

Introduction

Obsessive compulsive Disorder (OCD) is the fourth most common psychiatric illness. Despite significant pharmacologic and cognitive-behavior (CBT) treatment advances in recent decades, OCD symptoms frequently persist. Intensive Residential Treatment (IRT) has been demonstrated as an effective treatment for severe, refractory OCD. However, the durability of this effect and relapse rates following discharge have not previously been studied.

Methods

Consecutive IRT subjects were ascertained over a 12 month period (female N=26, male N=35). Psychometric measures were completed at admission and discharge from the McLean/MGH OCD Institute IRT, including the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Beck Depression Inventory (BDI), and the Work and Social Adjustment Scale (WSA)(N=61). These measures were repeated at one (N=57), three (N=42) and six months (N=36) following discharge via telephone interviews. This study was IRB approved. Descriptive and comparative analyses were conducted via SPSS Version 15 to determine relapse rates. Relapse was conservatively defined by a higher OCD severity score in more than one half of follow-up assessments. Characteristics of subject relapsers versus non-relapsers and of dropouts versus completers were statistically compared.

Table 1: Characteristics of total study sample, relapser and non-relapser groups

	Total Percentage (Frequency)	Non-Relapsers Percentage (Frequency)	Relapsers Percentage (Frequency)
Gender (% Male)	57.4% (N=35)	55.2% (N=16)	59.4% (N=19)
Living Alone	12.3% (N=7)	0% (N=0)*	23.3% (N=7)*
Living With Spouse or Partner	47.1% (N=24)	34.5% (N=10)	25.0% (N=8)
Receiving Treatment for OCD	88.5% (N=46)	92.0% (N=23)	85.2% (N=23)
CoMorbidity Illnesses	62.5% (N=30)	81.0% (N=17)**	48.1% (N=13)**
Physical Health Problems	23.9% (N=11)	22.7% (N=5)	25.0% (N=6)

Statistically significant difference via Fisher's Exact Test: *p<0.011; **p=0.034



Long-term Outcome Following Intensive Residential Treatment (IRT) of Obsessive Compulsive Disorder

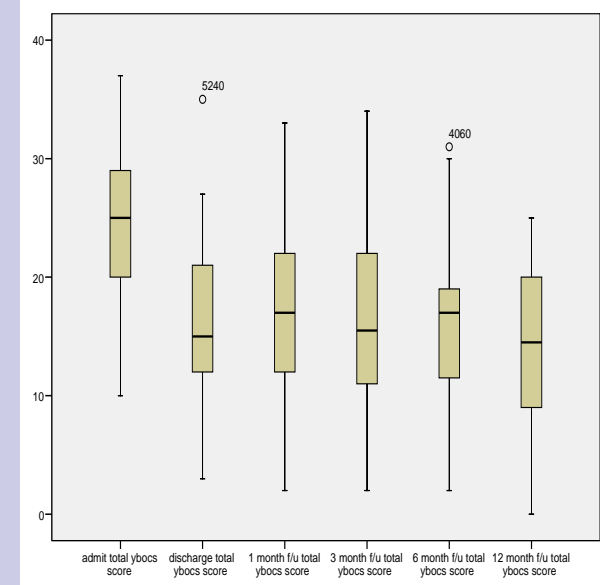


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Results

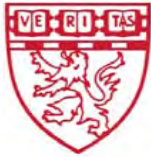
OCD mean severity did not significantly worsen from discharge to the one (17.4, SD 6.5), three (16.5, SD 7.4) or six month (16.2, SD 7.3) follow-up (p>0.24). Furthermore, the significant improvement from admission was maintained at each of the one (17.4, SD 6.5), three (16.5, SD 7.4) and six month (16.2, SD 7.3) follow-up time points (p<0.001). The percentage of subjects with follow-up OCD severity that remained improved versus at admission was 89.5% (51/57) at one month, 88.1% (37/42) at three months and 97.2% (35/36) at six months follow-up. Relapsers were significantly more likely to be living alone following discharge, and were less likely to have comorbid illnesses. BDI scores remained significantly improved at all follow-up time points compared to admission (P<0.02). Limitations of the study included low power and moderate dropout rates. However, there were no significant differences found between dropouts and completers with regards to YBOCS scores (P>0.47).

Figure 1: OCD Severity at admission, discharge, and follow-up points



Conclusion

In the first OCD IRT long-term follow-up study to date, findings have indicated that mean treatment gains were maintained at one, three, and six months post-discharge. Improvement of depression severity from admission was also maintained. Predictors of conservatively defined relapse include living alone after discharge and absence of comorbid illnesses. These predictors may have important implications for future discharge planning and warrant further confirmatory study.



**Memantine Augmentation in Severe Obsessive-Compulsive Disorder:
A Single-Blinded Case-Control Study**

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Background

Obsessive-Compulsive Disorder (OCD) is a common debilitating psychiatric illness that frequently improves, but does not remit, with first-line medication and behavioral treatments. Serotonergic agents including SSRIs and clomipramine provide the mainstay of OCD medication management. Combined dopamine/ serotonergic agents such as atypical antipsychotics are presently the only OCD augmenting strategies proven effective via randomized controlled trials. Despite increasing evidence for a pathogenic role of glutamate in OCD, no controlled trials of glutamatergic augmenting agents have been reported.

