

Mindfulness-based behavioral therapy (MBBT) for OCD

**Eda Gorbis, Ph.D.,
Joseph O'Neill, Ph.D.
Jim Sterner, M.F.C.C.
Jenny Yip, Psy.D.**

Westwood Anxiety Institute / UCLA, CA

**Christine Molnar, Ph.D.
META and Psychological Wellness Center, PA**

Objectives

- What is mindfulness and how can it improve upon traditional first line treatments for OCD?
- What is Mindfulness Based Behavioral therapy (MBBT)?
- Learn about results of the first study to integrate mindfulness with first line treatments for OCD.

So what are the first line
psychotherapy treatments for
OCD?

First Line Treatments for OCD: Expert Consensus Guidelines

- Children CBT is first line treatment
- Adolescents If mild OCD then CBT first
 If severe then CBT + SRI
- Adults If mild then CBT first
 If severe then SRI (first) + CBT

Notes: CBT = Cognitive-behavioral therapy
 SRI = Serotonin Reuptake Inhibitor (SRI)

*source: www.psychguides.com

Traditional CBT for OCD includes:

- Exposure *in vivo*: Prolonged confrontation with anxiety evoking stimuli (e.g., contact with contamination)
- Imaginal Exposure: Prolonged imaginal confrontation with feared consequences (e.g., hitting a pedestrian while driving)
- Response Prevention: The blocking of compulsions / rituals (e.g., leaving the kitchen without checking the stove)
- Cognitive Interventions: Correcting erroneous beliefs (e.g., fear / distress decreases without ritualizing)

When traditional CBT works the person with OCD

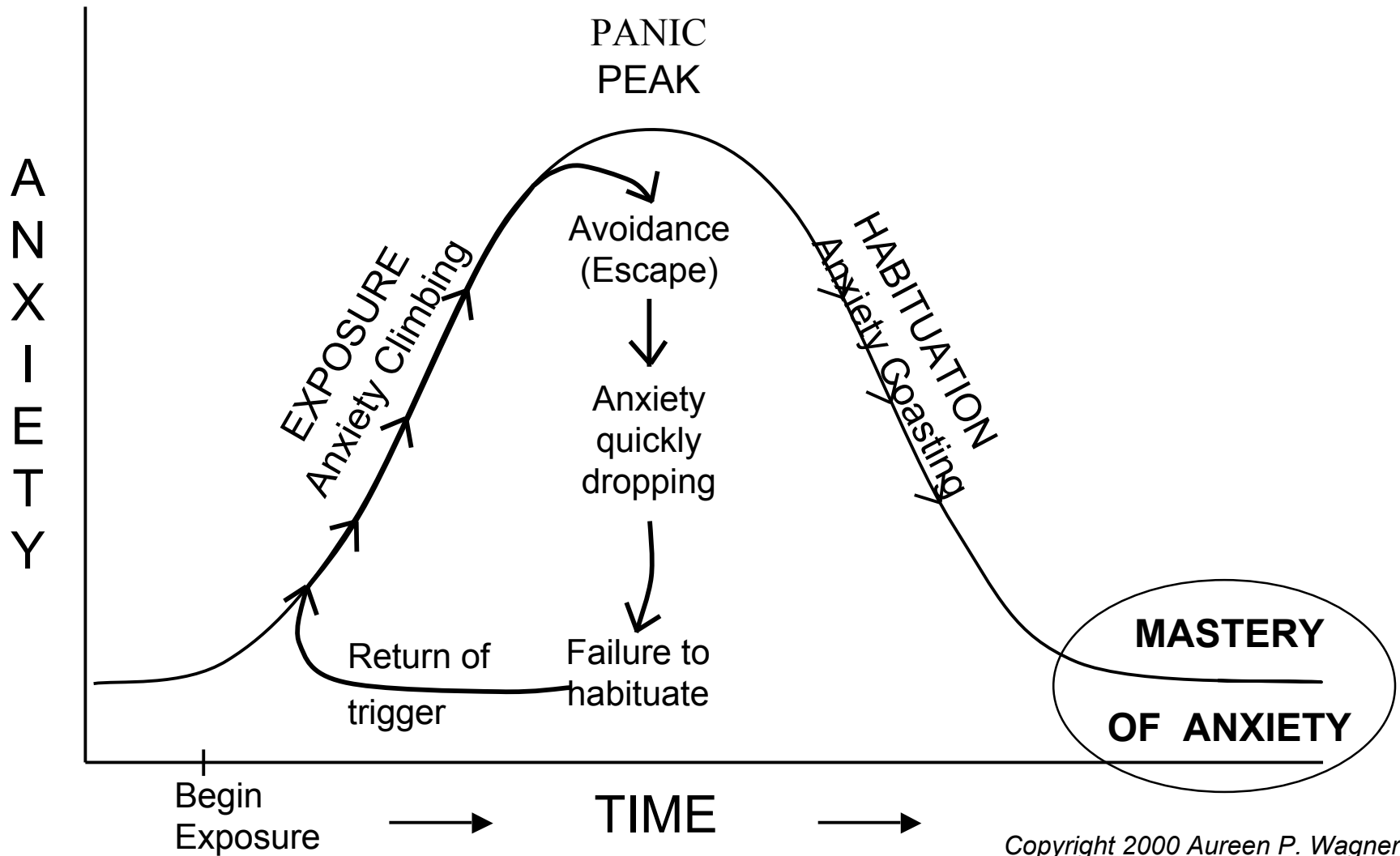
Breaks the cycle of avoidance

Faces the fear

Experiences reduction of the anxiety
without engaging in the compulsion

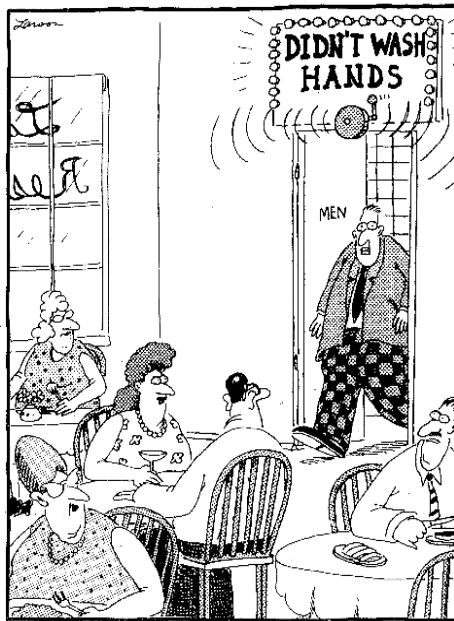
Learns that feared consequences do
not occur (if the person can attend
to & be aware of outcome!)

THE VICIOUS CYCLE OF AVOIDANCE
THAT MAINTAINS OCD SYMPTOMS IS
REDUCED WHEN ONE MINDFULLY ALLOWS FEAR
TO PEAK AND PASS



Keep Doing Those Exposures...

But normal people wash...



- Continue to expose yourself, for the rest of your life, to those things that you used to avoid and that used to distress you
- Expect waxing of symptoms during stressful times

And how about the first line medication treatments for OCD?

FDA-Approved Pharmacotherapy for OCD Treatment - (S)SRIs

- **Clomipramine** **25 - 250 mg / day**
- **Fluoxetine** **5 - 80 mg / day**
- **Fluvoxamine** **25 - 300 mg / day**
- Paroxetine 10 - 60 mg / day
- **Sertraline** **50 - 200 mg / day**
- Citalopram 20 - 80 mg / day

Drugs in red are NOT FDA-approved for kids

➤ Outcome date from one seminal study

Randomized, Placebo-Controlled Trial of Exposure and Ritual Prevention, Clomipramine, and Their Combination in the Treatment of Obsessive-Compulsive Disorder

Edna B. Foa, Ph.D.

Michael R. Liebowitz, M.D.

Michael J. Kozak, Ph.D.

Sharon Davies, R.N.

Rafael Campeas, M.D.

Martin E. Franklin, Ph.D.

Jonathan D. Huppert, Ph.D.

Kevin Kjernisted, M.D.

Vivienne Rowan, Ph.D.

Andrew B. Schmidt, C.S.W.

H. Blair Simpson, M.D., Ph.D.

Xin Tu, Ph.D.

Objective: The purpose of the study was to test the relative and combined efficacy of clomipramine and exposure and ritual prevention in the treatment of obsessive-compulsive disorder (OCD) in adults. Serotonin reuptake inhibitors (SRIs) and cognitive behavior therapy by exposure and ritual prevention are both established treatments for OCD, yet their relative and combined efficacy have not been demonstrated conclusively.

Method: A double-blind, randomized, placebo-controlled trial comparing exposure and ritual prevention, clomipramine, their combination (exposure and ritual prevention plus clomipramine), and pill placebo was conducted at one center expert in pharmacotherapy, another with expertise in exposure and ritual prevention, and a third with expertise in both modalities. Participants were adult outpatients (N=122 entrants) with OCD. Interventions included intensive exposure and ritual prevention for 4 weeks, followed by eight weekly maintenance sessions, and/or clomipramine administered for 12

weeks, with a maximum dose of 250 mg/day. The main outcome measures were the Yale-Brown Obsessive Compulsive Scale total score and response rates determined by the Clinical Global Impression improvement scale.

