask for tic-alerts that accompany the tic
  - Notice if other behaviours or feelings predict that a tic is coming
  - Detect early warning signs and indicate by giving a signal before occurrence of the tic
  - Observation during therapy session and at home

Premonitory Urge for Tics Scale-PUTS

Right before I do a tic, I feel like my insides are itchy				
Right before I do a tic, I feel pressure inside my brain and body				
Right before I do a tic, I feel 'wound up' or tense inside				
Right before I do a tic, I feel like something is not 'just right'				
Right before I do a tic, I feel like something isn't complete				
Right before I do a tic, I feel like there is energy inside my body that needs to get out				
I have these feelings almost all the time before I do a tic				
These feelings happen for every tic I have				
After I do a tic, the itchiness, energy, pressure, tense feelings or feelings that something isn't 'just right', at least for a little while				
I am able to stop my tics, even if only for a short period of time				

Take a closer look at the premonitory urge

- 7 validated PU instruments identified (Dabrowski et al., 2025)

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Detecting the urge

- Detect early warning signs and indicate by giving a signal before occurrence of the tic
- When feeling the urge
- Observation during therapy session and at home

6.7-K Competition "I pick up the scent!"

You have now observed your tics very well in the last few weeks and always gave your signal after or during a tic occurred. Since you can already do this so well, we will change the competition a bit.
You've already thought about how it feels just before a tic comes. We now want to try together to get to the bottom of the tic and detect it before it comes out.

Now you should try to give your signal whenever you feel that a tic is about to come. The signal should therefore be given before the tic really comes through, can be seen or heard. This is not so easy, but with a little practice you will notice that it will work better and better.

Take your signal again and start with a simple tic in an easy situation, such as listening to music. You can now also do this competition by yourself against the tic by giving the tic a point when it has occured without you having given the signal first. You get one point for each previously discovered tic. If this works well, add another tic or change the situation to make it a little more difficult.

My signal:

Which tic do you want to get to the bottom of: _____

Date	What did I do during the observation period?	I recorded the scent myself	The tic could sneak up unnoticed

Competing Response Training

- Competing Response = Tic Blocker
- Purpose:
  - Learn to apply a behavior that is physically incompatible with the tic or that allows the person to do something while they do not tic
- Three techniques
  - Choosing the Competing response
  - Therapist tries Competing response
  - Patient practices use of Competing response