Methods

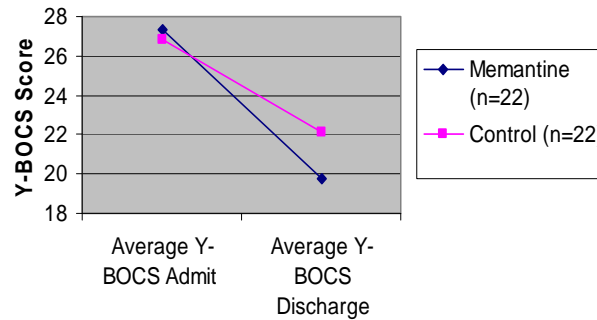
The intent-to-treat sample included 44 subjects receiving standard treatment at the McLean/ MGH Intensive Residential Treatment (IRT) program, 22 of whom also received memantine augmentation. Admission, monthly and discharge measures of OCD, depression and psychosocial functioning were collected by raters blinded to augmentation status. Matched controls were selected based upon gender, initial OCD severity and psychosocial functioning, and timing of admission. Descriptive and comparative analyses were conducted via SPSS, statistical significance was defined at $p < 0.05$, clinically significant response was defined by a 25% reduction, and 'marked response' was defined by a 50% improvement in Yale-Brown Obsessive Compulsive severity (Y-BOCS) scores, using a last-observation-carried-forward approach. The Clinical Global Improvement (CGI) scale captured global clinical change.

Results

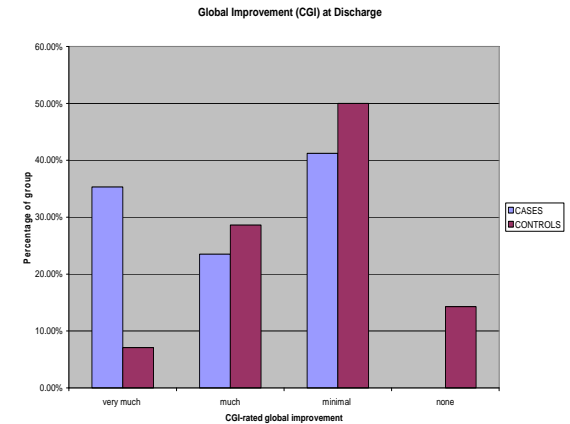
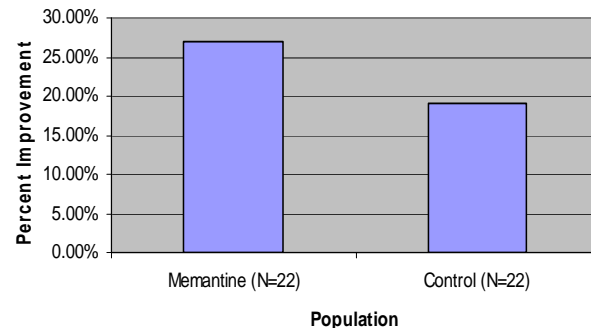
Mean Y-BOCS score decreases were 7.2 (SD 6.4) among cases and 4.6 (SD 5.9) among matched controls, reflecting clinical improvement among cases (mean 27.0% decrease) but not controls (mean 16.5% decrease). Mean depression severity score decreases were 5.8 (SD 9.5) among cases and 4.7 (SD 9.9) among controls. No discontinuations or

serious adverse effects were reported among cases. Intrusive obsessions were significantly more severe among 'marked responders' to memantine (4.4 versus 2.9, $t = 2.15$, $p = 0.048$).

**Y-BOCS Score at Admission and Discharge,
Memantine -vs- Control**



**Percent Improvement on Y-BOCS
Memantine -vs- Control**



Discussion

Results from this study suggest that memantine is an effective augmenting agent in a severely ill, comorbid OCD population receiving standard IRT. This finding supports previous smaller open-label trials and case reports suggesting its efficacy. This study examines 'real life' effectiveness of memantine as an augmenting agent with standard IRT in severely ill, comorbid OCD patients, rather than studying its efficacy among a comorbidity-free population. Its subjects are not typical of those included in double-blind randomized placebo controlled trials (DBRCT), but it is likely that its results are more generalizable to patients with severe OCD, which rarely occurs without comorbidity (Geller et al 2003). It is noteworthy that although the mean Y-BOCS score decrease represented clinically significant improvement, only 36.4% (N=8) of cases were responders. This suggests that glutamatergic agents may preferentially act on as-of-yet undefined OCD 'subtypes'. From a research perspective, this study provides a further line of preliminary evidence implicating the glutamatergic pathway as a potential target in OCD treatment.