Results: At week 12, the effects of all active treatments were superior to placebo. The effect of exposure and ritual prevention did not differ from that of exposure and ritual prevention plus clomipramine, and both were superior to clomipramine only. Treated and completer response rates were, respectively, 62% and 86% for exposure and ritual prevention, 42% and 48% for clomipramine, 70% and 79% for exposure and ritual prevention plus clomipramine, and 8% and 10% for placebo.

Conclusions: Clomipramine, exposure and ritual prevention, and their combination are all efficacious treatments for OCD. Intensive exposure and ritual prevention may be superior to clomipramine and, by implication, to monotherapy with the other SRIs.

(*Am J Psychiatry* 2005; 162:151–161)

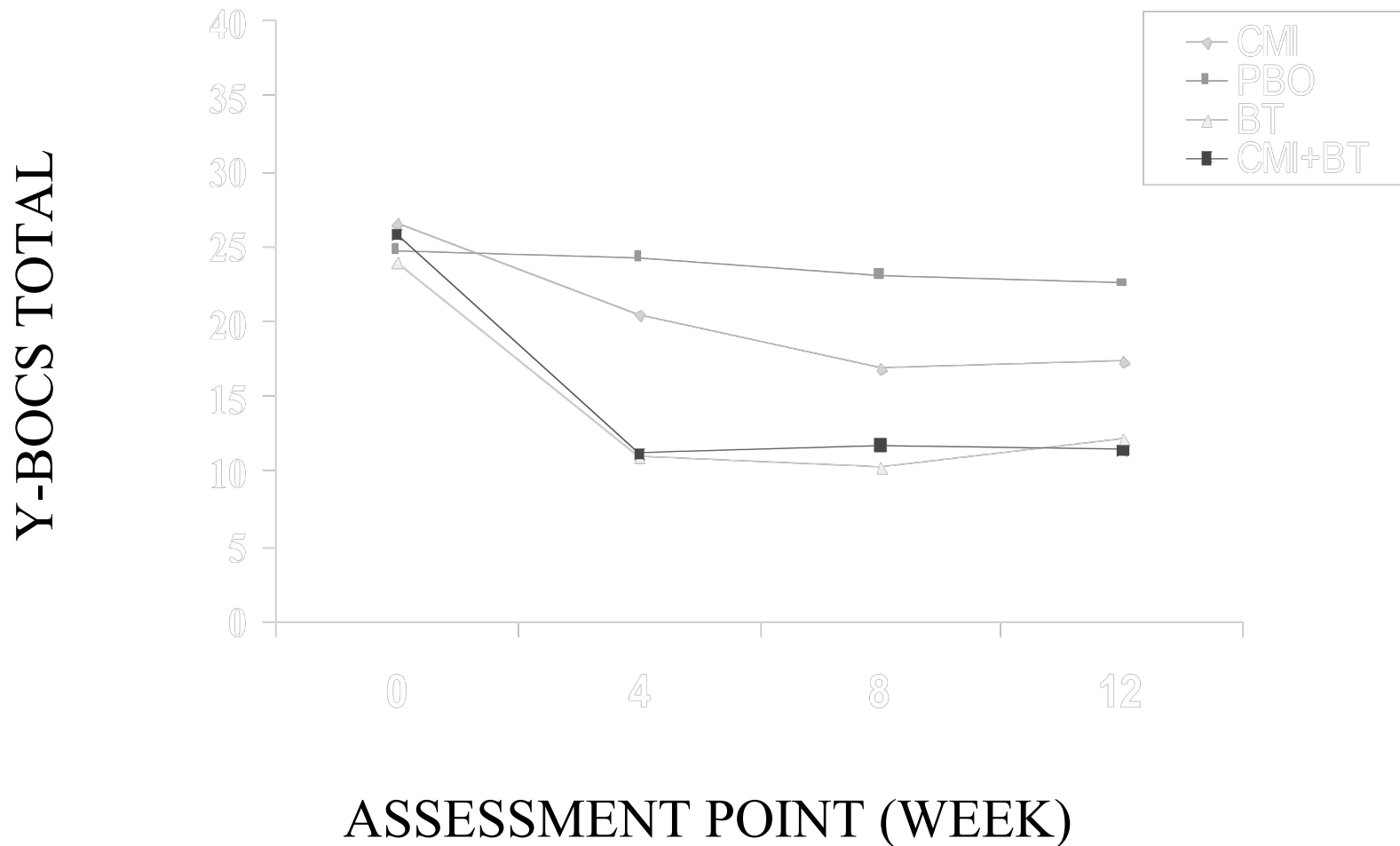
Obsessive-compulsive disorder (OCD) is characterized by recurrent obsessive thoughts, images, or impulses that evoke anxiety and by compulsive behaviors (e.g., handwashing) or mental acts (e.g., ritualistic praying) aimed at decreasing discomfort. Six-month prevalence is estimated at 1%–2% (1) and lifetime prevalence at 2%–3% (2, 3). OCD's relatively high prevalence, the typically long gap between onset and treatment, and pervasive associated dysfunction (4–7) highlight the importance of developing and disseminating effective treatments.

Cognitive behavior therapy by exposure and response (ritual) prevention (8) is now considered the best available psychotherapy for OCD (9). Pharmacotherapy with the serotonin reuptake inhibitor (SRI) clomipramine (10) and the selective serotonin reuptake inhibitors (SSRIs) sertraline (11), fluvoxamine (12), paroxetine (13), fluoxetine (14), and citalopram (15) has also proven efficacious. Although side effects limit its use as a first-line treatment,

clomipramine remains both the best studied and possibly the most efficacious medication for OCD (16, 17). Although exposure and ritual prevention and SRIs are each efficacious treatments, some patients do not benefit from these interventions and most remain at least somewhat symptomatic.

An important question concerns the relative and combined efficacy of these treatments. To our knowledge, five previous studies with adults have included medication and exposure and ritual prevention, but none have directly compared exposure and ritual prevention, medication, and their combination relative to placebo (18–22). Marks et al. (18) compared the effects of clomipramine and placebo over 4 weeks, followed by an additional 3 weeks of exposure and ritual prevention or relaxation. In this study, as well as a subsequent study (19), the combination of clomipramine with exposure and ritual prevention had a small transitory additive effect, compared to the

Y-BOCS Completer data from Foa et al., 2005 study



Factors Impeding the Efficacy of ERP

- Severe Depression or Fear / Anxiety
- Overvalued Ideation (Poor Insight)
- Non-Compliance with EX or RP
- Severe personality disorders (e.g. Schizotypal)

Limitations of Pharmacotherapy for OCD

- **Can take up to 3 months at an optimal dose to get a response.** This is longer than it takes for SRIs to target most cases of depression
- **80-90% of people treated with medications alone will relapse once medications are discontinued**
- **Side effects can include, but are not limited to:**
 - weight gain**
 - sedation**
 - sexual dysfunction**
 - hyperactivity in some children**

First Line Treatments: Limitations

ERP and medications alone do not work for everyone: 1/3 of people with OCD do not respond adequately to recommended first line treatments including ERP and pharmacotherapy

- Adjuncts to the first line psycho- and pharmaco- therapy options for OCD are needed

What is Mindfulness?

...focusing attention on the present moment, in a particular way, non-judgmentally

~ Kabat-Zinn, 1990; 1994

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Delacorte.

Kabat-Zinn, J. (1994) *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.

“Non-judgmentally”

This refers to relating with self and others in ways that are loving and kind. The practice of “loving-kindness” in mindfulness is referred to as “metta”.

Practicing metta can be as subtle as not being hard on the self when OCD symptoms emerge

Practicing metta also means only accepting self talk (i.e., accepting a belief) that is reality-based while noticing but not reacting to non-reality-based beliefs

Formal Mindfulness

- Practice is prolonged during a dedicated and protected time period that occurs daily and in addition to informal practices
- Usually formal practice is taught by a practitioner with his/her own formal meditation practice

Informal mindfulness practices

- Occurs in response to everyday events (such as hassles or OCD symptoms)
- Example: Noticing you are about to mindlessly engage in a compulsion reactively and pausing for a moment, focusing awareness on the sensations of your breath and rather embracing the fear sensations that are apparent in the body at that moment as you anchor yourself in your breath, standing firm where you are and welcoming rather than fighting the fear.

How can mindfulness reduce OCD symptoms?

- Meta-analyses suggest that integration of formal mindfulness training decreases distress, such as that found in OCD, across multiple mood and anxiety disorders (Baer, 2003; Bishop, 2002)
- Mindfulness Based Stress Reduction (MBSR) reduces relapse in Major Depressive Disorder (MDD). MDD is found in over $\frac{3}{4}$ of those with primary OCD and can interfere with CBT when it is extreme

How can mindfulness reduce OCD symptoms?

OCD symptoms are associated with

- avoidance of the present moment: focusing attention on either the past or the future;
- attachment to particular outcomes & efforts at controlling verses allowing life as it unfolds;
- reactivity in response to inaccurate thoughts, obsessions;
- ongoing critical judgments about self and OCD symptoms,
- much suffering for both self and others

Mindfulness: All the CBT therapists are doing this thousands of years old dance now!