Choosing the competing response

- **5 Rules for tic blocker**

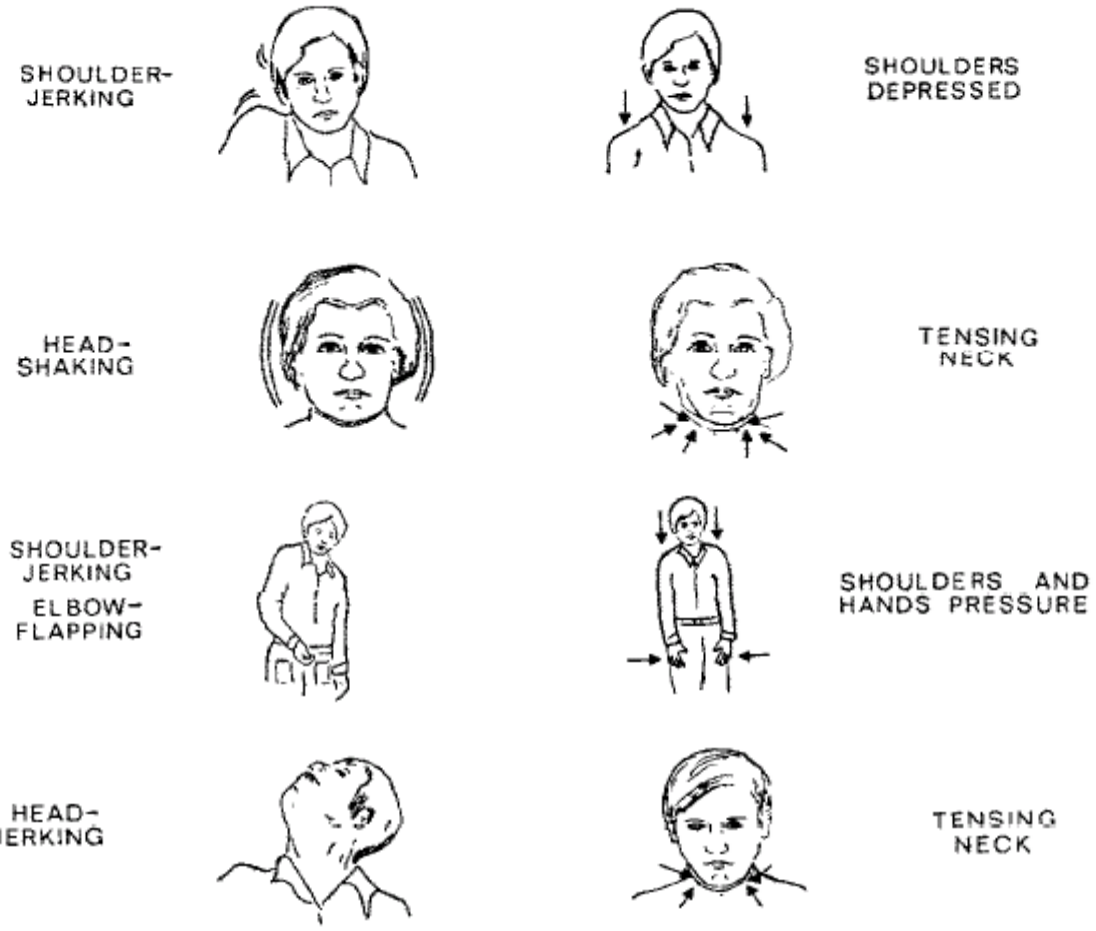
Tic Blocker

1. Incompatible with the tic
2. Less socially noticeable than the tic
3. Patient can do tic blocker almost anywhere
4. Maintain tic blocker for longer than one minute
5. Use no props (‘naked in the desert’)

Choosing a tic blocker should be a decision between patient and therapist!

- **Trial and error ;-)**

HR: Competing responses
motor tics



Azrin & Nunn, 1973

HR: Competing responses
vocal tics

Sounds 	Breath in and out through the nose without a pause Whistle Swallow
Sniffing 	Breath in and out through the mouth without a pause
Cursing 	Breath in and out through the nose without a pause; hold lips tight together

Practicing the Competing Response

- Have patient demonstrate CR and provide corrective feedback if necessary
- Practice when the urge to tic (tic-alert) is felt
- If the tic has started or already has been expressed, also practice the CR
- Hold the CR for 1 minute or until the urge goes away…
- Prompt and praise as appropriate!

- Practice in sessions and at home
- Train the parents/ carer as you train the child
- Depending on the effect, choose a new tic the next session or practice the same tic again
- Practice in everyday conversation, games, tasks etc while developing mastery and confidence

Let’s practice how to explain and design CRs/ tic blockers

- In the same groups of two, work on the same tic that you practiced awareness training on
- Swap roles!

Find Tic blockers for..?

Motor tics	Vocal tics
Eye blinking	Sniffing
Opening the mouth	Coughing
Shoulder jerks	Shouting words
Sticking out the tongue	Throat clearing
Arm movements	
Complex tic with eye blinking, grimacing, sticking out tongue	……..

Generalisation

- Work towards generalisation: go to park; visit a shop; play games in session; read a book; look at a computer
- Build a hierarchy of places where the patient is motivated to control their tics
- Start with the easiest places and work through the hierarchy

Break 

Come back at 10:30

Workshops 2026 | Behavioural Therapy for tic disorders

Exposure with Response Prevention: a beginner`s workshop

Dr Cara Verdellen

Clinical psychologist

Parnassia Group, PsyQ Nijmegen, the Netherlands

c.verdellen@psyq.nl

Dr Tara Murphy

Consultant Psychologist

Great Ormond Street Hospital NHS Trust, London, UK

Tara.Murphy@gosh.nhs.uk

Premonitory Urge

Uncomfortable sensation — tension, pressure, or itch

Tic

Motor movement or vocalisation occurs

Relief

Transient reduction in urge discomfort

Reinforcement

Tic behaviour strengthened through negative reinforcement

How ERP breaks this cycle

ERP teaches patients to suppress all tics simultaneously while deliberately exposing themselves to premonitory urges — without performing the relieving tic. Repeated exposure reduces the power of the urge, breaking the negative reinforcement cycle.

Verdellen et al. (2004, 2008); Conelea & Woods (2008)

Phases of ERP

1. Controlling tics

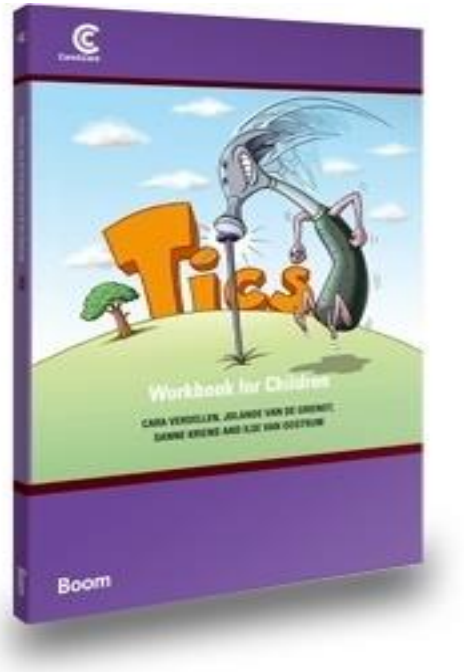
1. Optimising exposure

1. Generalisation

Treatment manual ERP for children (and adults)

CHAPTER 2

- 2 practice sessions: training response prevention
- 10 sessions: exposure is “added” to response preventio
- Weekly sessions
- Duration of sessions: 1-2 hours
- Homework



1. Practice sessions

- Learn to control tics
  - A coach: motivate, encourage, praise!
  - Like a goalkeeper/ learning to run the marathon
- Stop the time as soon as a tic is expressed
- Set new records! Longer times – fewer tics

- At this stage, all efforts are allowed to prevent the tics from happening

Divide into groups of 3 people.

