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What do therapists and clients do during exposures for OCD? Introduction to the special issue on theory-based exposure process

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ABSTRACT

Cognitive behavioral therapy (CBT) is the empirically supported psychotherapy of choice for obsessive-compulsive disorder (OCD). Exposure, which involves intentionally confronting a feared stimulus, is presumed to be a core procedural ingredient of CBT for OCD. Unfortunately, existing treatment manuals give little guidance about optimal exposure process in terms of proscribed and prescribed therapist and client behaviors. The current article discusses the importance of exposure process in terms of improving our understanding of CBT mechanisms and variable outcomes, as well as to dissemination and training efforts. A hypothetical case example is presented and will be used in subsequent articles to discuss exposure process from several CBT-based theoretical models.

1. Introduction

Decades of research have shown that cognitive behavioral therapy (CBT) is the empirically supported psychotherapy of choice for obsessive compulsive disorder (OCD) in both adults and children (Freeman et al., 2014; Ponniah, Magiati, & Hollon, 2013). A presumed core procedural ingredient in this treatment is exposure, in which a feared or aversive stimulus related to obsessional content is intentionally confronted, and compulsions and other escape or avoidance behaviors are withheld. This procedure of exposure is thought to activate critical treatment mechanisms necessary for therapeutic change.

Despite recognition of exposure as a core component of OCD treatment, existing treatment manuals give very little guidance about exposure process. By "exposure process", we refer to therapist and client behaviors and interactions that occur during an in-session exposure. Most of our manuals simply indicate *when* to do an exposure but give very little guidance about *how* to implement an optimal exposure task in session, including how the clinician selects and starts an exposure, what the clinician and client do and say during exposures, and how the clinician goes about ending an exposure. This is a critical gap in the CBT literature in terms of clinical practice and training that leaves wide room for variability in CBT delivery (Polman, Bouman, van Hout, de Jong, & den Boer, 2010).

2. A variety of CBT-based theories: implications for exposure process

There is no unified or universally agreed upon CBT model of exposure to date (Carey, 2011). Rather, several theoretical variants have emerged from the same CBT primordial soup of basic behavioral and cognitive learning principles. Each of these models incorporates exposure into treatment delivery, but each model carries unique implications for exposure process. In the current special issue series, the topic of exposure process in OCD treatment is examined from the perspective of four CBT-based theoretical models: the habituation model, inhibitory learning model, cognitive model, and acceptance and commitment therapy (ACT) model. These models were selected given their prominence in the field, existing research base, and utilization of exposure as a key procedure to facilitate therapeutic learning and change. We also sought to build upon a prior case-based (Twohig & Whittal, 2009) series of papers that examined the application of whole CBT-based packages for treatment of OCD (cognitive therapy, Chosak, Marques, Fama, Renaud, & Wilhelm, 2009; exposure and response prevention, Himle & Franklin, 2009; ACT, Twohig, 2009).

The primary goal of this series of papers is to begin what we hope is a longer, hypothesis-generating, empirically-informed discussion in the literature about exposure process. This special issue was conceived as an initial first step aimed at more clearly linking theory with in-session therapist and client behaviors presumed to reflect "optimal exposure." The reason for including several CBT-based theoretical models is to help illuminate differences – and similarities – between different theoretical models of

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exposure process. Thus, the intent is not to create a sense of competition or reinforce boundaries between theories, but rather to spur further discussion and research into the relationship between exposure process and mechanism of change. As we know, different variants of CBT theory often share more ideas and theory-based techniques than do not, as all are grounded in behavioral and cognitive principles (Grayson, 2013). Identifying "trans-theoretical" ideas and techniques may be important in understanding the mechanisms by which exposures can best help those suffering from OCD.

3. Why theory-based exposure process is important in OCD treatment

The topic of exposure process in OCD treatment is important to clinical practice, research, and teaching for several reasons. First, exposure process may be linked to variable outcomes in CBT for OCD. It is clear that some with OCD benefit from CBT while others do not, but the reasons for this variability are poorly understood. Efforts to predict treatment response have generally focused on global client and therapist characteristics. A few client characteristics have been identified as moderators of outcome (e.g., Garcia et al., 2010; Olatunji, Davis, Powers, & Smits, 2013), and there is some indication that therapist alliance predicts better outcome in OCD treatment (Keeley, Geffken, Ricketts, McNamara, & Storch, 2011). However, some data suggest that variable outcome may be at least in part attributable to variable therapy delivery, even when the same manual is used across clinicians (Pediatric OCD Treatment Study Team, 2004). It is quite likely that exposure process – how therapists and clients engage in the most important but least explicated part of the manual – is closely tied to treatment successes and failures. If we can better define the exposure processes linked to desired therapeutic change, we may be able to produce that change more reliably in the future (Carey, 2011).