Mindfulness is at the core of:

- Dr. Linehan's Dialectical Behavioral Therapy (DBT) for management of intense and distressing emotions
- Dr. Haye's Acceptance & Commitment Therapy (ACT) for general distress
- Dr.s Borkovec's, Roemer's & Orsillo's therapy for Generalized Anxiety Disorder (GAD)
- Dr.s Teasdale's, Williams', et al. Mindfulness Based Cognitive Therapy (MBCT) for Depression & its Relapse Prevention
- Dr. Marlatt's relapse prevention therapy for substance abusers

Mindfulness: An antidote for OCD?

Through mindfulness practice a person learns to:

- intentionally focus attention on the present moment;
- observe internal and external events as they unfold without attachment to particular outcomes and without getting caught up in & swept away by
 - “the stories” we tell ourselves about reality / thoughts / feelings / obsessions
- reduce reactivity (e.g., with compulsions) to events & distress;
- to relate with the self and others in compassionate ways that are grounded in reality and that do not contribute to unnecessary suffering.

Informal mindfulness practice applied to OCD

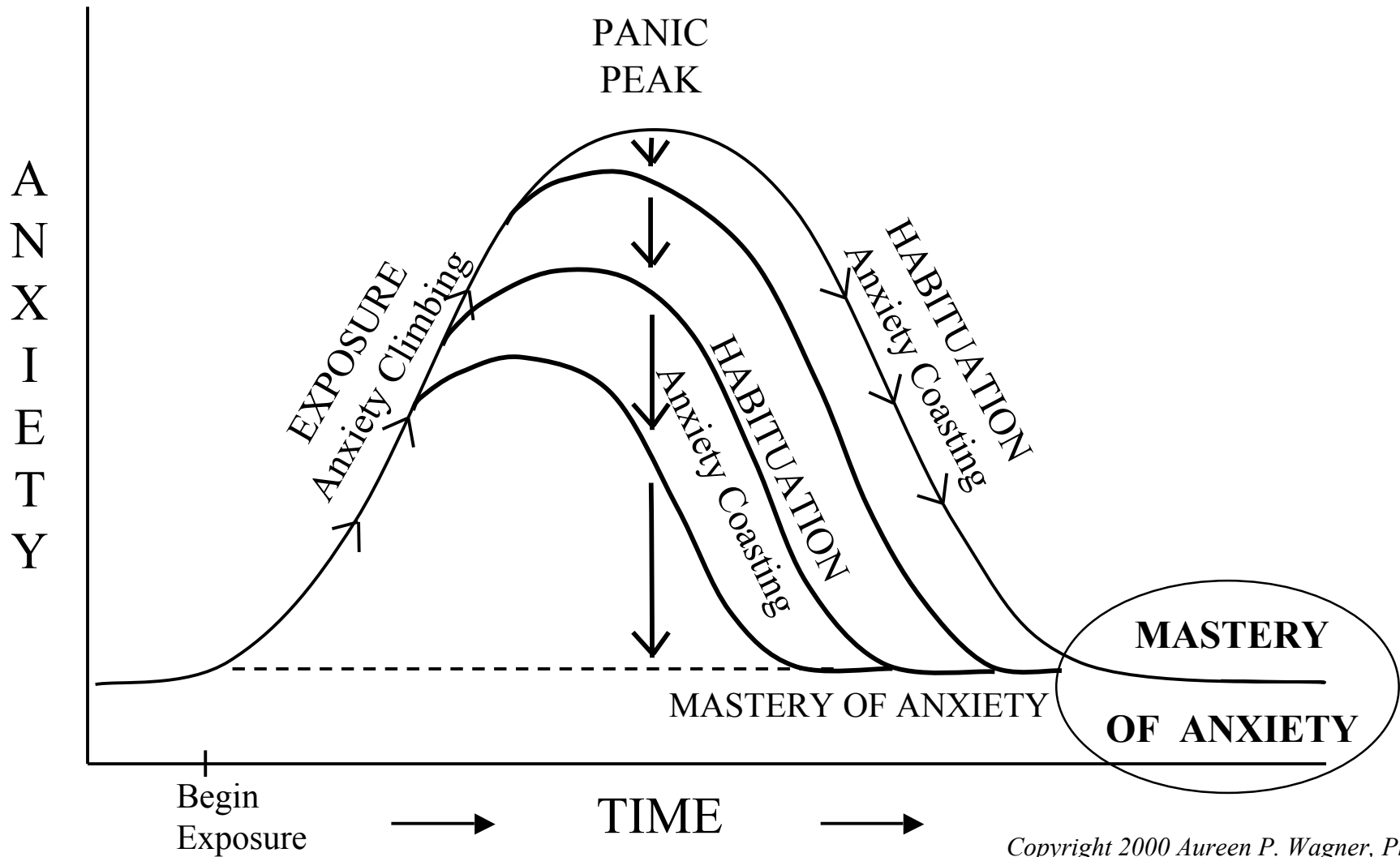
Some skills learned with mindfulness practice

- Improved attention
- Less reactivity
- Increased insight
- Improved relationships

Applied to OCD

to actual outcomes
to obsessions, compulsions,
and stressors in general
into impermanence of
fear and other
distressing emotions
such as a non-judgmental
attitude toward self and the
occurrence of symptoms can
reduce risk of relapse

THE OUTCOME OF REPEATED EXPOSURE TO ALL THAT HAS BEEN AVOIDED & ALLOWING FEAR



An experiential mindfulness exercise for everyone

- An experiential example of a formal mindfulness practice “Awareness of breath and body sensations”*
- This practice can be used in everyday life to strengthen mindfulness and in response to OCD symptoms to reduce distress*

*Instructions for further practice are found in the latest issue of the OCF Newsletter

Four Step Method (FSM) designed by Dr. Jeffrey Schwartz: Informal Mindfulness integrated with CBT

Can make ERP more tolerable for people with OCD by adding informal mindfulness training

Schwartz, J. M. (1996). *Brain lock: Free yourself from obsessive-compulsive behavior*. New York: Harper Collins.

“BRAIN LOCK”

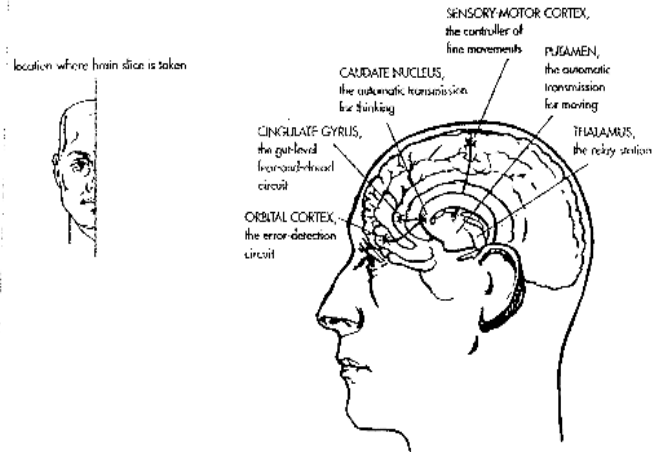


Figure 2. Illustration showing the location of the key structures of the brain that play a part in OCD.

The idea that activity of the OFC is driven by and locked to activity of the basal ganglia.

When basal ganglia do not serve the filtering function then the error-detection activities of the OFC are over-active

The cingulate gyrus amplifies the feeling that something is wrong

Frontal cortex needs to inhibit basal ganglia more, usually through ERP medications that improve function

Brain Lock, is by Jeffrey Schwartz, M.D.

The original FSM described in Brain Lock

1. Relabel
2. Reattribute
3. Refocus
4. Revalue

Step 1: Relabel

Label fear-producing cognitive activity, such as intrusive thoughts and images, as obsessions;

Label urges to engage in behaviors to reduce the fear as compulsions without reactively engaging in compulsive behaviors

Examples: “This thought of stabbing my little sister is just an obsession and this urge to pray a certain number of times is just a compulsion that my OCD brain thinks will reduce my fear”

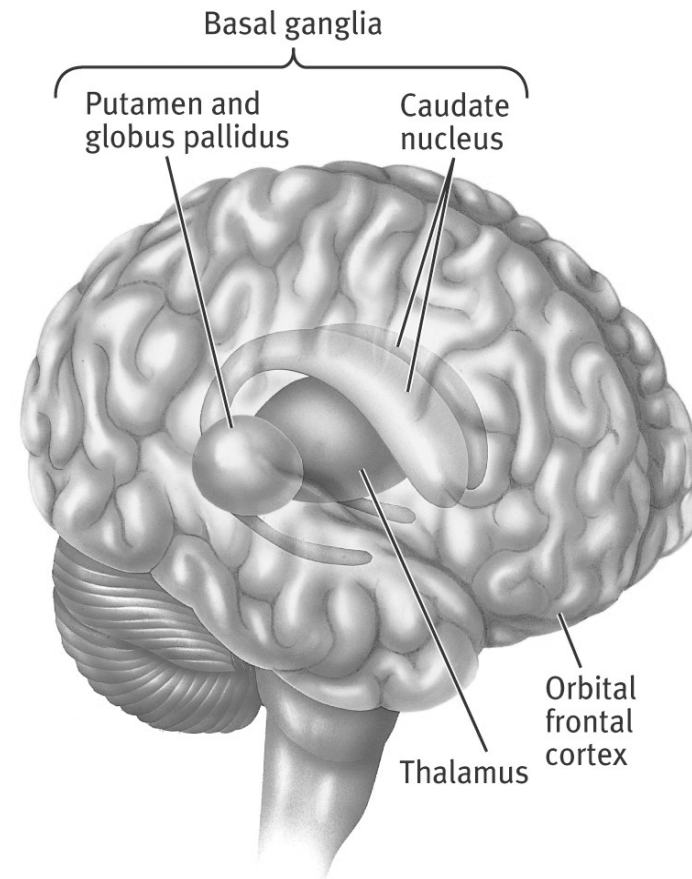
Step 2: Reattribute

Attribute obsessions and compulsions to the neurobiological condition of OCD rather than calling them a product of the “self” (i.e., obsessions and compulsions are ‘not self’).

