Integrating Cognitive and Behavioral Techniques in the Treatment of Obsessive-Compulsive Disorder

The Special Case of “Pure Obsessions”

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Essential Features of OCD

Recurrent *obsessions* or *compulsions* that are severe enough to be time consuming (i.e., they take more than 1 hour a day) or cause marked distress or significant impairment in functioning.

Obsessions

1) persistent thoughts, impulses, or images that are experienced as intrusive, inappropriate and distressing

2) the obsessions are not simply excessive worries about real life problems

3) the person attempts to ignore or suppress the obsessions or neutralize them with other thought or action

4) the person recognizes that the obsessions are a product of his own mind
Compulsions / Rituals

1) repetitive behaviors (e.g., handwashing) or mental acts (e.g., praying silently) that the person feels driven to perform in response to an obsession or according to rigid rules

2) the compulsions are aimed at reducing distress or preventing a dreaded situation: the compulsions are either unrealistic or clearly excessive
Mental Compulsions

- Special words, images, numbers recreated mentally to neutralize anxiety
- Special prayers repeated in a set manner
- Mental counting
- Mental list making
- Mental reviewing
Mental Compulsions vs. Obsessions

- Often confused for one another
- Obsessions are intrusive, unwanted thoughts that *evoke* anxiety or distress
- Mental compulsions are deliberate mental acts designed to neutralize or *reduce* anxiety or distress
Functional Relationship Between Obsessions and Compulsions

Q: *Most of the time are your compulsions:*

44% - intended to prevent harm (e.g., disease, fire, poison)?

40% - unrelated to harm, they just reduce anxiety or discomfort?

9% - done automatically without purpose?

7% - relationship between obsessions and compulsions is unclear

(N=395)
Relationship Between Obsessions and Compulsions

- Obsessional thoughts give rise to anxiety/distress
- Compulsions are performed to reduce this distress and/or to reduce the probability that disastrous consequences will occur
- Neutralizing is a cardinal feature of OCD
Subtype: With Poor Insight

Specify if: for most of the time during the current episode the person does not recognize that the obsessions and compulsions are excessive or unreasonable.
Dimensions of OCD

- Contamination / washing
- Harm & mistakes / checking
- Symmetry / ordering
- Hoarding
- Unacceptable thoughts (religious, sexual, harm) / mental rituals

- Much overlap between symptom presentations

Theories and Treatments of OCD

• Previously considered treatment-resistant
• Insight-oriented therapy rarely helps core symptoms
• Effective treatments have been derived from theoretical accounts of the disorder:
  – Cognitive-behavioral theories = cognitive and behavioral treatment techniques
  – Biological theories = serotonergic medication
Learning Theory View of OCD

- Obsessional stimuli evoke classically conditioned fear, anxiety, or distress
- Compulsions produce an immediate reduction in obsessional anxiety
- Compulsions are negatively reinforced by the immediate reduction of anxiety they engender
- The performance of compulsions prevents the extinction of obsessional anxiety
Behavioral Therapy for OCD Includes:

- Procedures that evoke obsessional anxiety
  - Exposure to obsessional cues (floors, driving)

- Procedures that eliminate the contingency between performing compulsions and anxiety reduction
  - Response prevention (refrain from washing or checking rituals)
Cognitive Model of OCD

- **Obsessions**
  - Intrusive unpleasant thoughts are universal
    - A thought about stabbing my child at dinner
  - “Obsessive beliefs” lead to misinterpretation of normal intrusions as anxiety-provoking
    - “Only bad people have bad thoughts”
    - “I am a bad person for thinking about this”

Rachman, 1997; Salkovskis, 1999
Cognitive Model of OCD

• Compulsions
  – Rituals and avoidance reduce obsessional fear
    • Avoidance of child, keep knives locked up
    • Asking for reassurances, checking, repetitive praying
  – Avoidance and rituals prevent the correction of obsessive beliefs and misinterpretations

Rachman, 1997; Salkovskis, 1999
Cognitive Therapy for OCD
Includes:

• Psychoeducation
  – Intrusive unpleasant thoughts are universal
  – How do avoidance and rituals maintain obsessions

• Cognitive restructuring
  – Identify and modify mistaken beliefs about intrusive thoughts

• Behavioral experiments
  – Test out new beliefs about obsessional thoughts
Pure Obsessions

• I have never seen a case of true “pure obsessions”

• If you assess carefully enough, you will find a mental ritual or neutralizing strategy if your diagnosis is right.