- Person with motor and vocal tics
- One observer
- One therapist

Therapist: set up the response prevention activity and give encouragement

Observer: provide feedback on what went well and any other ideas

Patient: act this role based on a person you have worked with or using one the examples in the videos

Practice session - What if….

- Same tic 3 times in a row?
  - Focus on that specific tic!
  - Control for 5 minutes? Then control all again

- Small tics escaping?
  - Let them go in the beginning
  - Notice them
  - Count them
  - Try to control them

- If it wasn't a tic??
- Patient knows best! But…
- If it wasn't a tic, he can control!
- Negotiate, count it as ½ a tic

- Parent keeps commenting on their child's tics
- Discuss with parent
- Discuss with child/YP

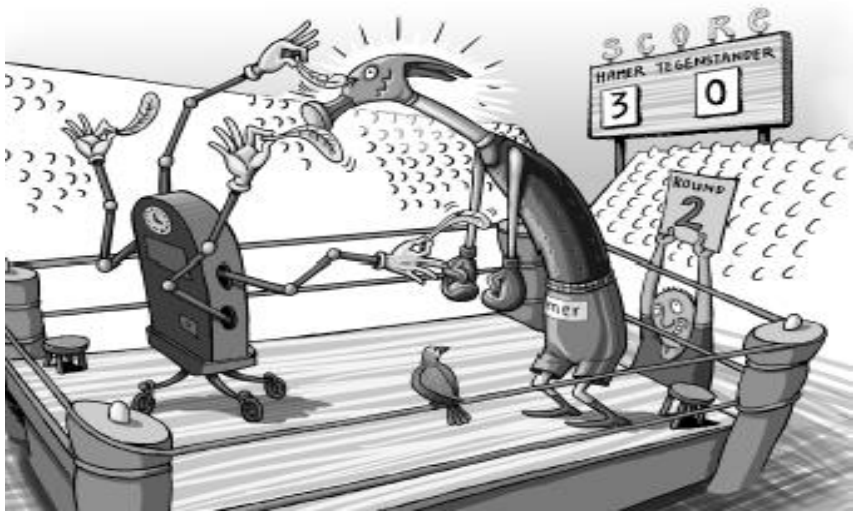
Practice session - Homework

- Homework assignments: when/ how long?
  - -Start: eg 2 x 10/15 min/day
  - -Quiet environments
  - -Negotiate if necessary
- Record the practices

- Consider a reward system to encourage practice
- Cite the evidence that the more homework completed = better outcome (Essoe et al, 2021)

2. Exposure sessions (3+)

- Repeat the rationale
- Strive for complete tic control
- No pause – if a tic is expressed, control again!



- Identify tic-alerts (sensations)
- Focus on tic-alerts!
  - Location
  - Use metaphors (‘running mice’, ‘kiwi’)

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A. Optimising exposure

- Try to provoke urges, without doing tics!

- Talk about tics and tic-alerts
- Describe tics and tic-alerts
- Watch video of (own) tics
- Mimic the tic

B. Optimising exposure

- Take a tic posture
- Do the beginning of a tic and then stop
- Do the tic in imagination
- Imagine situations, use objects, play games!

- Watch out: focus on the tic-alerts!
- Watch out: response prevention!

- Compliment and encourage!

C. Optimising exposure

- If no tic-alerts are present:
  - Imagine a situation in which the patient has many tics
  - Let the patient bring tic-eliciting objects in the session
  - Go outside!

Remember:
-High urges
-No tics!

Hierarchy of ERP Practice

10. Hold tics in school assembly
9. Hold tics in the library
8. Hold tics in a book shop
7. Hold tics in the supermarket
6. Hold tics on the train
5. Hold tics while in the car
4. Hold tics while parent copies tics and talks about them
3. Hold tics while parent copies tics
2. Hold tics while being asked about the strength of the urge
1. Hold in tics with no reminders about them

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Divide into groups of 3 people

- Person with motor and vocal tics
- One observer
- One therapist

Therapist: set up the exposure response prevention activity

Observer: provide feedback on what went well and any other ideas

Young person: act this role based on a person you have worked with or using the example in the video

3. Enhancing generalisation

More frequent

More situations

More difficult

3. Enhancing generalisation

- Practice ERP in many different situations/ contexts
- Only start this if tics are controlled in the presence of high urges
- For example during reading, walking, eating

- Make a hierarchy

- Are tics still being controlled?
- What about the tic-alerts?

- Make compliments and encourage!

TIC CERTIFICATE

has done really well!

Congratulations!