Example: “Its not me, it’s just OCD, a neurobiological disorder”

OCD is a neurobiological disorder

- Hyperactive orbital frontal cortex (OFC) and basal ganglia regions (e.g., caudate nucleus) leads to thalamic dysfunction, thus causing OCD symptoms
- Marked by serotonin dysfunction



Step 3: Refocus

Repeatedly practice shifting attention away from succumbing to an OCD compulsion (e.g., hand washing) and toward an ultimate observing of the impermanence of the OCD symptoms

Example: “I will keep refocusing on playing Monopoly with my little sister, checking in every 5 minutes to see how the strength of the urge to do my compulsion changes and does not last forever...and how what I fear does not happen even when I do not do the compulsion”

Step 4: Revalue

See the reality of the situation, as opposed to buying into the negatively over-valued OCD version of the current state-of-affairs.

Example: “My “Impartial Spectator” is aware of reality: This is just OCD brain acting up because I am stressed. All of the OCD stuff in my head isn’t based in reality. Even though it feels so real, I know it is just the OCD making me feel this way. I will use my CBT and mindfulness tools to manage this”

Mindfulness Based Behavioral Therapy (MBBT)

Integrates intensive ERP with:

- modified FSM model
- extensive writing exercises
- pharmacotherapy*
- behavioral activation
- weight management*
- time management*
- partial-hospitalization (1 week max)*

* only when indicated

Summary of Intensive CBT Protocol at the core of MBBT

- 2 Planning Sessions
- 15 daily ERP sessions, minimum 90 minutes, over 3 week time period
- Daily Homework (min. of 3 hours)
- Ongoing Assessment & Psychoeducation
- Relapse Prevention

Guided by the following protocol: Kozak, M. J. & Foa, E.B. (1997). *Mastery of obsessive-compulsive disorder: A cognitive-behavior approach -- therapist guide (treatments that work)*. New York: Graywind Publications*.

*Now available through Oxford University Press.

How is FSM modified in MBBT?

- **MBBT requires intensive and prolonged exposure identical to those seen in classic ERP. Initially, habituation can take more than 90 minutes. In contrast, the FSM allows for brief exposures as described in Schwartz's original refocus step.**
- **The FSM allows distraction toward pleasant events that is not permitted in MBBT. This is because distraction interferes with habituation of fear in the treatment of OCD (Grayson et al., 1982).**

The extensive writing component

- This component is especially helpful in insuring that the ERP component of MBBT adequately targets each participant's fear structure so that its elements can be modified through exposure to corrective information as described in Foa & Kozak (1986).
- Writing is both a crucial component of thorough assessment of the fear structure and a means of increasing mindfulness
- Writing is also a form of exposure

The results of the first MBBT study

So was it of service to people with OCD?

Method of the MBBT Study: How was MBBT investigated?

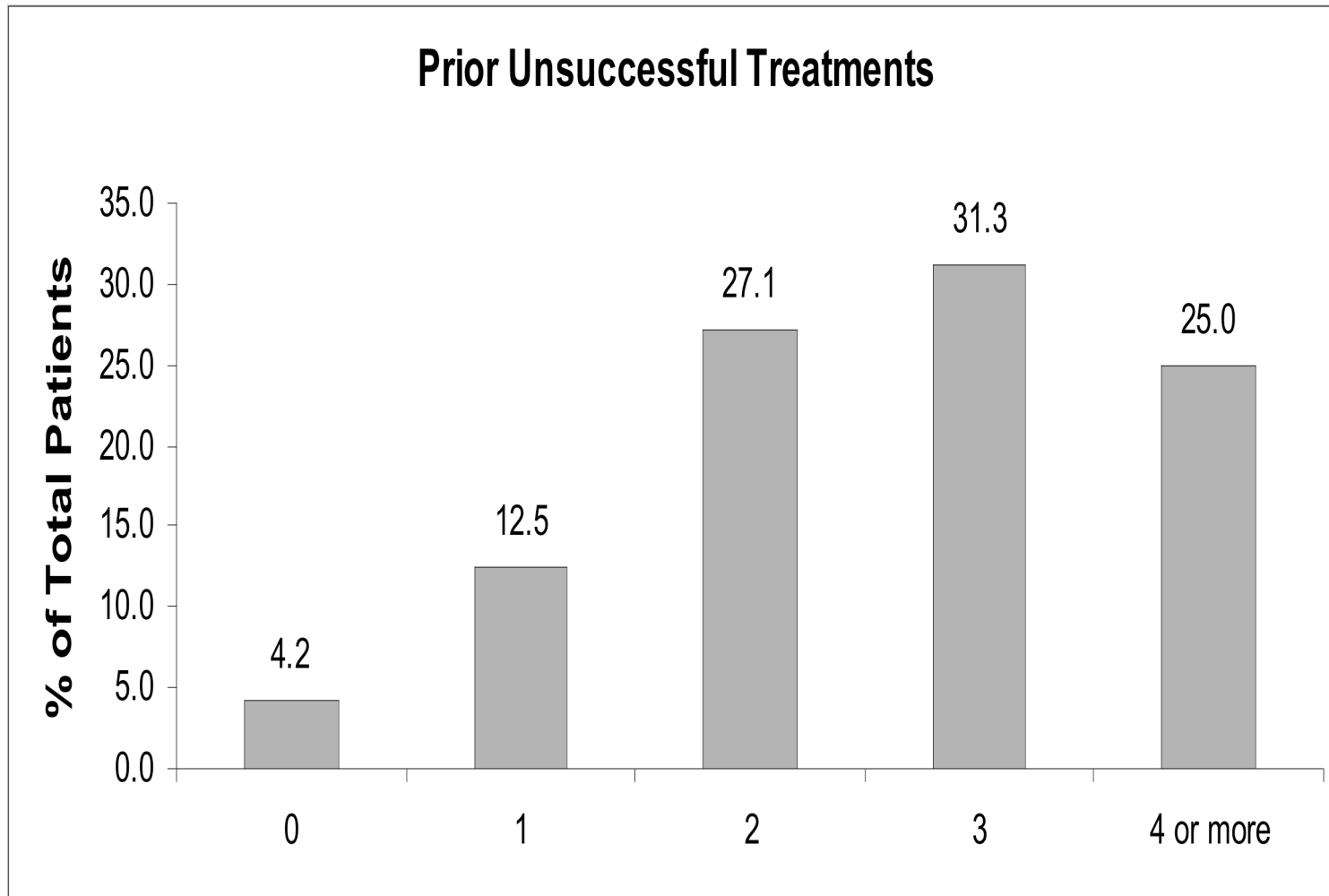
A retrospective chart review of all records from the Westwood Institute for Anxiety Disorders outpatient center between 1995 and 2005 was conducted.

During this time 246 adults were screened and 1/3 of these were excluded because they did not have a primary diagnosis of OCD, had hoarding as the primary symptom type of OCD, or were not sufficiently motivated.

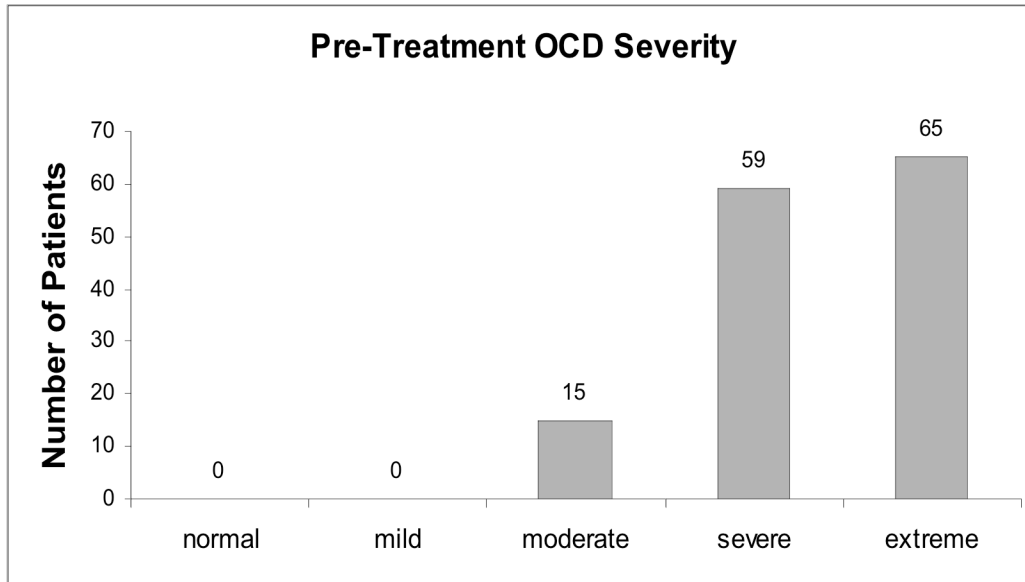
Participants: Who was included in the MBBT study?