• May be very brief and covert
  – The patient may not be initially aware of it.

• If you believe you have found pure-o, consider the diagnosis of generalized anxiety disorder.
Responses to Obsessions: A “Functional Class” of Behaviors

• Patients often present with no overt rituals such as washing and checking
• However, covert rituals and other “neutralizing behaviors” are usually present
  – Avoidance of obsessional cues
  – Thought suppression
  – Mental compulsions (e.g., praying)
  – Concealment
  – Reassurance-seeking
Covert Neutralizing

• The purpose of neutralizing strategies, which are often covert, is to:
  – “Put matters right”
  – Reduce moral discomfort caused by a repugnant thought or impulse
  – Reduce the likelihood of the corresponding event
  – Reduce the effects of the event
Conceptualizing “Pure Obsessions”

- Anxiety-evoking phenomena (obsessions)
  - Unacceptable thoughts, ideas, images
  - Situations or stimuli that evoke obsessions

- Anxiety-reducing phenomena
  - Mental rituals (e.g., praying)
  - Neutralizing, suppressing
  - Avoidance

- “Pure obsessions” are not really *pure*
Cognitive-Behavioral Model of Obsessions

1. **Trigger**
2. **Thought**
3. **Appraisal** (importance)
4. **Neutralization**

The cycle starts with a trigger, leading to a thought, followed by appraisal, and finally neutralization.
Treatment Strategies for “Pure obsessions”

• Help the patient identify the ritual or neutralizing
  – Identify relationship with obsession
  – Identify cognitive basis
  – Treat it just like an overt compulsion

• Education about intrusive thoughts

• Cognitive therapy techniques

• Exposure with response prevention
Detailed Investigation of OCD Symptoms

- “Functional (behavioral) analysis”
- Using cognitive-behavioral framework
  - Triggers (internal & external)
  - Thoughts and beliefs
  - Neutralizing strategies
- Leads directly to the treatment plan
Assessing Obsessions (1)

• Situational triggers
  – What kinds of situations do you have to avoid?
  – What situations make you feel anxious?
  – What triggers the need to do your rituals?

• Intrusive thoughts
  – What thoughts, ideas, images, or impulses make you feel anxious or uncomfortable?
Assessing Obsessions (2)

- Feared consequences
  - What is the worst thing that would happen if you confronted this situation?
  - What might happen as a result of thinking this thought?
  - What would happen if you _____ without ritualizing?
  - Inquire about possible physical and emotional consequences (anxious forever)
Assessing Avoidance and Safety behaviors

• What situations and objects do you avoid?

• What do you do when you...
  – Cannot avoid these situations?
  – Have anxiety-evoking intrusive thoughts?

• Collect detailed information about all neutralization
  – Overt and covert

• How is neutralization linked to obsessions?
Psychoeducation

• Obsessional problems as a set of maladaptive patterns
  – Tendency to misinterpret normal “bad” thoughts
  – Use of certain maladaptive strategies to reduce distress
• Review of cognitive-behavioral model
• Normalizing obsessional thoughts
Cognitive Assessment of OCD

• Use of cognitive therapy techniques is linked to cognitive assessment
  – Obsessive Beliefs Questionnaire
  – Interpretations of Intrusions Inventory
  – Intolerance of Uncertainty Scale
  – Thought-Action Fusion Scale
  – Responsibility Attitudes Scale
Cognitive Restructuring for OCD