Therapist

Date:

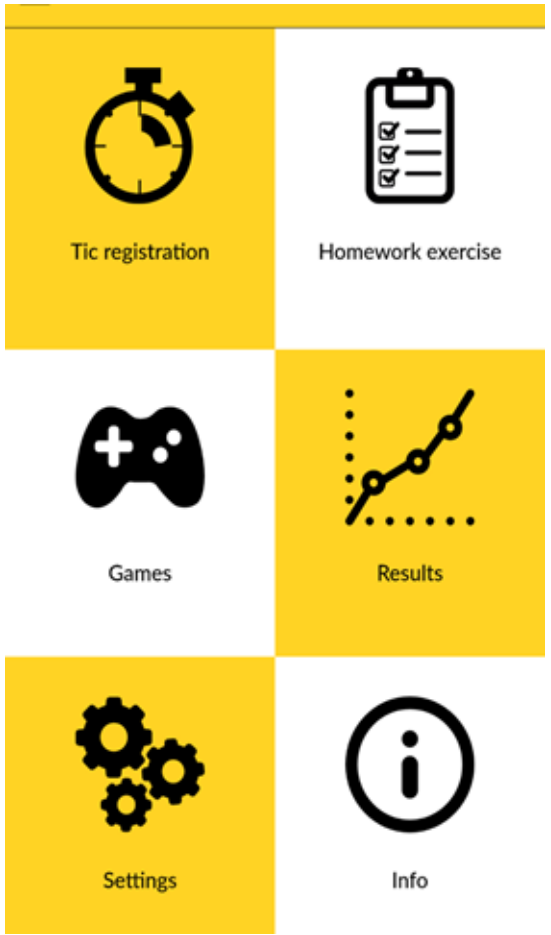
LUBLJANA

BT-Coach: ERP@Home

- For Apple (iOS)/Android
- Tic registration
- **Homework exercise**
- **Record times**
- **Tic frequency/ urge severity**
- **Minigames for new record times**

BT-Tics

BT-Coach 2.0! In preparation



1 Training Sessions 1–2

- Psychoeducation: explain urge–tic–relief cycle
- Patient practices suppressing all tics for increasing durations
- Therapist coaches and encourages — 'you can do this'
- Build tic suppression stamina before full exposure begins

2 Exposure Sessions 3–12

- Suppress all tics while actively focusing on premonitory urges
- Therapist introduces urge-eliciting triggers (exciting games, tic videos)
- Patient describes sensations in detail to maximise urge awareness
- Discuss and rate urge intensity throughout session

3 Generalisation & Home Practice

- Daily home practice — ERP exercises in real-world settings
- Homework reviewed at start of each session
- Practise in high-tic contexts: social situations, stressful events
- Relapse prevention: recognise early signs and apply ERP independently

Standard: 12 × 1-hour weekly sessions | 1-hour sessions non-inferior to original 2-hour format (Van de Griendt et al., 2018) | Can be individual, group, or internet-delivered

ERP: Flexible Delivery Formats

Individual Face-to-Face

Gold standard

- 12 × 1-hour weekly sessions
- Therapist coaches in real time
- Best evidence base
- Original format (Verdellen 2004)

Internet-Delivered

ORBIT / BIP TIC ERP

- 10 chapters over 10 weeks
- ~25 min therapist support/week
- ERP: d=1.12; 75% response rate
- Gains maintained at 12 months

Intensive Group Format

Tackle Your Tics/ Niks til Tics

- 4-day intensive / 8 week programme
- Groups of 6–8 children
- ERP + coping workshops
- Peer support; highly rated

Shorter Sessions (1h)

Non-inferior

- 1h vs 2h: equivalent outcome
- Halves therapist time per session
- More accessible in NHS/clinic
- Van de Griendt et al. (2018)

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Andrén et al. (2019) BMJ Open; Heijerman-Holtgrefe et al. (2021) Eur Child Adolesc Psychiatry; Van de Griendt et al. (2018)

ESSTS

What every clinician should know about ERP for tic disorders

01

First-line recommendation

European and Canadian guidelines recommend both ERP and HRT/CBIT before medication. Offer behavioural therapy first.

02

Large, durable effect sizes

Consistent d > 1.0 across RCTs and naturalistic studies. Gains maintained to 9–12 months follow-up.

03

Superior to risperidone long-term

Equally effective post-treatment, but ERP shows advantage at follow-up on tics and quality of life, with far fewer side effects.

04

Address all tics simultaneously

ERP suppresses all tics at once, while therapist maximises urge exposure using triggers, discussion and urge-eliciting objects.

05

Flexible formats are effective

Individual, online, group, and intensive formats all work. 1-hour sessions are as effective as 2 hours. Internet delivery needs only 25 min/week.

06

Patient preference matters

82% of patients prefer behaviour therapy over medication. Psychoeducation and shared decision-making are essential from the first contact.

References: Verdellen et al. (2004, 2008); Van de Griendt et al. (2018, 2024); Andrén et al. (2019, 2020); Heijerman-Holtgrefe et al. (2021); Conelea & Woods (2008)

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Function based interventions

Jolande van de Griendt, TicXperts, the Netherlands

j.vandegriendt@outlook.com

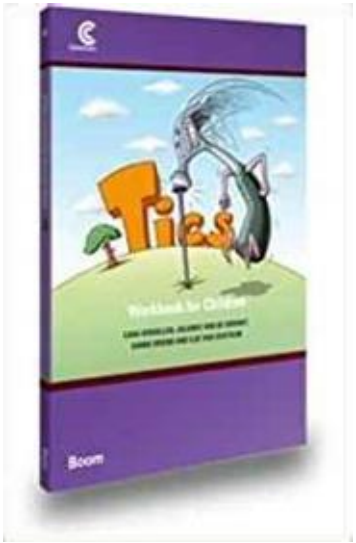
Function-Based Interventions

- Environmental events that exacerbate or maintaining tics.