- 139 adults, half of which were male, with an average age of 32
- Most participants (96%) had one or more unsuccessful treatments before coming to Westwood Institute for Anxiety Disorders
- The majority had severe or extreme OCD symptoms
- All of the symptom types but hoarding were represented

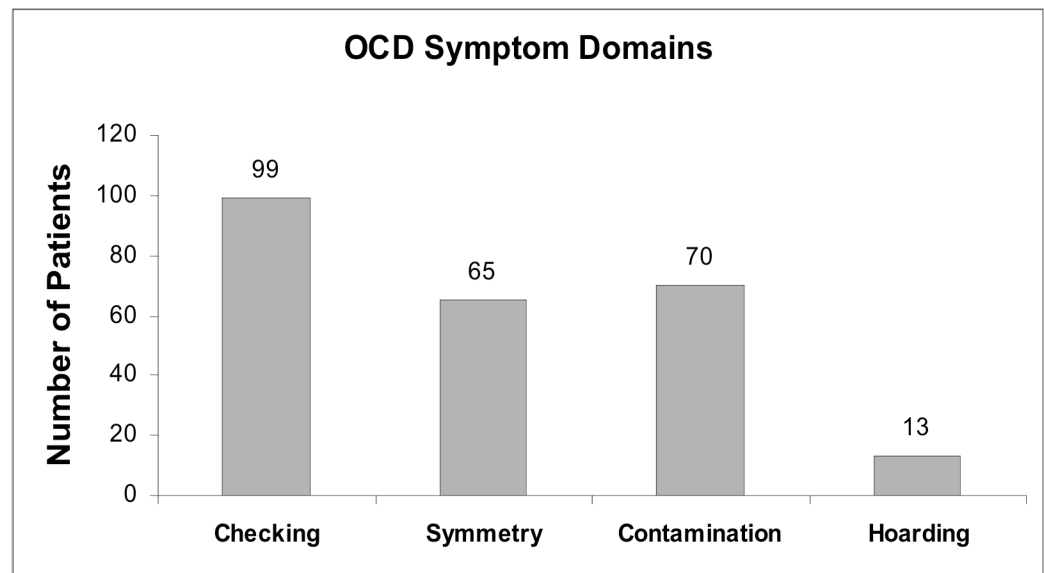
A treatment refractory sample



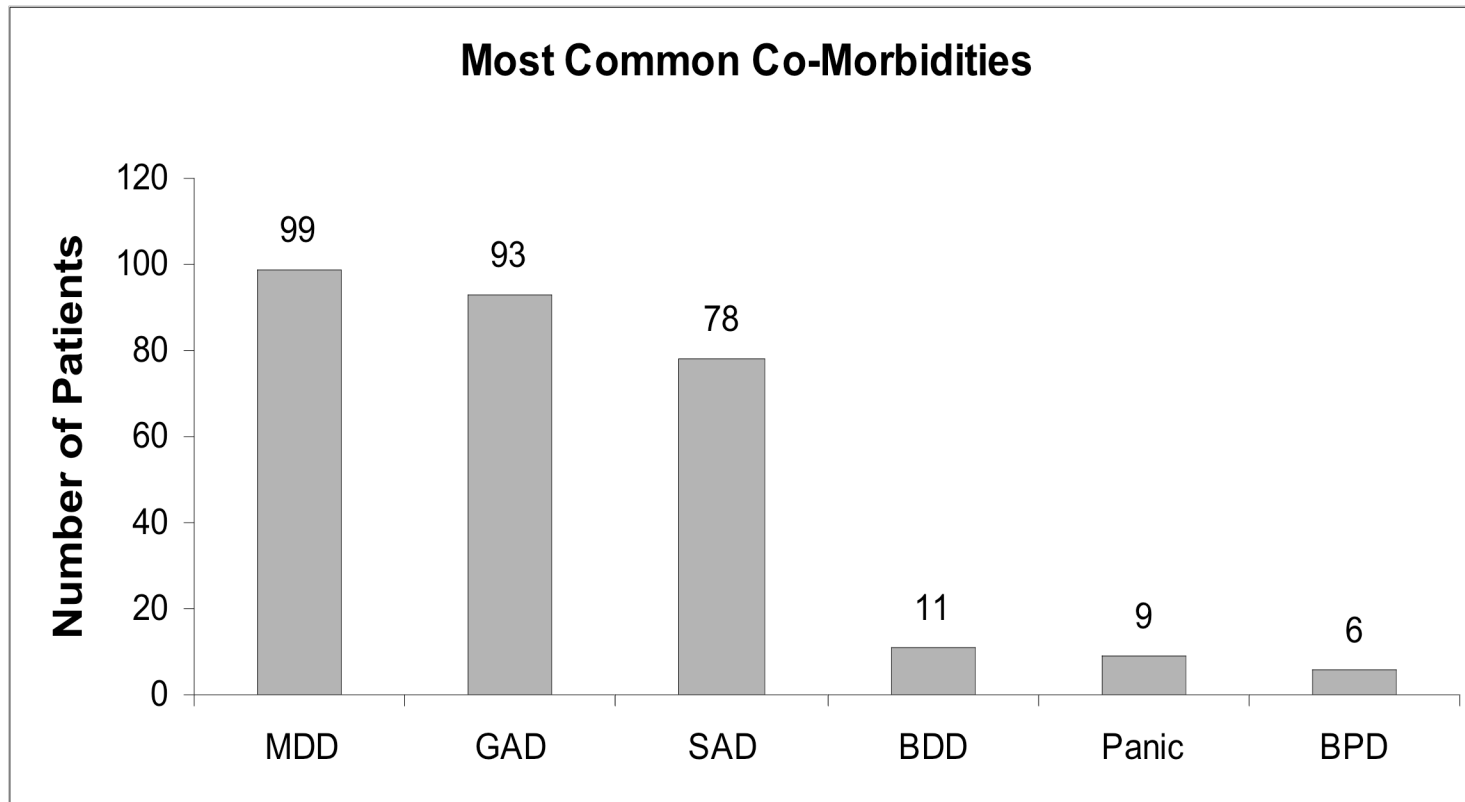
Severe symptoms of many kinds



Yale-Brown Obsessive-Compulsive Scale (Y-BOCS); normal 0-7, mild 8-15, moderate 16-23, severe 24-31, extreme 32-40



Many comorbid conditions



MDD = major depressive disorder (Hamilton Depression score >17),

GAD = generalized anxiety disorder (Hamilton Anxiety score > 17),

SAD = social anxiety disorder (Willoughby score > 39),

BDD = body dysmorphic disorder,

Panic = panic disorder,

BPD = bipolar disorder,

More about the 139 participants

- During MBBT, 60 of the 139 required partial hospitalization (not more than one week) at UCLA
- Most had many other disorders (comorbidities)
- Most were receiving medication therapy at the start of MBBT, mostly SRIs. They continued taking medications during MBBT
- Only 17 of the 139 had never had any kind of treatment before beginning MBBT