• **Purpose**: To modify dysfunctional beliefs and assumptions about intrusive obsessional thoughts

• **Do not**: Try to modify the obsession itself
  – treat it as a normal occurrence no matter how unacceptable
Cognitive Concepts in OCD

1. Over-importance of intrusive thoughts
2. Need to control intrusive thoughts
3. Overestimates of responsibility
4. Intolerance of uncertainty
5. Overestimates of threat
Over-importance of Intrusive Thoughts

- Having the thought means it’s important and it’s important because I think about it.
- Having the thought makes the outcome more likely.
- Having the thought and engaging in the action are morally equivalent.
“Because I have this Thought, it must be Important”

- Circular reasoning

thinking a thought is important → dwelling on it

further dwelling ← verifies the importance of the thought
Challenging Beliefs about the Importance of Thoughts

• Psychoeducation
  – Normalize the experience of intrusive senseless thoughts (sexual, sacrilegious, violent/aggressive)
  – Provide examples of your own
  – People develop obsessions about subjects that bother them the most because of an ambivalent sense of self
    • They fight intrusive thoughts that they worry might be indicative of something awful about themselves (sex, religion, violence)
Challenging Beliefs about the Importance of Thoughts

• Socratic questioning (exploration/clarification)
  – How many thoughts do you have each day?
  – Do you sometimes have unimportant thoughts?
  – How do you decide which thoughts are important?
  – What role does your emotional reaction to the thought play in this decision?

  • Identify emotional reasoning (“If I feel anxious, there must be danger”)
Challenging Beliefs about the Importance of Thoughts

• Double-standard technique
  – Explore contradictory thinking about themselves and others
  – Reverse patient and therapist roles
    • “What would you tell me if I was describing these kinds of thoughts?”
  – “Would you have the same attitude toward me (a friend, your parent, your rabbi, etc.) if they had similar thoughts?”
Challenging Beliefs about the Importance of Thoughts

• Continuum technique
  – Evaluate the belief that thinking about something bad is as serious as actually doing something bad (e.g., violence)
    • How dangerous are you (0-100%)? (patient usually gives a high score)
    • How dangerous is someone who kills their spouse?
    • How dangerous is Jeffrey Dahmer?
    • How dangerous is someone who hires a hit man to murder a family member?
    • Etc…
Challenging Beliefs about the Importance of Thoughts

- Experiment of alternating between letting thoughts ‘come and go’ vs. ‘fighting and dwelling’
- Patients record overall anxiety and frequency of intrusive thoughts
- Patients predict results of experiment prior to beginning
Experiment #1

- Take this baseball (paper weight, etc.)
- Think vividly about throwing it (at the floor, at a picture, through the window, at therapist)
- Cock your arm back like you’re ready to throw it…
- “Why didn’t you throw the ball?”
- Discuss the process of going from thoughts to actions and the implications for acting on thoughts of hurting others
Experiment #2

• Imagine/think about the most important person in your life

Write the following sentence:
Thought Action Fusion (TAF)

• **Likelihood-self** - because I’ve had the thought it’s more likely to happen to me

• **Likelihood-others** - because I’ve had the thought, it’s more likely to happen to others (e.g., MVA)

• **moral** – thinking the thought is as reprehensible as doing the corresponding action
Challenging Likelihood TAF

• Thought experiments
  – Purposely having a negative thought about something bad happening to somebody, yourself, or something

• Keep a list of “premonitions” and their actual outcomes

• Discuss biases in recall of premonitions
Challenging Misinterpretations of Intrusions

• Examine advantages and disadvantages of misinterpretations

• Consult an expert (Priest, Rabbi, Minister)
  – Only one well-planned consultation

• List qualities of a good and bad person
The Need to Control Thoughts

• The role of thought suppression and attention

Belief that I must be in control of my thoughts and emotions at all times

Further attempts to control thoughts

Not trying hard enough to control thoughts

Experiences a normal intrusive thought (IT), but appraises it as dangerous

Efforts are made to fight, control, suppress, distract, or neutralize the thought

Increased vigilance or attention

Notices more ITs

Further attempts to control thoughts

Not trying hard enough to control thoughts
Experiment #3

• For 30 seconds, think about anything in the world **EXCEPT** a white bear.