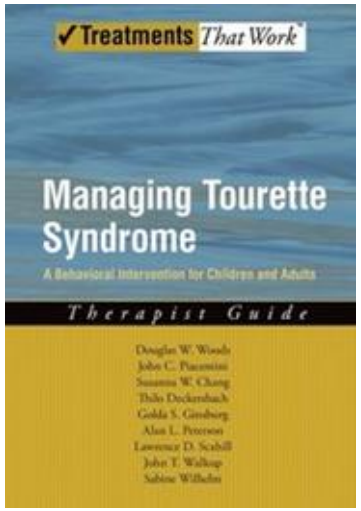
- These events are then changed to facilitate tic reduction.

Function based interventions

Add on intervention



Integrated in CBIT



Operant conditioning

SD: Response → Consequence

- SD = discriminative stimulus
- R = Response = behaviour of the subject
- C = Consequence = what happens to the subject

  AFTER the response

Functional Analysis

FA:

Sd: (Discriminative stimulus)	R (Response) →	Sr (Consequence)
Doing dishes:	Tics increase →	Short term: - don't have to finish dishes - mother gives me a massage - brother mad at me cause he has to finish dishes Long term: - tics will worsen

Function-based interventions

Woods et al., 2008; Verdellen et al., 2011

- **Step 1: Functional assessment**
- **Step 2: Developing interventions**
- **Step 3: Develop plan for implementation**

STEP 1

Functional Assessment

Antedecents / SD

Sd : R (Response) → Sr (Consequence)

- Internal antecedents:
  - Anxiety
  - Excitement
  - Anger
  - Anticipation

- External antecedents
  - Specific situations
  - Specific activities

Functional Assessment Form

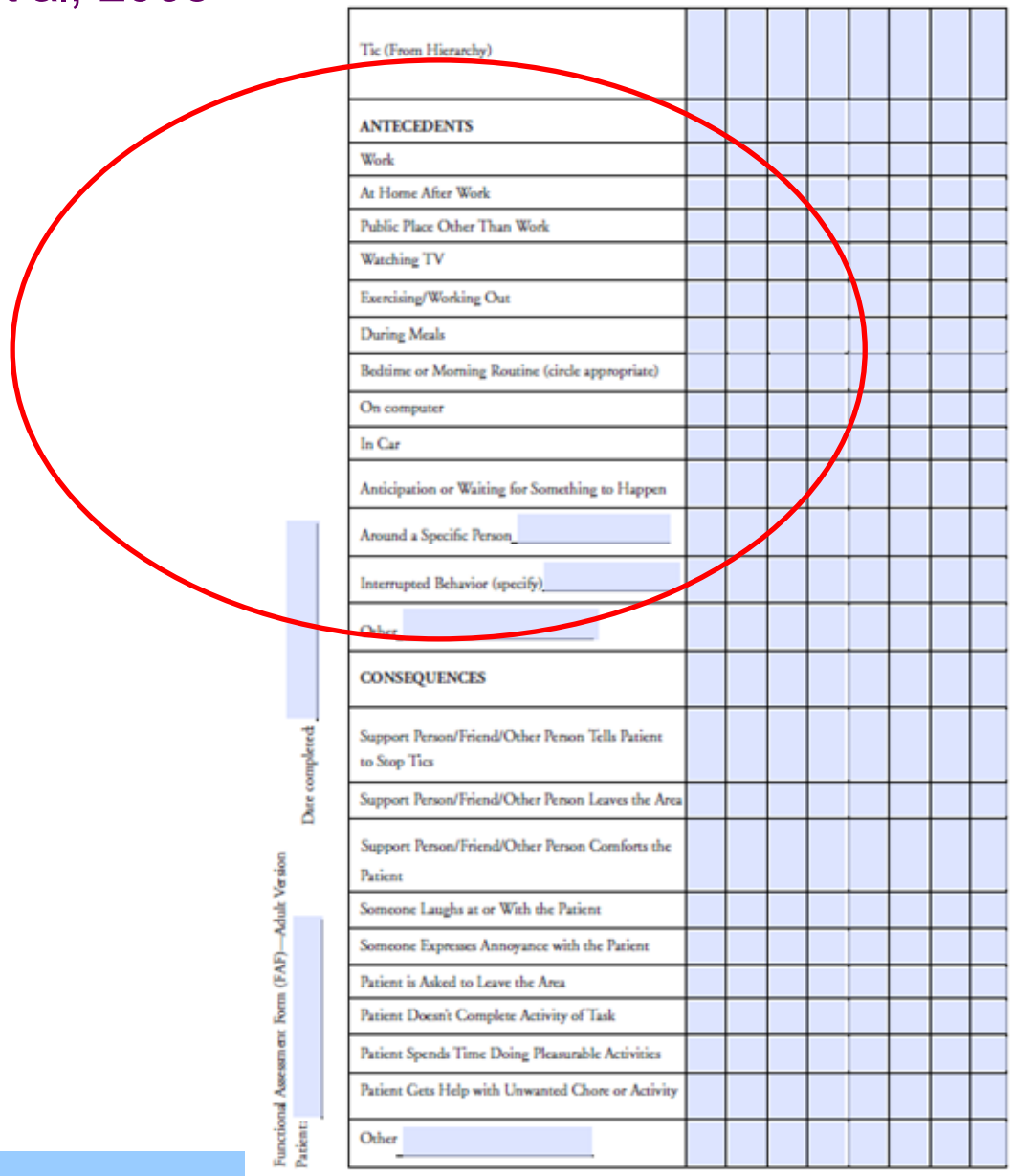
Woods et al, 2008

- Check antecedents (SD):

Most tics when….