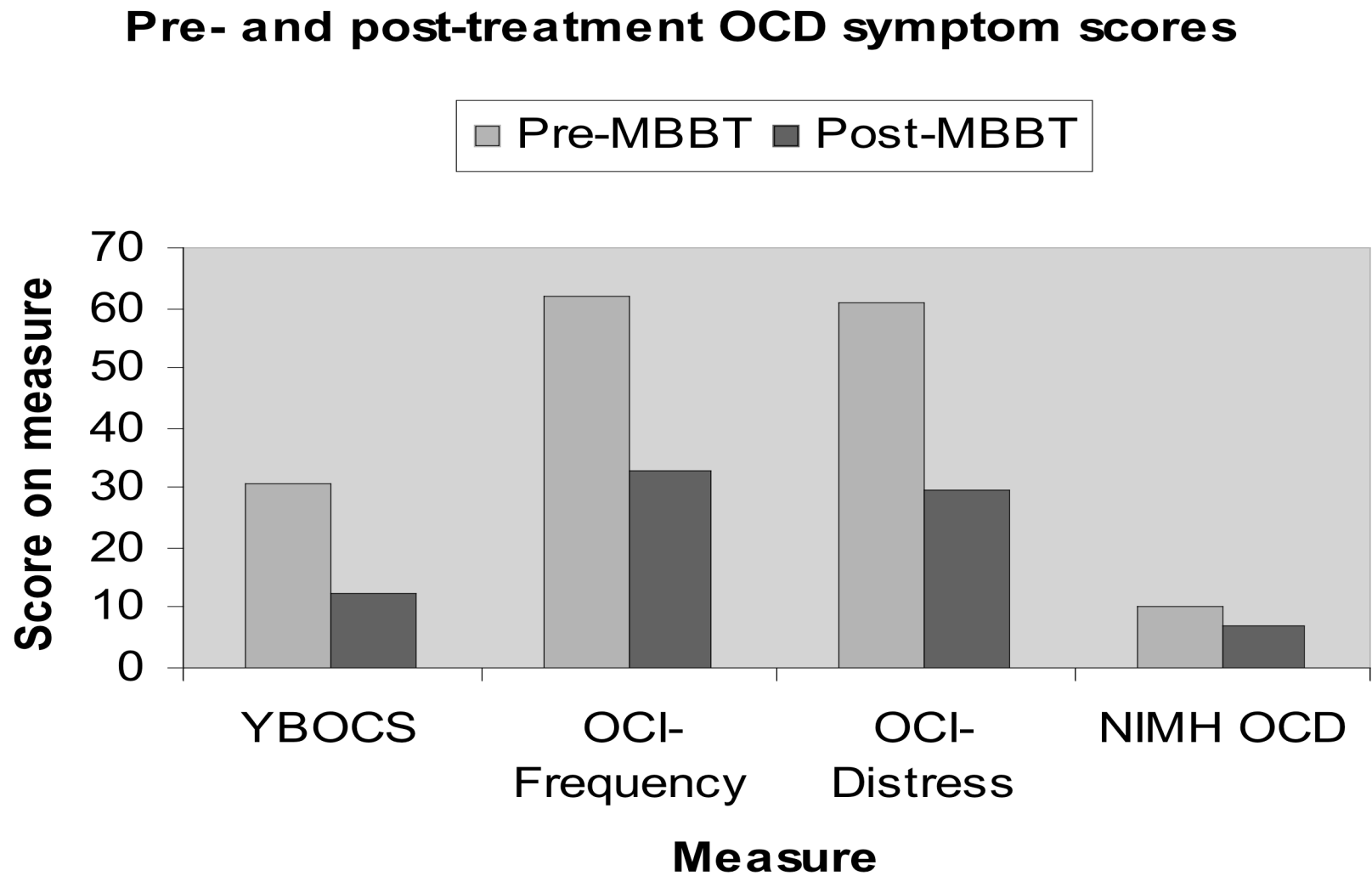
Participants who were excluded from the MBBT study

- **People with a current diagnosis of:**
 - **psychosis**
 - **substance use disorder**
 - **Neurodevelopment disorder first diagnosed in childhood (e.g., mental retardation)**
- **People with insufficient motivation**
- **Those for whom OCD was not the primary diagnosis**
- **People who required more than 30 sessions of MBBT**

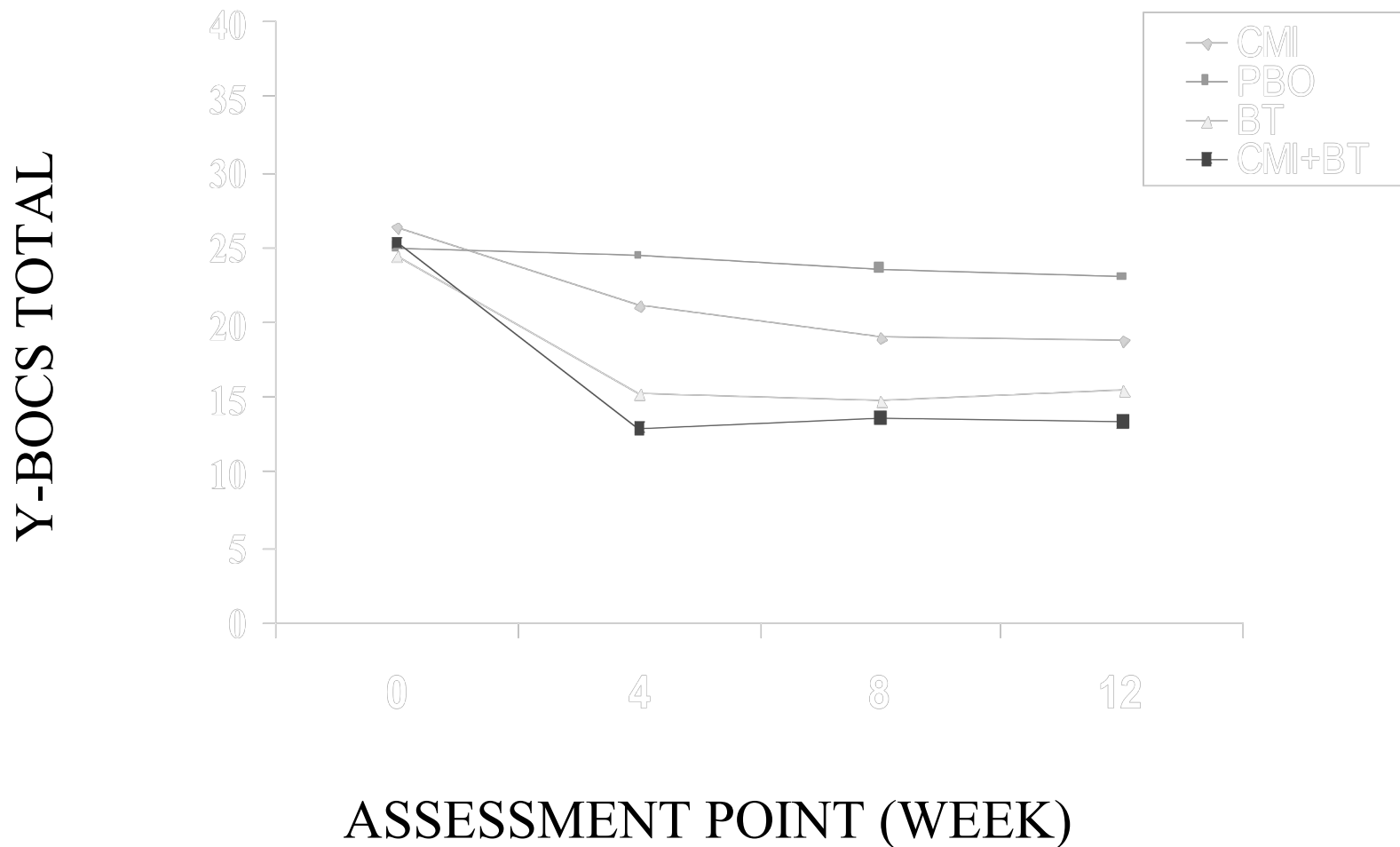
Results

- The average OCD score on our primary measure of symptoms, the YBOCS, was reduced by 60% and went from 31 to 12 points. This means the group's OCD symptoms went from extremely severe to mild.
- 115 of the 139 participants were classified as responders using YBOCS cut-offs, with 44 being completely in remission.

Pre- and post-MBBT: OCD Symptoms



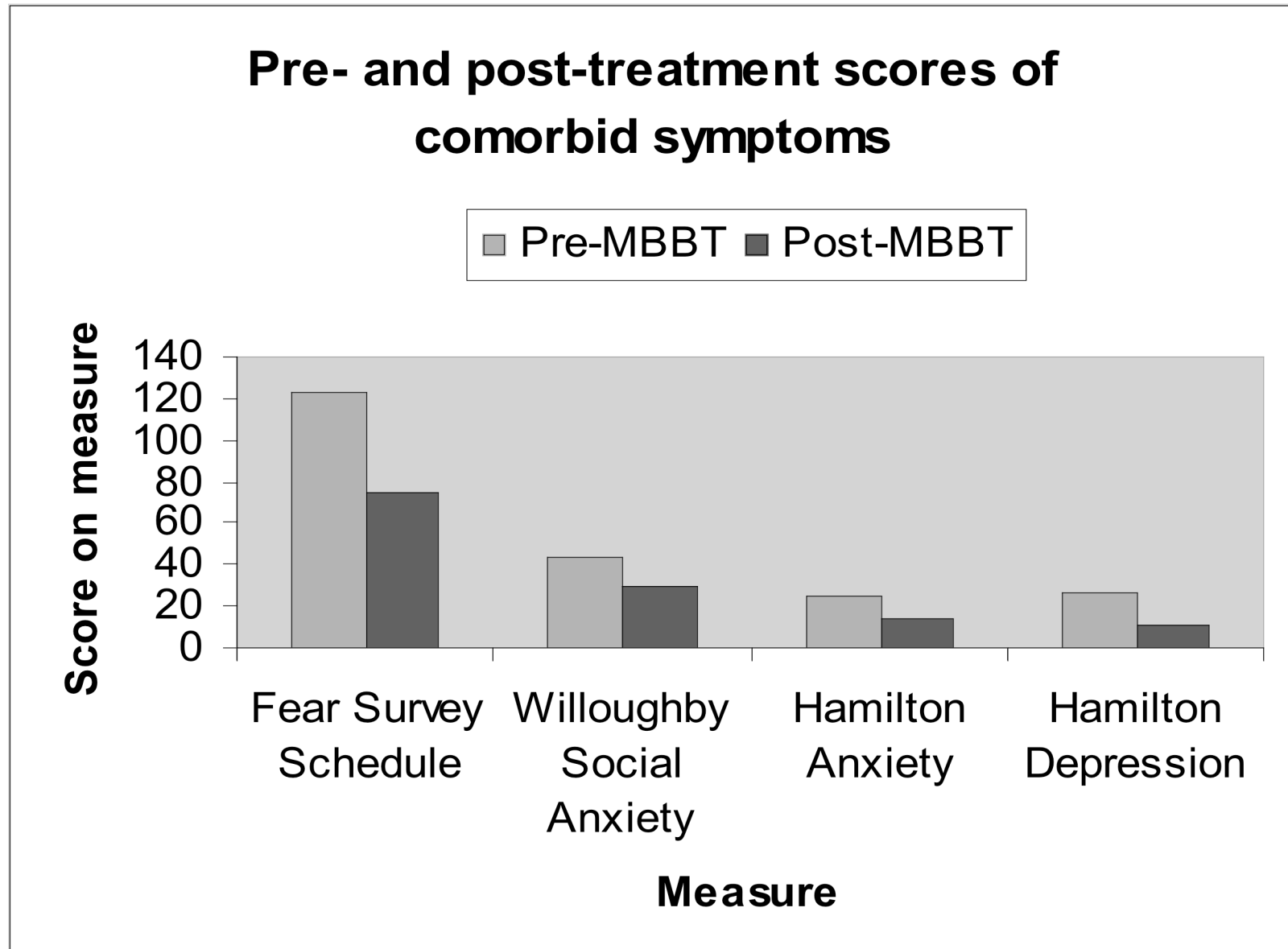
Comparable to results from Foa et al., 2005 study: Y-BOCS Intent-to-Treat data