Second, close and systematic examination of exposure process may help illuminate our understanding of mechanism of change in CBT for OCD and how it can best be activated. Mechanism refers to the process or events responsible for therapeutic change (Kazdin, 2009). While researchers generally agree that the procedure of exposure activates therapeutic change, the precise mechanism by which exposure changes OCD symptoms, and how to activate this mechanism most effectively, remains debatable. Furthermore, discussion of this topic often occurs at the level of theory, making it difficult to extrapolate *how* to conduct exposure (i.e., prescribed and proscribed therapist and client behaviors). Examining exposure process may help indentify therapist and client behaviors most closely associated with therapeutic change, which may lead to better understanding of treatment mechanism, treatment enhancement or simplification (Kazdin, 2009), optimization of treatment dose and delivery method, and improved understanding of flexible therapy delivery when treatment is not proceeding as expected (Carey, 2011).

Third, exposure process is critical for dissemination and training: therapists need to know *how* to conduct optimal exposure. Importantly, this knowledge is not likely to arise from a cookbook explication of exposure, but rather from a theory-based understanding that fosters "flexibility within fidelity" (Kendall, Gosch, Furr, & Sood, 2008). As stated by Carey (2011, p. 239), "It is imperative to understand the function of exposure and the principles underlying it rather than simply focusing on its technical features and applying it in a procedural sense." Unfortunately, to date treatment experts have largely written about exposure theory without clear linkage to concrete, theory-based therapist behaviors that can be applied in session. Delineating these behaviors more clearly will likely help with CBT dissemination efforts.

The potential benefit of theory-based process research is not unique to exposure therapy. In fact, process research focused directly on theory-based therapist and client in-session behavior has yielded important insights in other areas of psychotherapy. The Motivational Interviewing (MI; Rollnick & Miller, 1995) literature is arguably the best example of this type of process research to date. When MI was initially developed (for treatment of substance use), specific in-session therapist and client behaviors were hypothesized to lead to improvement in client behavior out of session (e.g., substance use behaviors). Manuals then operationalized these behaviors and contrasted them with behaviors associated with other theoretical models (e.g., Miller, Zweben, DiClemente, & Rychtarik, 1995). Measures were developed to assess the frequency and timing of these behaviors in-session, including self-report therapist and client measures and direct observation coding systems. Recent reviews and meta-analyses have in turn confirmed that MI-consistent therapist and client behaviors in-session are predictive of client outcomes (Apodaca & Longabaugh, 2009). Application of similar theory-based process methodology has begun to shed light onto cognitive-behavioral treatment mechanisms (e.g., Busch et al., 2009; Montano-Fidalgo, Ruiz, Calero-Elvira, & Frojan-Parga, 2014), an approach that may be beneficial in exposure therapy research.

4. Clinical case example

Below, we present a case example describing OCD symptoms. Each subsequent paper in the special series uses this clinical example to describe the theoretical model as it relates specifically to exposure process. Contributors use the case example to describe, in a step-by-step fashion, what happens during an "optimal exposure" in terms of clinician and client behaviors. Note that the case is a hypothetical example derived from the collective experience of the authors.

4.1. Demographic information

Monica is a 17-year old female who lives with her biological parents in a mid-sized North American city. She has one older sibling who moved 3 years ago to attend college in another state. She is a senior in high school and earns average grades. She has no history of developmental or cognitive delays or academic accommodations. Monica reported that she plans to attend a local college after graduation and study history. Monica identifies having a close group of friends, and her extracurricular activities include playing for her school basketball team and taking piano lessons. She denied substance use. Monica was referred to psychological treatment for OCD by her pediatrician. She has no prior history of psychotherapy or psychotropic medication.

4.2. OCD symptoms

Monica endorsed a significant fear of developing cancer or a neurological disorder if she is exposed to chemicals in foods or cleaning products. Monica recalled that she first learned about links between chemicals and these diseases in a biology class two years ago. She began researching the topic on the internet and became increasingly more preoccupied with this fear over time.