Conclusions

This single-blinded, matched case-control study of standard IRT with versus without memantine in a severe OCD sample demonstrates promise for this augmenting agent that suggests specificity for OCD amelioration. Moreover, this work provides yet another line of converging evidence pointing to a pathophysiologic role for glutamate in OCD. The use of memantine and identification of OCD treatment response predictors for use by clinicians warrants further rigorous study.



Is Depression Taxonic, Dimensional, or Both? A Replication Study with a Severe OCD Sample



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Introduction

Previous research has shown that depression is both taxonic (i.e., categorical) and dimensional, such that:

1. **Distress**, represented by depressive thoughts and feelings, lies on a continuum
2. **Somatic** manifestation of depression is taxonic

In the present research, we examined the question of taxonicity in depression in a sample of patients with severe OCD.

Method

Taxometric methods (Meehl, 1995; Waller & Meehl, 1998) were used for the analyses to test between categorical and dimensional models.

- Indicators of **Distress** (e.g., hopelessness about the future, guilt): Items 2, 4, 6, 8, 9, 12, 13, 15 from the Beck Depression Inventory
- Indicators of **Somatic Disturbance** (reflecting disruption in homeostatic mechanisms, e.g., appetite and sleep disturbance): Items 12, 16, 18, 19, 20, 21 from the Beck Depression Inventory

NATAX v. 4.55 (Amir, 2002) software was used to conduct taxometric analyses.

Participants

N = 312 patients (56% male*) from McLean OCDI

	Mean	SD
AGE	33.0	12.2
BDI	25.1	11.3
YBOCS*	27.9	7.0

*Indicates missing data

Results

Preliminary results of MAXCOV (Maximum Covariance) analyses show that the structure of depression is similar in the severe OCD sample:

1. **Distress** (e.g., hopelessness about the future, guilt) is on a continuum:



2. **Somatic Disturbance** (e.g., appetite and sleep disturbance) is taxonic, with a base rate of 28% in the severe OCD sample:



Discussion

This methodology requires that several independent procedures, e.g.,

- MAXCOV (Maximum Covariance)
- MAXEIG (Maximum Covariance using Eigenvalues)
- MAMBAC (Mean Above Minus Below a Cut)

yield convergent evidence for a categorical or dimensional model. Thus, additional taxometric analyses need to be conducted in order to confirm these preliminary findings.

Conclusion

Preliminary evidence suggests that the structure of depression in the severe OCD sample is as predicted: Distress lies on a continuum whereas the somatic manifestation of depression is taxonic.

In future research, it may be possible to find differential predictors and treatment responses for distress vs. disruption of homeostasis in depression in OCD.

Poster presented at the 15th Annual Obsessive Compulsive Foundation Conference, Aug, 2008. For more information, please contact jelias@mclean.harvard.edu

Method: This study involved 142 individuals admitted to the Massachusetts General Hospital/McLean OCD Institute (OCDI) between January 2000 and January 2004 and examined the relationship between patients' motivation and treatment effectiveness for individuals receiving intensive treatment for severe OCD. Measures of OCD severity, depression severity, and motivation for treatment were administered at admission, interim, and discharge points.

Results: Preliminary results indicate that motivation for treatment is significantly related to post-treatment OCD symptom severity, in that patients who are more extrinsically motivated tend to exhibit higher symptom severity scores at the conclusion of treatment. Clinical implications of these findings and future directions in treatment motivation research with OCD patients are discussed.

Introduction

Research findings have identified exposure and response prevention (ERP) as the gold standard of treatment for obsessive-compulsive disorder (OCD). However, many patients who could benefit from this treatment do not do so because of either a reluctance to enter therapy, a tendency to drop out prematurely, or a failure to comply with the treatment regimen. Recently, researchers have begun identifying factors associated with premature termination and poor treatment response. One variable that has yet to be studied as a predictor of outcome is motivation to change. Given that behavioral therapy for OCD is associated with substantial discomfort and requires active participation, it is reasonable to assume that motivation significantly influences Tx response.

Methods

The intent-to-treat population comprises 142 OCDI participants between 2000 and 2004. Participants completed measures at regularly scheduled intervals during the course of treatment. Measures assessed a variety of domains including OCD symptom severity, motivation for OCD treatment, motivational orientation, and depressive symptom severity. These measures included: (1) a demographic questionnaire (2) *Yale-Brown Obsessive Compulsive Scale (Y-BOCS)*, (3) *Treatment Self-Regulation Questionnaire (TSRQ)*, and the (4) *Beck Depression Inventory (BDI)*. Measures were administered as a means of monitoring the clients progress during his or her stay at the OCDI. Descriptive analyses, and hierarchical linear regression analyses are conducted. In each of the regression analyses, length of treatment, initial OCD symptom severity, and initial depressive symptom severity were entered in as control variables. SPSS 11.5 software was used to analyze the data.



The Role of Motivation to Change in the Treatment of Refractory Obsessive-Compulsive Disorder

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Results

The sample consisted of 142 participants who were 58.5% male and 34.2 years old (mean; SD 12.3; range 16-68), with OCD onset at 15.9 years (mean; SD 9.8; range 3-65). Treatment length was 52.9 days (mean; SD 31; ranging 1-152). Hierarchical regression analyses were conducted with Y-BOCS at admission and length of Tx entered at step one, BDI entered at step two, and the key predictor variable (type of motivation) entered at step three. Scores on the Y-BOCS at discharge served as the outcome variable.