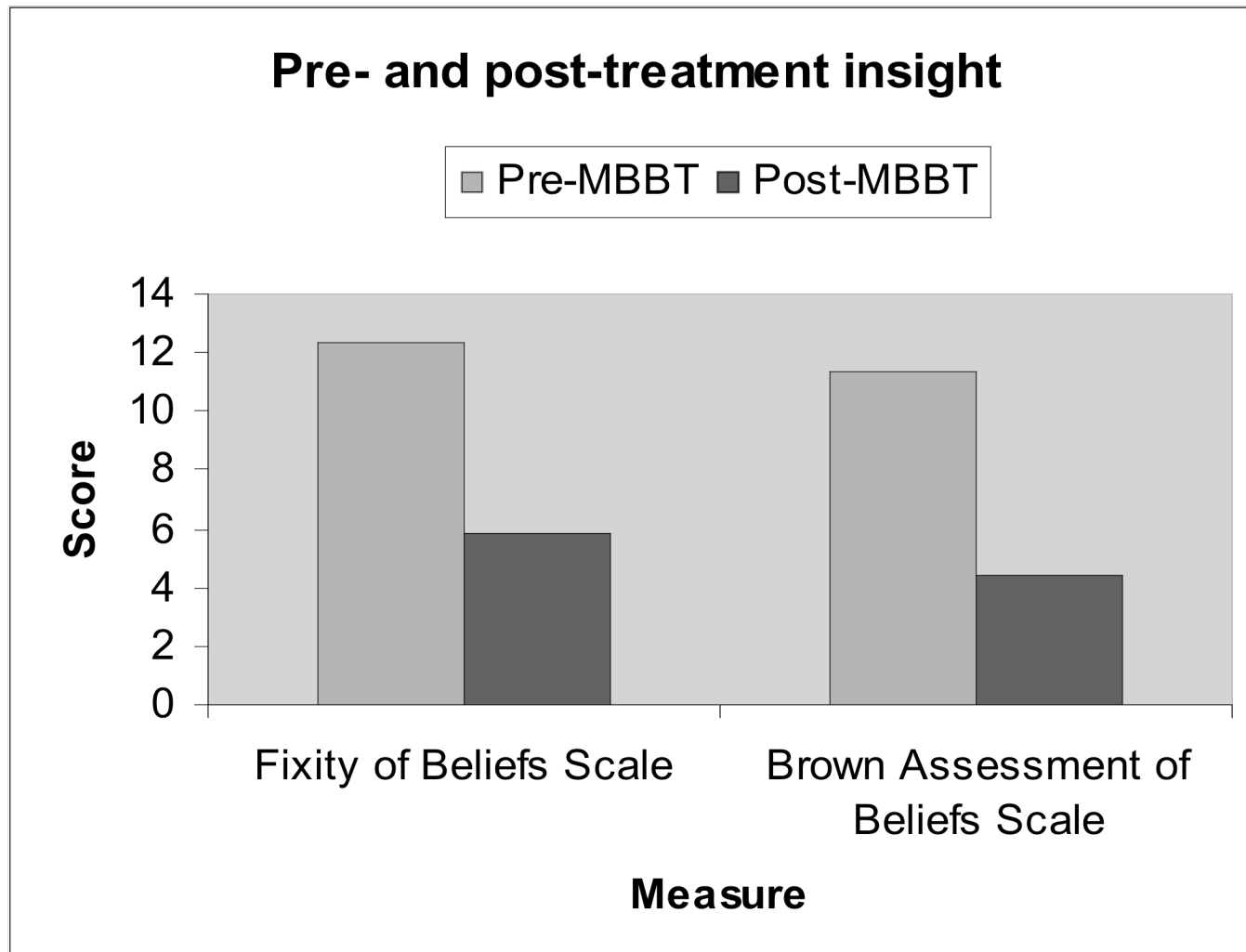
More Results

- Reductions in all of the symptoms of the comorbid disorders were also found when we looked at scores on self-report measures of other kinds of anxiety symptoms and of depression symptoms
- Increases in insight were found
- General functioning in life, measured by the Global Assessment of Functioning (GAF) Scale, increased from 49 to 65 for the group. This means that the group went from having serious impairment in living due to symptoms before MBBT to only mild difficulties in living after MBBT

Pre- and post-MBBT: Comorbid Symptoms



Pre- and post-MBBT: Insight



Limitations of this study

- We cannot yet conclude to what degree mindfulness improves therapy outcome because the current study was retrospective in nature, did not include a control comparison group, and lacked randomization to treatment conditions.
- We did not require that medications were stabilized, so it is possible that medication changes were also responsible for outcome
- MBBT is an integrative treatment with many facets and the current study design does not allow us to know with certainty which components of MBBT were associated with the promising changes seen on each outcome measure

We can conclude that:

- Mindfulness practice can be feasibly integrated into traditional interventions for OCD and such integration is associated with an improvement of therapy outcome in those who were previously described as “refractory” or “resistant” to such traditional interventions.
- Factors that often preclude treatment response (e.g., pretreatment OCD symptom severity level, decreased flexibility in cognition at pretreatment, comorbid symptoms) did not interfere with outcome for the group
- Those who completed MBBT showed symptom reductions on measures of many emotional disorder symptoms in addition to OCD, increases in insight and reality testing, and general functioning.

Hope

- MBBT offers hope to people with OCD whom many clinicians consider non-responsive to traditional interventions.

Acknowledgements

- Edna Foa, Ph.D.
- Michael Kozak, Ph.D.
- Martin Franklin, Ph.D.
- Aureen P. Wagner, Ph.D.
- Clinical research participants everywhere for increasing our knowledge about OCD and its treatment

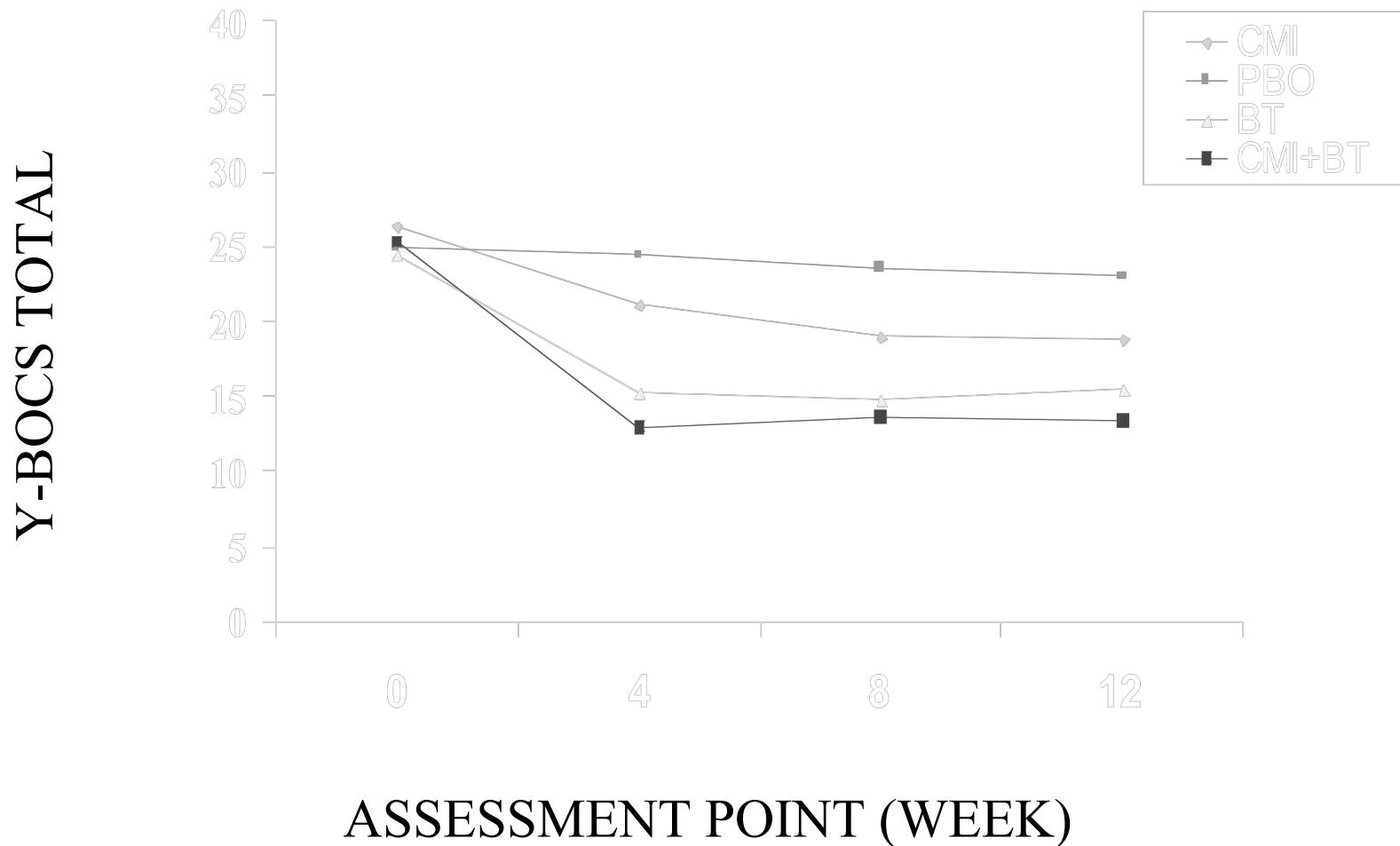
Talk will be available for download
next week