Tell me what happens…
Challenging the Need for Thought Control

• Psychoeducation
  – Thought suppression effect
  – Discuss how this is relevant to the patient’s obsessions
  – Discuss how need to control thoughts leads to anxiety and neutralizing responses
Challenging the Need for Thought Control

• Set up an experiment in which the patient alternates each day between suppression and acceptance of intrusive thoughts

• have patients make predictions ahead of time
Concealment of Obsessions

- Form of avoidance that serves to reinforce maladaptive appraisals of intrusive thoughts
  - Decreased opportunity to receive corrective information about the normalcy of intrusions
- Homework assignment to reveal thoughts to others
  - Note others’ responses
    - Horror and shock?
    - Threatened?
Overestimates of Responsibility

• Pie technique
  – Helps the patient to recognize
    • The various factors that could be responsible
    • A more realistic sense of his/her own responsibility

**Obsession:** “My medicine will accidentally drop on the floor of a public place and a child will pick up the pills, take them, and die.”
Overestimates of Responsibility

• Pie technique
  – List the possible factors (besides yourself) that could play a role in such a catastrophe (how would a detective think about this?)

  • Child him/herself
  • Parent/guardian (lack of supervision of the child)
  • Defective pill container
  • Bad luck (wrong place at wrong time)
Overestimates of Responsibility

• Pie technique
  – Rate the amount of responsibility attributable to each (must equal 100%)

  • Child him/herself (30%)
  • Parent/guardian (lack of supervision of the child) (40%)
  • Defective pill container (10%)
  • Bad luck (wrong place at wrong time) (20%)
Overestimates of Responsibility

- Pie technique
  - Create a pie graph of the various responsible factors
  - Discuss patient’s degree of responsibility relative to these other factors
Intolerance of Uncertainty

• Obsessional fear is driven by the need for 100% certainty
  – Neutralizing and avoidance strategies function to bring about a complete guarantee of safety

• Focus on possibility, rather than probability

• Obsessive doubts often focus on unanswerable issues
  – Will I go to heaven? Did I focus enough on my wedding vows?

• Aim is to help patients understand
  – Absolute certainty is more or less an illusion
  – Overcoming OCD means learning to tolerate acceptable levels of risk
Intolerance of Uncertainty

• Demonstration that uncertainty is ubiquitous
  – Identify a beloved person who is not in the room
    (parent, child, friend)
  – “Is ______ alive right now?”
    • Patient will usually answer “yes, of course” right away
  – How do you know for sure? (they don’t!)
  – Process how the patient arrived at this answer
    • It requires an acceptable level of uncertainty, just like managing obsessions
Intolerance of Uncertainty

• “Life savings wager” technique
  – If you had to bet your life savings that this obsession is true or not, where would you place your bet?
  – Why would you bet this way (past experience)?

• Help the person see that he/she takes this bet all the time—and is usually correct!

• This helps the person feel more comfortable with “guesses”
Intolerance of Uncertainty

- Advantages and disadvantages of trying to have 100% guarantees
- Socratic questioning
  - “When you’ve worried about this in the past, what has the outcome been? Do you have a good reason to suspect it will be different this time?”
  - “What would your friend say about needing to be certain about ______?”
Overestimates of Threat

• Probability technique
  – Ask: “What is the probability of _____”
  – Patient will often exaggerate the likelihood or severity of the feared outcome
  – Help the patient to examine evidence for his/her claim

- Probability of hitting someone with auto = 50%
- Probability of getting ADIS from a toilet = 30%
- Probability of becoming an Atheist = 70%
Overestimates of Threat (cont’d)

• What is the probability estimate based on?
  – Emotional reasoning? (If I am anxious, there must be danger)
  – **Severity** of the outcome? (independent of probability)
  – One or two observations? (recall bias)