Table 1: Intercorrelations for Study Variables (N = 142)

Variables	1	2	3	4	5	6	7
1. Y-BOCS at admission	—	.412***	.288***	-.069	-.296***	.514***	-.139*
2. Y-BOCS at discharge		—	-.239**	-.043	-.275***	-.324***	-.139*
3. TSRQ score			—	-.394***	.814***	-.203*	-.162*
4. Intrinsic motivation				—	-.125	-.013	-.053
5. Extrinsic motivation					—	.130	-.184*
6. BDI at admission						—	-.061
7. Length of Treatment							—

Note. *p < .05. **p < .01. ***p < .001. †p < .10

Table 2: Hierarchical Regression Analysis for Intrinsic Motivation Predicting OCD Treatment Outcome.

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Y-BOCS at admission	.437	.085	.401***	.351	.098	.322***	.349	.098	.321***
Length of Treatment	.019	.017	.083	.019	.017	.085	.019	.017	.084
BDI score at admission				.097	.056	.153†	.097	.056	.154†
Intrinsic motivation							.075	.403	.014
R ²	.177***			.194***			.194***		
F for change in R ²	14.936***			2.953†			0.34		

Note: Y-BOCS at admission, BDI score at admission and intrinsic motivation were centered at their means.

Note. *p < .05. **p < .01. ***p < .001. †p < .10

Table 3: Hierarchical Regression Analysis for Extrinsic Motivation Predicting OCD Treatment Outcome.

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Y-BOCS at admission	.437	.085	.401***	.351	.098	.322***	.349	.098	.321***
Length of Treatment	.019	.017	.083	.019	.017	.085	.014	.017	.061
BDI score at admission				.097	.056	.153†	.100	.056	.158†
Extrinsic motivation							1.243	.613	.162*
R ²	.177***			.194***			.218		
F for change in R ²	14.936***			2.953†			4.110*		

Note: Y-BOCS at admission, BDI score at admission and intrinsic motivation were centered at their means.

Note. *p < .05. **p < .01. ***p < .001. †p < .10

Results (cont.)

Results indicate that extrinsic motivation scores predict Y-BOCS scores at discharge over and above baseline levels of depression and OCD symptom severity (Table 3), whereas intrinsic motivation scores were not significantly predictive (Table 2). Furthermore, results indicate that higher extrinsic motivation at the beginning of treatment is associated with higher OCD symptom severity at discharge.

Discussion

In the first study examining the role of motivational orientation in OCD treatment outcome, findings indicate that levels of extrinsic motivation may play a significant role in OCD treatment response. That is to say, patients who are more externally motivated (attending Tx more at the behest of others) may have poorer outcomes. These initial findings warrant further investigation and may have important clinical implications. Future OCD treatment interventions may benefit from conducting initial assessments aimed at ascertaining the patient's overall motivation for change and motivational orientation (intrinsic vs. extrinsic). Given the results of this study, gathering information on one's motivation for treatment may be helpful in developing more effective treatment interventions. Limitations of this study include the absence of a control group and the dependence on patient ratings. Future controlled studies could be designed to address these validity issues.

Conclusion

Results of this study indicate that motivation for treatment may play a significant role in treatment response. More specifically, extrinsic motivation appears to be a significant predictor of OCD treatment outcome. More research is needed to explore the complex interplay between motivation and OCD treatment response.

Introduction

In treating mild to extreme OCD severity, guilt appears to negatively impact treatment outcome and recovery. Over time, successful outcomes are compromised when guilt is not directly addressed and often results in relapse. Guilt has been intermittently cited by OCD investigators as important, but no clinical protocols have been devised to effectively treat it. It is hypothesized that treatment developed to specifically address state/trait guilt will yield improved outcomes. In order to learn what attention this topic has been given across psychological and theological disciplines, a review of the body of literature was conducted.

Methods

An iterative literature search was conducted from 12/07-04/08 using psychological, medical, and theological databases. PubMed yielded 24 citations from 1973-present, PsychInfo yielded 140 articles from 1930-present, Journal Storage (JSTOR) yielded 66, Academic One File yielded 9, and American Theological Library Association (ATLA) Religious database yielded 1. References from each manuscript were used to identify additional manuscripts. Key search words included guilt, OCD, subjective, normal, healthy, unhealthy, excessive, pathological, existential, moral, excessive, obsessive, state, trait, and conscience. Three relevant theological dissertations were also obtained through JSTOR. All identified studies were summarized to evaluate differential perceptions and recommendations regarding this construct across clinical and pastoral settings. The quality and limitations of each study were examined.