(Himle et al., 2014; N=51)

- Watching TV/videogames (92.2%)
- Coming home after school (88.2%)
- Doing homework (80.4%)
- Being in classroom (78.4%)
- Being in social public places (78.4%)
- Doing sports (72.5%)
- In car (72.5%)



Most tics when….

(Himle et al., 2014; N=51)

Antecedent:

- Watching TV/videogames (92.2%)
- Coming home after school (88.2%)
- Doing homework (80.4%)
- Being in classroom (78.4%)
- Being in social public places (78.4%)
- Doing sports (72.5%)
- In car (72.5%)

R (Response)

Sd : R (Response) → Sr (Consequence)

- R is often an increase of symptoms:
  - More tics
  - More severe tics

Sr (Consequences)

Sd : R (Response) → Sr (Consequence)

Two categories: (Woods et al, 2008):

- Social Attention
- Escape from difficult situations

Most tics when…. (Himle et al., 2014; N=51)

- When told to stop ticcing (72.5%)
- When being comforted (58.8%)

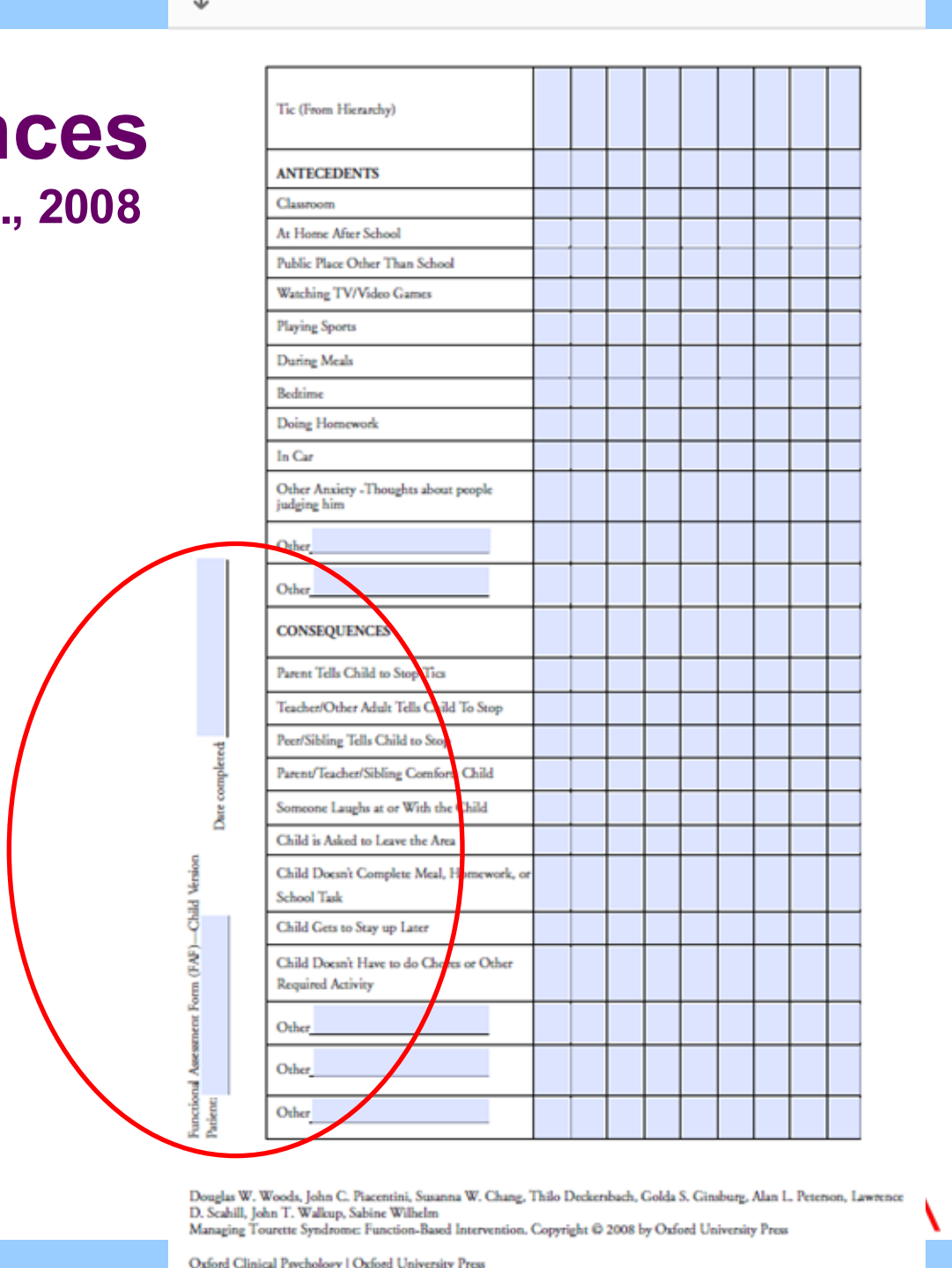
ESSTS

Consequences

Woods et al., 2008

- Social attention
  - Someone tells the patient to stop tics
  - Someone leaves the area
  - Someone comforts patient
  - Someone laughs at or with patient
  - Someone expresses annoyance with patient
  - Patient is asked to leave the area