• Process the basis of overestimates and help the patient arrive at more reasonable predictions

• **CAUTION**: Help the patient find new information, rather than using old material (reviewing rituals)
Setting Up the Treatment Plan

- Generate list of situations and thoughts for exposure
  - Realistically safe
  - Evoke obsessional distress and urges to ritualize
- Patient rates subjective units of discomfort (SUDS) for each situation or thought
- Collaborative effort in generating exposure hierarchy
  - Start with stimuli of moderate difficulty
  - Highest items must be included
Response Prevention

- **Rationale:** weaken the need for safety behaviors and neutralizing
- **Goal:** refrain from all avoidance and safety behavior
  - May have to start with partial RP
Exposure therapy is:

A set of techniques designed to help patients confront situations that elicit excessive or inappropriate fear and anxiety (a.k.a., flooding, systematic desensitization).
The Treatment of Fear

- Exposure to fear-eliciting stimuli or situations
- Prevention of avoidant behaviors
- Anxiety increases initially, followed by habituation
Effects of Repeated and Prolonged Exposure

Time (mins)

SUDS

Session 1
Session 2
Session 3
Session 4

- Session 1
- Session 2
- Session 3
- Session 4
Types of exposure

• Situational (in vivo)
  – Actual confrontation with situations and stimuli that provoke obsessions (examples)
    • Sit next to a relative who provokes incest obsessions
    • Attend a religious service (blasphemous thoughts)
    • Bathe the baby (thoughts of violence)

• Imagininal exposure
  – Confrontation with the distressing thoughts, ideas, images, impulses themselves
    • Think about incest
    • Think blasphemous thoughts or curse words
    • Think of drowning the baby
Why use Imaginal Exposure?

• Helps patients access experiences that cannot be confronted with situational exposure
  – Patient cannot experience eternal damnation, Hell, death of loved ones, or sexual misconduct through situational exposure
  – Helps patient to confront these fears
Why use Imaginal Exposure?

- Weakens connections between anxiety and obsessional thoughts/images
  - Repeated imagining decreases the negative affect
  - Does not change from distress to desire (e.g., homosexual thoughts or killing someone)
Why use Imaginal Exposure?

• Increases tolerance for anxiety
  – May elicit adaptive coping for negative emotion
    • Shows able to manage it and not fall apart
    • Acceptance
    • Reality testing
  – May generalize to other emotions
Why use Imaginal Exposure?

- Increases tolerance for uncertainty
  - Fears of long-term future consequences that cannot be detected immediately can be confronted (brain damage in 30 years)
  - Fears of not “knowing for sure” can be confronted (you don’t know whether someone repeated the dirty joke you told)
Why use Imaginal Exposure?

• Helps patients learn to confront instead of fight unpleasant intrusive thoughts
  – By purposely imagining distressing scenes, the individual learns he/she can handle anxiety
  – They may experience relief of symptoms after listening repeatedly, reinforcing the notion that exposure leads to habituation and symptom reduction
Why use Imaginal Exposure?

• Corrects mistaken beliefs about intrusive thoughts
  – Beliefs about the importance of thoughts
  – Beliefs about the need to control bad thoughts
  – Patient sees that just by allowing him/herself to think of bad things does not make them come true (death of others, sin, other horrible things)
  – Patients often state that the ideas that were first extremely distressing are no longer, and that the likelihood of the extreme negative outcomes is very low and/or that they can handle it
Why use Imaginal Exposure?

- Makes patient feel understood by the therapist
  - Patients sometimes state that they were surprised at how well the therapist understands what they are really going through
  - Patients feel like someone finally understands what is going on
Types of Imaginal Exposure

- **Primary**
  - Confrontation with unacceptable ideas, images, thoughts (e.g., blasphemous, sexual, violent)

- **Secondary**
  - Exposure to thoughts/doubts evoked by situational exposure (e.g., after situational exposure to being the last person to leave home)

- **Preliminary**
  - As an intermediate step to prepare for situational exposure (e.g., imagine touching the floor before actually touching the floor)
Choosing a Scene

• Evaluate the core fears- get specific:
  – “Go crazy” or “lose control” can mean many things
  – Include specifics (names, places, etc.)