Results

Relevant articles were selected from initial database search results. This included 10 from PubMed, five from PsychNet, seven from Academic OneFile, and one from both JSTOR and ATLA. These included a commentary, a brief communication, case studies, dissertations, and empirical studies. Several of these articles overlapped such that the total number of identified papers focusing specifically on guilt and OCD was 14. Among these, ten were clinical research studies, two were neuroimaging studies, one was a case series and one was a review paper. Sources, citations, samples sizes, measures, and results for each of these studies are summarized in Table 1.

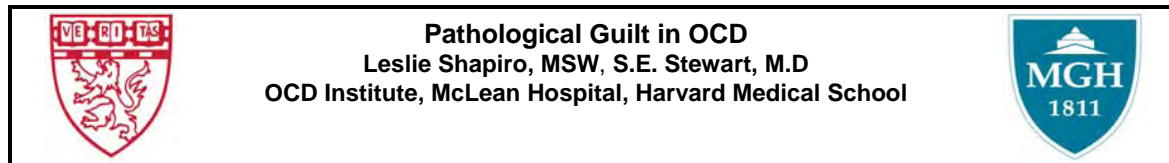


Table 1

Author	Sample Size (N)	Sample Type	Measures	Findings Summary
Gangemi ¹ (2007)	N=120	Undergrads, postgrads	GI/S&T	Threat perception associated with: 1) Trait guilt 2) State guilt in high trait
Mancini ² (2007)	N=104	Undergrads	GI/T&S; ST-NJREQ; PI; PI-R	Trait Guilt: 1) Increases NJREs 2) Associated with NJRE and OC-sx
Nissenson ³ (2006)	N=299	Undergrads	GI/T&S; VOCI; OBQ; DASS	Perceived responsibility: 1) Inflated by state and trait guilt 2) Unchanged by psychoeducation
Mancini ⁴ (2004)	n/a	Review	n/a	Guilt-inflated responsibility: maintains OCD
Takahashi ⁵ (2004)	N=19	Nonclinical	fMRI Vetrbal suggestions	Guilt/embarassment associated with: 1) ↑ Medial Prefrontal Cortex, 2) ↑ L Post Sup Temporal Sulcus, 3) ↑ Visual Cortical activity
Mancini ⁶ (2003)	N=47	Nonclinical	Object location, memory task	OC-like behavior in normals: ↑ by fear of state guilt
Schechter ⁷ (1999)	N=281	Lay/ Religious Leaders	TOSCA; SQ2; ISS; BDI; IELCS; STAI; STAEI; RIS; PCBS; AUIEROS	Guilt/ shame proneness: associated with religion
Shin ⁸ (2000)	N=8	Nonclinical males	PET; scripted imagery	Guilt ↑ regional CBF: in 3 paralimbic regions
Savoie ⁹ (1996)	N=9	OC pts	Interview	15 guilt/ OCD themes described
Shafraan ¹⁰ (1996)	N=60	OC pts Healthy controls	GI/ S&T ; BDI BAI ; MOCI	OCD > controls: ↑ trait and state guilt Trait guilt predicted: obsessiveness
Tallis ¹¹ (1994)	N=2	OC pts	n/a	Life events triggered: Obsessive responsibility Guilt, TAF
Steketee, ¹² (1991)	N=57	OC pts Anxiety pts	PSQ ; MOCI ; CAC ; BDI ; STAI; FNE	OCD severity correlates with: most guilt measures
Niler ¹³ (1989)	N=76	Undergrads	STAI; BDI ; PGI; ITIS	Perceived guilt best predictor of: intrusive thoughts and impulses
Otterbacher ¹⁴ (1973)	N=233	Undergrads	PGI	State and Trait Guilt measure: 1) Good reliability.....

Discussion

Three central observations emerged from this literature review on the role of guilt in OCD: 1) in nonclinical samples guilt leads to OC-like symptoms including increased threat perception, NJRE's, over-responsibility and intrusive thoughts/ impulses; 2) in nonclinical neuroimaging samples (ref), state guilt leads to brain activation in regions proximal to OCD-affected regions; and 3) in OCD samples, common guilt themes are present (Savoie, 1996). Moreover, guilt is increased versus in controls, guilt plays a larger role than responsibility, guilt-related life events worsen obsessiveness and increased guilt is associated with OCD severity. A practical, validated measure was also identified that differentiates state and trait guilt for use in non-clinical and OCD samples.

Conclusion

Results of this review support the importance of guilt in OCD. Despite this importance, relatively few studies have been published on this topic. Creation of effective treatment strategies targeting this overlooked and confounding OCD factor is warranted. Addition of a guilt category to the Y-BOCS would allow explicit and routine assessment of this component.



Retrieval Induced Forgetting in Compulsive Checkers



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MGH/McLean Hospital OCD Institute

Introduction

Retrieval-induced forgetting (RIF; Anderson et al., 1994) may allow one to recall information efficiently and with greater certainty by “suppressing” related, but unimportant, information.

This may be what allows one to feel more certain after double checking or mentally reviewing something.

We hypothesized that compulsive checkers would exhibit a lack of RIF, consistent with reports of reduced memory confidence in these individuals even after checking.

