The Role of Anxiety Sensitivity in Obsessive-Compulsive Disorder Treatment Outcome

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Abstract

Anxiety Sensitivity (AS) is the fear of bodily sensations related to anxiety due to beliefs that these sensations are harmful (Reiss, Peterson, Gursky, & McNally, 1986). While considerable research attention has focused on the link between AS and panic disorder, less research has examined AS in OCD. Calamari and colleagues (2004) found that AS was significantly associated with OCD severity, even after controlling for cognitive risk factors. The present study examined changes in AS over the course of treatment in 337 individuals with an OCD diagnosis and Y-BOCS-SR score of 16 or higher. Multiple regression analysis demonstrated that all variables significantly decreased from admission to discharge. Adding the ASI change over treatment to the multiple regression increased variance accounted for significantly, suggesting that changes in AS may play an important role in the treatment of OCD, and that targeting AS may be beneficial. Limitations and future directions are discussed.

Introduction

Anxiety Sensitivity (AS) is defined as the fear of bodily sensations related to anxiety due to beliefs that these sensations are harmful (Reiss, Peterson, Gursky, & McNally, 1986). While considerable research attention has focused on the link between high levels of AS and panic disorder (e.g., McNally, 2002), less research has been conducted examining the role of AS in OCD. Support for a link between AS and OCD includes findings that AS, as measured by the Anxiety Sensitivity Index (ASI) (Reiss, Peterson, Gursky, & McNally, 1986) or the Anxiety Sensitivity Index – Revised (ASI-R; Taylor & Cox, 1998), is elevated in individuals with OCD compared to nonclinical controls (Deacon & Abramowitz, 2006; Taylor, Koch, & McNally, 1992). Individuals with OCD may also have elevated AS in some areas (i.e., physical concerns, mental dyscontrol) compared to individuals with non-panic disorder anxiety diagnoses (Zinbarg, Barlow, & Brown, 1997). Recently, Calamari, Rector, Woodard, and Chik (2008) examined AS in an OCD sample and found that AS was significantly associated with OCD symptom severity, even after controlling for other cognitive risk factors. They suggested that future studies investigate the potential mediating role of AS over the course of treatment. Therefore, the present study sought to examine changes in AS over the course of treatment in individuals with a diagnosis of OCD and a Yale-Brown Obsessive-Compulsive Scale Severity Rating. Self Report (Y-BOCS-SR; Baer, Brown-Beasley, Sorce, & Henriques, 1993) score of 16 or higher.

Methods

Participants included 320 adults between the ages of 18 and 70 (M = 31.33, SD = 12.15; females = 168, 52.5%). All participants had a primary diagnosis of OCD established by a psychiatrist who specializes in anxiety disorder diagnosis and treatment and had a Y-BOCS-SR score of 16 or higher. Comorbidity was common, with 71.6% of participants having at least one additional diagnosis and 34.7% having at least two additional diagnoses. Of note, only 11 participants (3.4%) of the sample had a diagnosis of Panic Disorder (PD) in addition to OCD.

Treatment

The majority of patients (n = 265, 82.6%) were in a residential treatment center (RTC), with the remaining 55 (17.2%) in an intensive outpatient program (IOP). Participants admitted between May, 28, 2001 and October 25, 2011 and had an average length of stay of 62.02 days (SD = 32.39, range = 6 - 231), with participants in the RTC program having an average length of stay of 63.48 days (SD = 32.16, range = 8 - 231) and participants in the IOP program having an average length of stay of 31.43 sessions (SD = 18.37, range = 3.43 - 81.14 sessions). Treatment in both programs primarily consisted of exposure and response prevention (ERP), with cognitive restructuring and medication management. Of note, participants were not excluded based on acquired dosage of treatment; therefore, the data presented includes individuals who terminated treatment prematurely.

Measures

Y-BOCS-SR (Baer, Brown-Beasley, Sorce, & Henriques, 1993). The Y-BOCS-SR consists of 10 items rated from 0 to 4 for a total score ranging from 0 to 40, with higher scores representing greater OCD symptom severity. Baer and colleagues (1993) found that scores on the self-report Y-BOCS-SR highly correlate with the interview version, and that the Y-BOCS-SR has acceptable internal consistency within OCD samples and has acceptable test-retest reliability.

ASI (Reiss, Peterson, Gursky, & McNally, 1986). The ASI is a 16 item self-report checklist measuring anxiety sensitivity severity. Items are rated from 0-4, with total scores ranging from 0-64, higher scores indicate greater anxiety sensitivity.

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21 item measure of severity of depressive symptoms. Items are rated from 0-4, with total scores ranging from 0-63. Higher scores indicate greater depression severity.

Results

Participants with a comorbid PD diagnosis had significantly higher admission ASI scores (M = 34.27, SD = 13.86) than those with a PD diagnosis (M = 26.20, SD = 12.45), t(318) = 2.115, p = .035. There were no significant differences in all other variables at admission or discharge based on the presence of a comorbid PD diagnosis. The mean ASI score in our sample (26.45, SD = 12.51) is in line with ASI scores reported in other OCD samples (Calamari et al., 2004; Calamari et al., 2008; Taylor et al., 1992).

In order to examine changes over the course of treatment, residual gain scores (RG) were calculated, which corrects for problems in using raw change scores (see Steketee & Chambless, 1992). Then, we examined whether the ASI-RG or BDI-II RG significantly interacted with the type of program (RTC or IOP) in predicting Y-BOCS-SR RG in order to determine whether data could be collapsed across programs or would need to be analyzed separately. This interaction was not significant; therefore, data were collapsed across programs for all subsequent analyses.

Initial examination of the data using paired-samples t-tests revealed that scores on the ASI, BDI-II, and Y-BOCS-SR significantly decreased from admission to discharge, indicating less severe symptom severity.

In order to more fully examine these relationships, multiple regression analysis was conducted with the BDI-II RG entered in Step 1 to control for depressive symptoms, and the ASI RG entered in Step 2. Adding the ASI RG increased variance accounted for from 8.6% to 34.6% for 2001, which was a significant change, F (1, 316) = 29.55, p < .001. Results indicated that, controlling for changes in BDI-II scores, changes in ASI scores over the course of treatment significantly predicted changes in Y-BOCS-SR scores. Results from the final step of the regression equation are presented below:

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<th>BDI-II RG</th>
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<td>M</td>
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<td>SD</td>
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Conclusions

These results suggest that changes in AS over the course of treatment may play an important role in OCD symptom severity reduction. In addition to exposure and response prevention treatment, targeting AS through interoceptive exposures and thought challenging regarding the meaning of aversive physical sensations may be beneficial in the treatment of OCD.

References