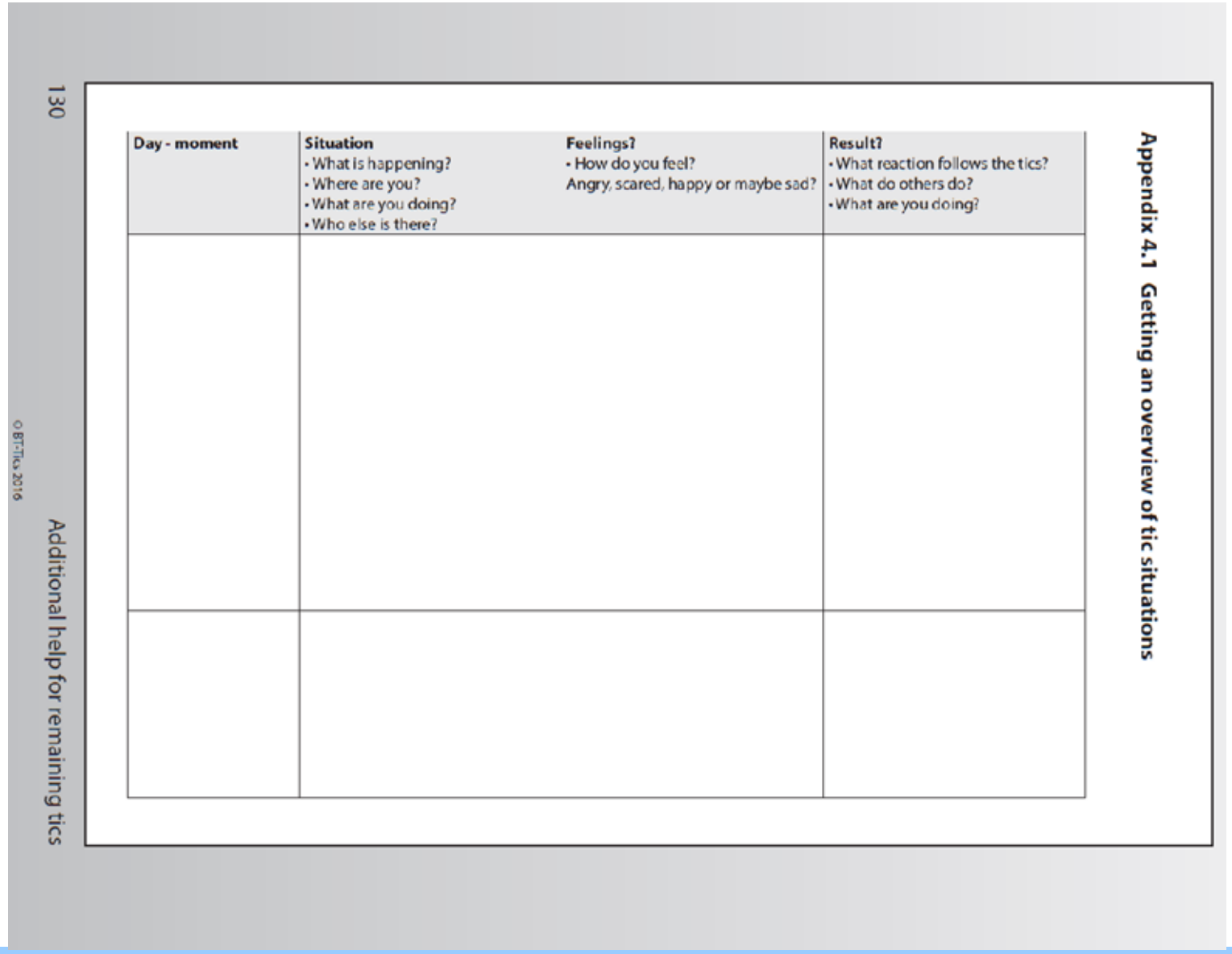
- Escape from difficult situation
  - Patient doesn't complete activity or tasks
    e.g. meal, homework, school tasks, chores
  - Patient spends time doing pleasurable things
    e.g. stay up later, get a massage
  - Patient gets help with required activities
  - Patient doesn't have to do required activities



Functional Assessment Form (FAF)—Child Version
Patient: _____ Date completed: _____

Tic (From Hierarchy)									
ANTECEDENTS									
Classroom									
At Home After School									
Public Place Other Than School									
Watching TV/Video Games									
Playing Sports									
During Meals									
Bedtime									
Doing Homework									
In Car									
Other Anxiety -Thoughts about people judging him									
Other_____									
Other_____									
CONSEQUENCES									
Parent Tells Child to Stop Tics									
Teacher/Other Adult Tells Child To Stop									
Peer/Sibling Tells Child to Stop									
Parent/Teacher/Sibling Comforts Child									
Someone Laughs at or With the Child									
Child is Asked to Leave the Area									
Child Doesn't Complete Meal, Homework, or School Task									
Child Gets to Stay up Later									
Child Doesn't Have to do Chores or Other Required Activity									
Other_____									
Other_____									
Other_____									

Self-report form (Verdellen et al., 2011)



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Additional help for remaining tics

Appendix 4.1 Getting an overview of tic situations

Day - moment	Situation • What is happening? • Where are you? • What are you doing? • Who else is there?	Feelings? • How do you feel? Angry, scared, happy or maybe sad?	Result? • What reaction follows the tics? • What do others do? • What are you doing?