Method

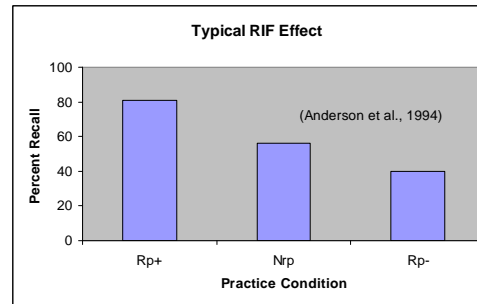
Participants studied word pairs consisting of a category label paired with an exemplar of the category. Word pairs were either:

- Neutral: Fruit - Apple
- Checking threat: Appliances – Spark
- Checking non-threat: Appliances – Mixer

Half the words from half the categories were practiced a second time, creating three practice conditions:

- Rp+ : Practiced words from practiced categories
- Rp- : Unpracticed words from practiced categories
- Nrp : Unpracticed words from unpracticed categories

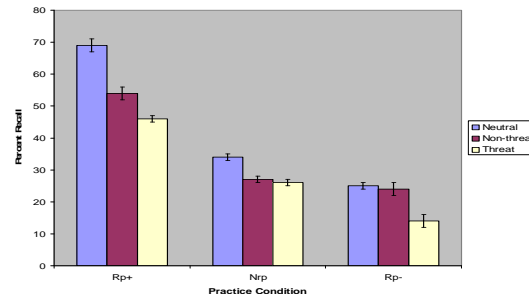
*Rp- and Nrp receive the same amount of practice



Participants

	Checkers (n=39)		Non-anxious Controls (n=46)	
	Mean	SD	Mean	SD
AGE	19.0	0.8	19.9	4.3
BDI	13.2	10.1	2.0	1.7
MOCI	17.2	3.0	4.1	2.0
MOCI-Ck	5.0	1.0	0.4	0.5

Results



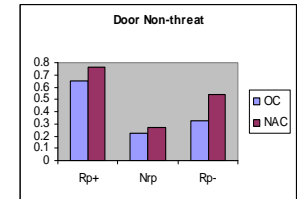
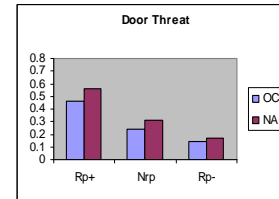
Discussion

No group interaction with RIF effect

No RIF effect for non-threatening checking words

Checkers exhibited lower recall rates overall

Stimuli may be inadequate to test hypothesis



Conclusion

Preliminary evidence suggests that compulsive checkers do exhibit retrieval induced forgetting for lexical stimuli.

This study is currently being replicated in a clinical sample.

Future versions of this task should include ecologically valid stimuli, including in vivo learning and memory tests.

Poster presented at the 15th Annual Obsessive Compulsive Foundation Conference, Aug, 2008. For more information, please contact jelias@mclean.harvard.edu

Introduction

OCD is a debilitating illness that affects males and females with nearly equal frequency. Previous research demonstrated female gender to be predictive of improved treatment response to Intensive Residential Treatment for severe OCD. However, the role of gender as a treatment mediator has not been fully explored. It was hypothesized that confounding factors previously associated with treatment resistance would explain males' decreased OCD improvement; specifically that males would have increased rates of hoarding, depression severity, tics, and comorbidities.

Methods

The study population comprised 205 consecutive male (58%) and 149 female (42%) subjects receiving treatment at the MGH/McLean Hospital OCD Institute. Admission, discharge, and monthly psychometric measures included the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Beck Depression Inventory (BDI), and Work and Social Adjustment Scale (WSA). Additional admission measures included the Y-BOCS symptom checklist, MGH hair-pulling scale (HPS) and the Body Dysmorphic Disorder Questionnaire (BDDQ).

Results

Admission Y-BOCS, BDI, and WSA scores did not significantly differ by gender ($p > 0.07$). Males were less likely to have current contamination obsessions ($t = -2.3, p = 0.02$), symmetry obsessions ($t = -2.1, p = 0.04$) or hoarding compulsions ($t = -2.5, p = 0.02$). Male BDDQ and HPS scores were lower ($t = -3.6, p = 0.001$; $t = -4.0, p < 0.001$, respectively). No gender differences existed in depression improvement ($t = -1.8, p = 0.07$) or tic history ($\chi^2 = 3.6, p = 0.06$).