To download talk go to either:

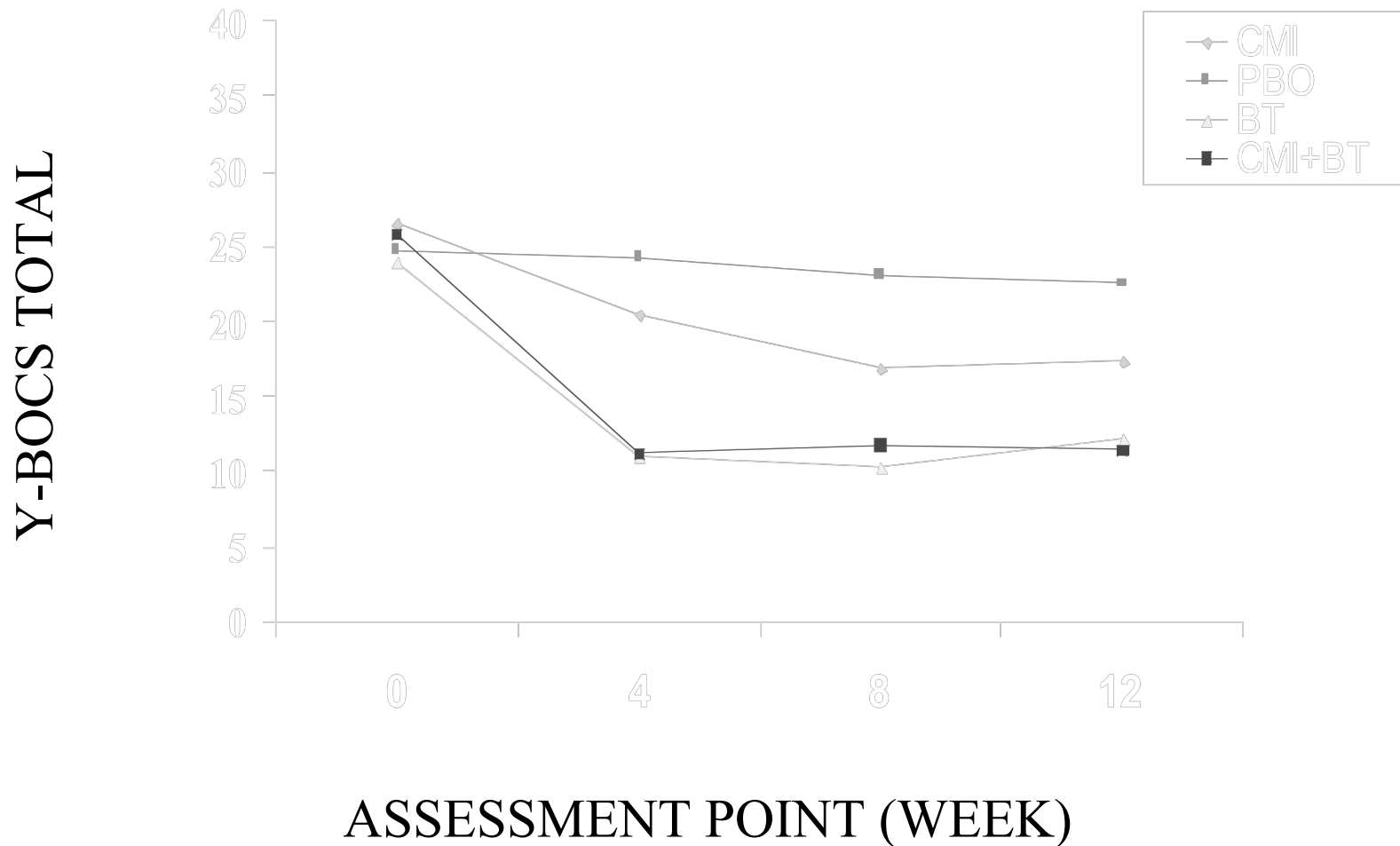
www.hope4ocd.com

www.meta4stress.com

Y-BOCS Intent-to-Treat from Foa et al., 2005 study

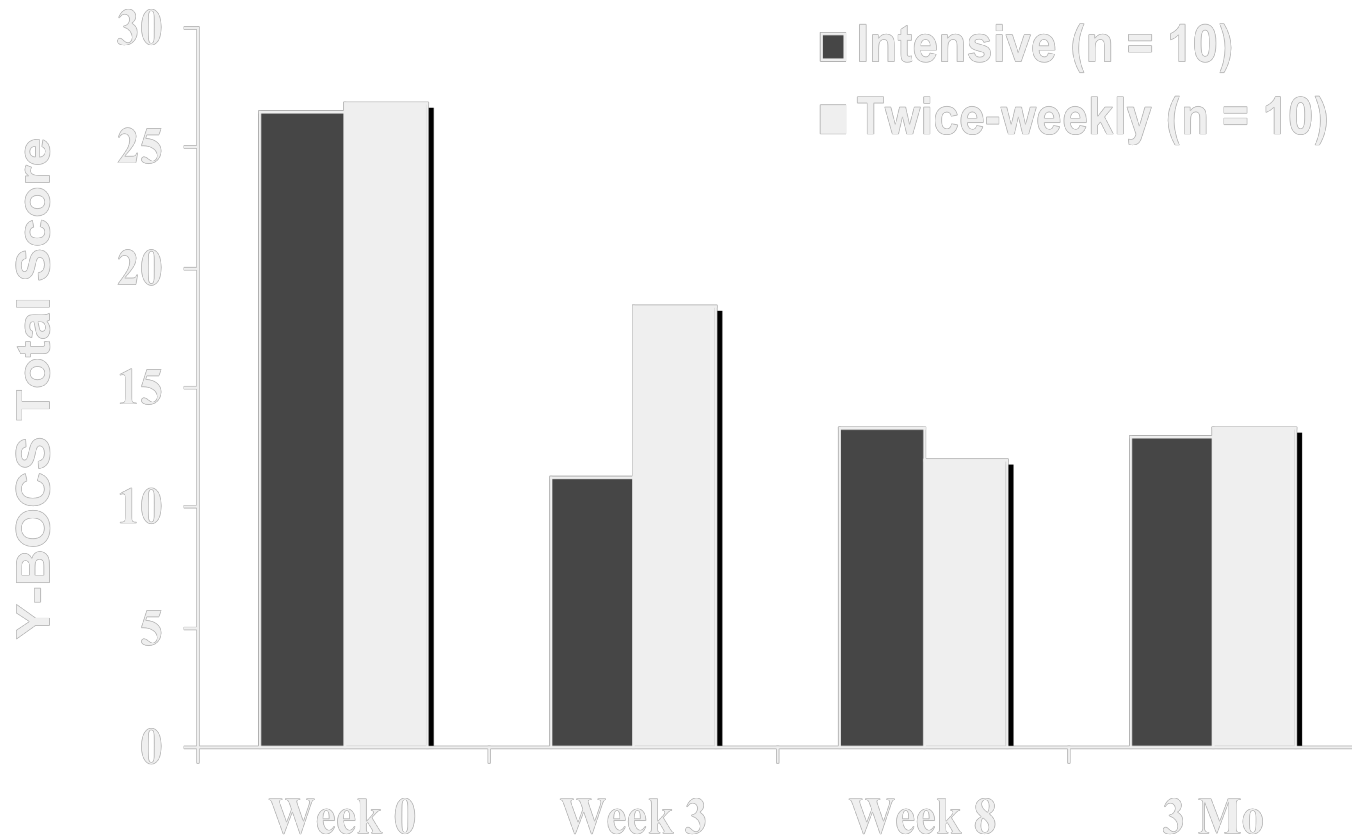


Y-BOCS Completer data from Foa et al., 2005 study



Intensive vs. Twice-Weekly EX/RP

Treatment Completers ($n = 20$)



Abramowitz et al. (submitted)