STEP 2

Develop Interventions

Interventions on situations

- Minimize or eliminate situations when possible
- If situations cannot be eliminated: what strategies help to relieve tics in these situations
- Examples (Woods et al., 2008; Murphy& Millar, 2019):

➢ **Classroom Tics**
  - Child should be seated in location that diminishes noticeability of tics

➢ **After School Tics**
  - Provide child 15 min of free time after school before making any requests; after 15 min child should return to family living area; exercise

➢ **Bedtime Tics**
  - Relaxation practice 15 min before bed
  - Establish a specific bedtime routine

Interventions on situations

- **During dating**
  - Discuss tics at an early stage
  - Avoid tic-eliciting activities just before the date
  - Model ignoring tics
  - Be careful with alcohol

- **Finding a job**
  - Think about whether you mention Tourette in your application
  - Practice interviews so you feel more secure
  - Arrive early to avoid stress on the way

- **(Public) Transport**
  - Schedule transport during time of day when it is less crowded
  - Seat child in a place where tics will cause the least safety risks
  - Travel together with people you feel comfortable with
  - Use a Tourette's pass

Interventions on Consequences

Social attention:

Parents/siblings/teachers/peers/coaches/spouses should…

- No longer tell the patient to stop the target tic
- No longer comfort the patient when target tic occurs
- No longer laugh at the patient when target tic occurs
- Provide specific instructions to peers not to react to the tics
- Educate peers, teachers and relatives about the child's condition

Interventions on Consequences

Escape items:

- The patient should not be encouraged to leave the room for mild tics
- Child must begin homework after 30 min at home, should work until finished
- Parents/spouse should prompt the use of behaviour therapy
- The child should not be sent from the table
- Practice tic management strategies
- Child must not be allowed to come out of the room after assigned bedtime

STEP 3

Develop plan for implementation

Develop Plan for Implementation

- Do functional assessment and develop a function-based treatment plan for a new tic each week.
- Discuss with the parents how the intervention would be implemented for the patient's particular situations.
- Training necessary to implement the intervention.

Function-Based Interventions Form

Date Developed: _____ Date Implemented: _____

Target Tic: _____

List specific plausible strategies that can prevent the antecedent situations from occurring or prevent you from encountering them.

1. _____
2. _____
3. _____
4. _____

List specific strategies that could make a situation less likely to worsen tics if the situation cannot be prevented.

1. _____
2. _____
3. _____
4. _____

List ways in which consequences for this tic can be avoided or changed.

1. _____
2. _____
3. _____
4. _____

Relapse management

- **Keep-the-tics-away-plan**
  - In what situations could tics come up again?
  - What signs are there that tics may be coming back?
  - What are you going to do if this happens*
  - Who are you going to ask to help you?
  - At what point you will get back into contact with your therapist?

- **Examples**
  - Look back over notes / manual
  - New tics/ increase of tics: keep a list
  - HRT: Train awareness twice a week 20 minutes
  - Restart daily practice of HRT
  - Make an appointment if professional help is necessary

Symptoms/ Alarmbells:

- More tics
- More severe tics
- Headache
- Getting irritated by tics
- Tiredness

Risk situations:

- When I'm enthusiastic
- When I'm stressed
- During holidays/ festivities

What can I do about it/ how can I prevent it?

- Take a moment of relaxation
- Cuddle with my dog
- Practicing response prevention
- Making it more difficult for myself:
  - Focus on my tic alerts
  - Talk about tics
  - Doing half of a tic and then stop
  - Looking in the mirror
  - Practice with BT-Coach app
- Chat with friends

Who can help me?

- I CAN!
- My mom & dad
- My therapist
- My teacher
- My dog

Take home Messages

Now you know:

- How operant conditioning can play a role in tic disorders
- What common antecedents are that can increase tics
- What common consequences are that can increase tics
- And how to intervene with Function Based Interventions
- A bit about relapse prevention

Questions?

Join us this afternoon for the Advanced workshop!

And learn all about Tourettic OCD!

Multi-disciplinary Clinical Consultation Sessions 2026–2027

Evidence-based practice & real case discussion

For who? - Clinicians delivering treatment for tics
How long? 2-hour group consultation sessions

Peer learning (not 1:1 supervision)
Dates across 2026–2027

What time might work for you?
Write an Email to: administrator@essts.org

€35 (€25 ESSTS members)
Discussion of anonymized cases

Responsibility remains with clinician

Treatment for Tics

Thank you!

See you at 14:00 for -OCD and tic-related OCD-

Come collect your certificate