Gender as a Mediator of Intensive Residential Outcome in Obsessive-Compulsive Disorder



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	Males	Females	Test Statistic
Depression Severity (BDI)	24.3 (SD=11.8)	25.2 (SD=11.0)	$t = -0.62, p = 0.53$
Married/Partner	17.2% (N=35)	25.4% (N=36)	$\chi^2 = 3.45, p = 0.06$
Tics	67.1% (N=104)	56.2% (N=68)	$\chi^2 = 3.44, p = 0.06$
PTSD Score	38 (SD=28.9)	35.0 (SD=27.5)	$t = 0.66, p = 0.51$
HPS	1.16 (SD=3.7)	5.3 (SD=8.3)	$t = -4.1, p < 0.01$
PGI	2.45 (SD=1.15)	2.21 (SD=0.89)	$t = 1.90, p = 0.059$
% Change YBOCS Obsessions	21.5% (SD=25.5)	36.3% (SD=25.9)	$t = -4.0, p < 0.01$
% Change YBOCS Compulsions	23.8% (SD=30.5)	33.8% (SD=27.1)	$t = -2.4, p = 0.018$
% Decrease WSA	17.7% (SD=35.3)	27.3% (SD=40.3)	$t = -2.2, p = 0.028$

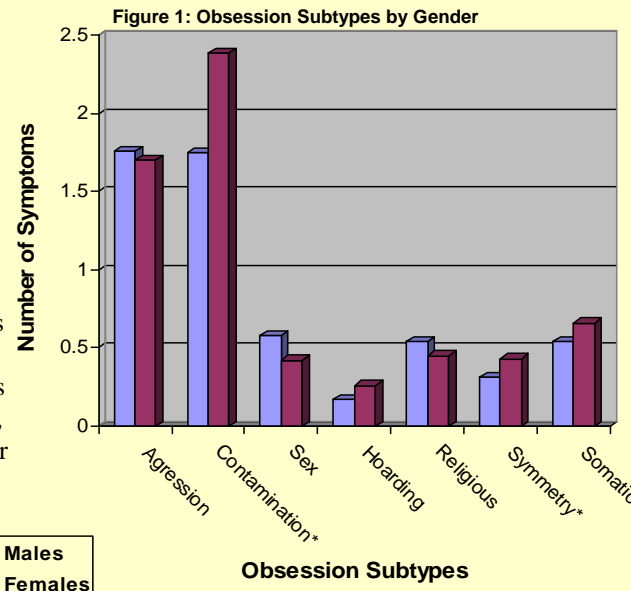


Table 1: Characteristics of Total Study Sample

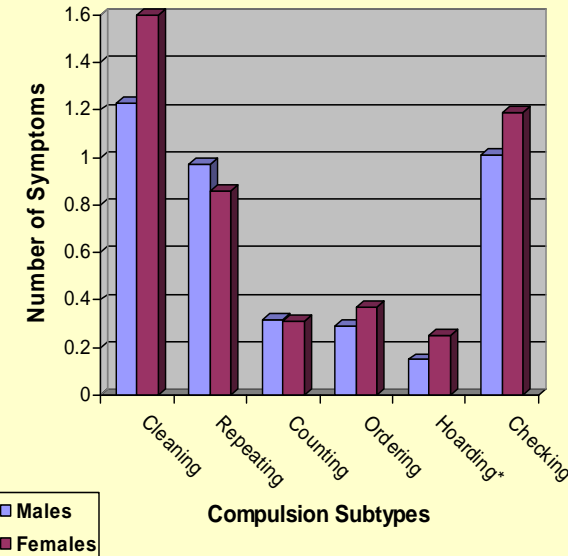


Figure 2: Compulsion Subtypes by Gender

Conclusion

Contrasting with initial hypotheses, the lesser OCD improvement among males could not be explained by the presence of confounding factors including increased hoarding, tics, depression, or other examined comorbidity frequencies. Although depression rates were not higher among males, the fact that they were equal is of note given the female predominance of this disorder in the general population. Further study of the relationship between gender and OCD treatment response is warranted.

Abstract

Introduction: The autogenous and reactive model of obsessions was investigated in a sample of patients with treatment-refractory OCD. **Method:** The sample consisted of 139 adult patients who received residential treatment at McLean Hospital. Obsession subtyping was derived from the Obsessive Compulsive Checklist Rating Scale. **Results:** Confirmatory factor analysis using structural equation modeling indicated that a two-factor model (putatively representing autogenous and reactive obsessions) demonstrated adequate overall fit and was superior to a modestly fitting one-factor model. **Conclusion:** Evidence for the autogenous and reactive model of obsessions was replicated in this treatment-refractory OCD sample. Implications for treatment and research are discussed.

Introduction

Recent cognitive research on the nature of OCD has attempted to define subtypes using symptom or cognitive dimensions¹. One cognitive model of OCD suggests that obsessions fall on a continuum between two cognitive subtypes (i.e., autogenous and reactive obsessions)². Autogenous obsessions result in primary distress from the negative experience of the thought itself, not the perceived consequence of the thought. With reactive obsessions, the distress is less focused on the experience of the obsession and more focused on the perceived consequences of the obsession. Support for autogenous and reactive obsessions has been demonstrated in samples with and without OCD, but no studies have attempted to replicate this model in a severe, treatment-refractory OCD sample.