• Try to get into the patient’s head to determine what he/she is afraid of
  – Most anxieties have a strange, but consistent logic to them; if you figure it out, you can help the story unfold

• Incorporate the **worst** thing that would happen if the patient no longer tries to prevent danger through rituals or neutralizing
Presenting the Rationale

• Helps the patient to engage in thoughts that have been avoided

• Avoidance maintains obsessional fear

• By repeatedly listening to feared experiences about yourself, you gain perspective and evaluate the probability and cost more logically

• Similar to watching scary movie 100 times- notice lots of details and get bored after a while
Using Imaginal Exposure: Basic Steps (1)

1. Identify the feared outcomes in a given situation(s)

2. Collaboratively create a script that evokes or exaggerates the most feared outcome

3. Record the script (audiotape, computer file)
   - The script could be recorded by the patient (using the first person, “I…”) or by the therapist (using the second person, “You…”)
   - The story is told in the present tense
Using Imaginal Exposure: Basic Steps (2)

4. Patient listens to the tape repeatedly (eyes closed, no distractions) for at least 45 min in session and for daily homework
   - Record anxiety ratings during each listening period
   - Record how beliefs about the scenario change between sessions
Imaginal Exposure: Some Tips

- Describe the scene with appropriate emotion
- Incorporate details that will increase vividness (e.g., use real names)
- Incorporate thoughts, physical feelings, and actions and their interplay
- Use the patient’s own language/descriptions
- Keep track of whether you think the patient is disengaging
- Use an endless loop tape
Imaginal Exposure: Things to Avoid

- Jokes
- Monotone
- Unimportant details
- Spending too much time on things not related to core fear (setup or scenario transition)
Who Should Record the Scene?

• Therapist:
  – Make sure to incorporate the patient’s core fear
  – Avoids discomfort of patent hearing own voice
  – Helps patient feel understood

• Patient:
  – Might be able to describe the scene more realistically
  – Hearing own voice may be more similar to thinking
  – Therapist can ask questions/guide patient through the scene
What to Expect

• Initial increase in anxiety, followed by leveling off and reduction with repeated listening

• For some, less decrease in anxiety, though a re-evaluation of the fear of ultimate consequences

• Some patients may report no change in anxiety, but appear more at ease

• Increased willingness to engage in exposure

• Enhanced compliance with dropping rituals, neutralizing strategies, and avoidance behaviors
Example of Imaginal Exposure (postpartum obsessions)

“You are taking Emily for a walk and you have to cross a busy street. As you’re waiting for the light to turn so you can cross, the thought of pushing Emily’s stroller into traffic comes to mind. You decide to go with the thought and not push it out of your mind this time. You feel afraid of losing control. Then, all of a sudden, you can’t stop yourself… You push the stroller into the busy street and hear breaks screeching. You watch in horror as the stroller is hit by one car, then another, and another. Emily’s little body is thrown out onto the street. You imagine what your husband will say when he learns that you’ve killed the baby…”
Example of Imaginal Exposure (“hit and run” driving obsession)

“I was driving through campus and lots of students were crossing the street. They all think they are invincible, so they dart out into traffic thinking the cars will just stop for them. One woman darted out in front of me and then stopped and started back to her side of the street. I hit my breaks but I have doubts about whether I might have hit her- she was very close to my car. I was listening to the radio so I might not have been paying enough attention to the road. What if I didn’t notice when the car hit her? I feel the urge to go back and check to make sure. She could be injured or dead on the side of the road and it would be my fault. There were lots of other people there, so they might have taken down my license plates. It’s probably just a matter of time before the police show up at my door and arrest me for leaving the scene of an accident…”
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