When asked to identify specific feared "chemicals," Monica reported concern about pesticides used in food production and "unnatural" ingredients in household and personal cleaning products (e.g., bathroom cleaners with bleach, face wash or hand lotion not labeled "organic" or "natural"). Monica said she worries that repeated exposure to these chemicals could result in her eventually developing a serious or deadly illness, "like breast cancer, a brain tumor, or Parkinson's." She noted particular

concern that she might develop such illness "in my 20s or 30s" and subsequently be unable to live an independent and fulfilling life.

Monica identified several associated compulsions. To ensure that she does not eat pesticides, Monica only eats foods that are labeled organic or "all natural." She refuses to eat organic food if it touches non-organic food or is prepared in the same cookware for fear that pesticides will spread. Monica avoids contact with "unnatural" household and personal cleaning or grooming products, including cleaners, soaps, lotions, makeup, and toothpaste. She insists that she and her family only use products that are labeled as containing "natural" ingredients. She refuses to use products with packaging that contains any warning labels (e.g., "toxic," "may cause skin irritation") and carries preferred products with her (e.g., brings own soap to school). Monica also avoids touching objects or other people who may have just been exposed to such products for fear that chemicals will be inhaled or absorbed through her skin. Monica noted that she continues to spend a considerable amount of time reading about the toxicity of products on the internet.

Monica exhibited some insight into her symptoms. She acknowledged that her obsessions may not be completely accurate, saying that many people are exposed to chemicals and do not develop serious illnesses. She noted that she "prefers to play it safe" even though compulsions are time-consuming and effortful. Monica's parents endorsed OCD-related accommodation, saying that they purchase products and prepare foods specific to Monica's liking, even though it is a burden on their time and finances. When they have tried withholding accommodation in the past, Monica has become very distressed, argumentative, and refused to eat. They noted that they are able to manage Monica's needs but worry about her ability to be healthy and independent when she transitions to college.

The evaluation indicated a diagnosis of OCD. Monica did not meet criteria for any other psychiatric diagnosis but reported some social and academic difficulties secondary to OCD. For example, Monica reported that she has difficulty spending time with friends if activities involve potential contamination (e.g., eating out, sleepovers). Monica said she has also had a hard time dating because of both contamination fears and concern that she will be rejected for "being weird." Academically, Monica sometimes struggles to complete her assignments because of the amount of time consumed by rituals, especially researching on the internet. She noted that she wishes she could live in the college dormitory next year but is not sure she will be able to because of OCD.

During the initial evaluation, Monica was asked to identify specific tasks that would be challenging for her given her OCD symptoms. Tasks rated as mildly anxiety provoking included (a) touching organic food, (b) eating organic food that has touched non-organic food, and (c) touching objects cleaned with "unnatural cleaner." Moderately anxiety provoking tasks included (a) eating packaged food without a label, (b) eating fresh fruit/vegetables without a label, (c) smelling "unnatural" cleaning or grooming products, and (d) using "unnatural" soap or body wash. Highly anxiety provoking tasks included (a) eating non-organic packaged food or produce, (b) eating food at a fast food restaurant, (c) using "unnatural" lotion, toothpaste, or makeup, and (d) cleaning with "unnatural cleaner."

5. Content of the special section

The papers that follow in the special section will utilize Monica's case to discuss exposure principles and process from the perspective of four CBT-based theoretical models. In the first paper on the habituation/behavioral model, Drs. Benito and Walther discuss the role of habituation in exposure process and describe the use of individually tailored functional analysis to facilitate habituation during exposure. Next, Drs. Arch and Abramowitz outline an inhibitory learning approach to exposure for OCD and describe techniques for enhancing extinction learning during exposure. Dr. Berman and colleagues then detail the cognitive model for conducting exposures ("behavioral experiments"), focusing on how exposure can be used to modify maladaptive beliefs in OCD. In the next paper on ACT and exposure, Dr. Twohig and colleagues illustrate the use of exposure to increase Monica's willingness to experience OCD-related experiences such as intrusive thoughts, anxiety, and uncertainty. In the final paper, Dr. Himle compares and contrasts these four approaches and discusses the implications of these papers for clinical practice and future research.

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