Methods

The sample consisted of 139 adult treatment-refractory patients who required intensive residential treatment at Massachusetts General Hospital/McLean Hospital's OCD Institute between 1997 and 2003 (60.5% male; 85.8% Caucasian; M age = 32.7, SD = 12.3, range = 16-76). At treatment admission, OCD severity was determined with the self-report Yale-Brown Obsessive-Compulsive Scale (YBOCS) Severity Rating, which has demonstrated adequate psychometric properties³. Obsessions were measured with the Obsessive Compulsive Checklist Rating Scales (OCCRS), a recently developed dimensional variant of the YBOCS Symptom Checklist⁴. Based on previous research⁵, obsessional themes were bifurcated into a two-factor model. This two-factor model was compared to a model with a single obsession factor. The minimal missing data were estimated using Maximum Likelihood techniques.



Autogenous and Reactive Obsessions in Treatment-Refractory OCD

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Results

At treatment admission, participants scored in the severe range of OCD severity (YBOCS Severity M = 26.39, SD = 6.29). Model fit was evaluated using the following criteria: a non-significant X^2 , relative ratio (RR, X^2/df) ≤ 2 , root mean square error of approximation (RMSEA) $< .08$, and a comparative fit index (CFI) $\geq .90$ ⁶. The one-factor model demonstrated modest fit: X^2 (14, N = 139) = 32.22, p < .01; RR = 2.23; RMSEA = .09; CFI = .77. The two-factor model demonstrated adequate and superior fit: X^2 (13, N = 139) = 20.94, p = .074; RR = 1.61; RMSEA = .067; CFI = .90.

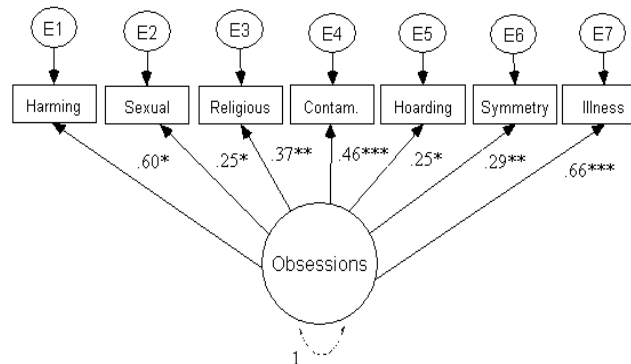


Figure 1: Results of one-factor model of obsessions

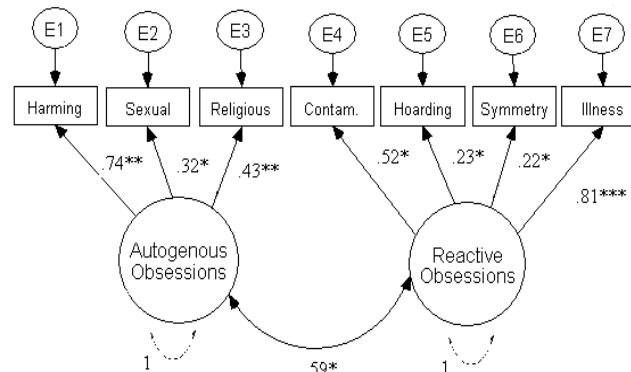


Figure 2: Results of two-factor model of obsessions

Table 1: Descriptive statistics for and correlations among observed variables in the models

Obsession Theme	$M(SD)$	1.	2.	3.	4.	5.	6.	7.
1. Harming	5.21(3.92)	1						
2. Sexual	1.93(3.25)	.21 ^a	1					
3. Religious	3.22(3.84)	.31 ^c	.29 ^c	1				
4. Contamination	4.60(4.11)	.21 ^a	.02	.09	1			
5. Hoarding	3.01(3.68)	.13	-.05	.08	.04	1		
6. Symmetry	4.69(3.99)	.22 ^b	.06	.12	.10	.28 ^c	1	
7. Illness	3.12(3.78)	.39 ^d	.11	.16	.44 ^d	.18 ^a	.12	1

Note. N = 139. ^a $p \leq .05$; ^b $p \leq .01$; ^c $p \leq .001$; ^d $p \leq .0001$

Discussion

Relative to a one-factor model, the two-factor model demonstrated superior fit, providing support for the autogenous and reactive model of obsessions. A limitation of the current study was the absence of standardized diagnostic interviews to confirm OCD diagnoses and comorbid conditions. However, the sample reported severe OCD symptoms and was recruited from a highly specialized OCD treatment site. Another limitation was the sample size, which precluded the investigation of models with more than two factors. Future research with larger samples might benefit from evaluating models with more than two cognitive subtype factors. Notwithstanding these limitations, the current study supports the growing evidence for autogenous and reactive cognitive subtypes of OCD.

Conclusion

Evidence for the autogenous and reactive model of obsessions was replicated in this treatment-refractory OCD sample. Evidence for consistent obsessional subtypes across severity groups supports their future research use. Their homogeneity may improve specificity of treatment approaches, as some recent research suggests differential treatment effectiveness based on patients' presentation (i.e., autogenous vs. reactive)⁷. Additional research is needed to explore the nature and treatment implications of these two obsessional subtypes.

Introduction

OCD has several comorbidities, including Post-Traumatic Stress Disorder. No studies have been done that examine the frequency of PTSD in a severe OCD population. We sought out to examine the symptom characteristics of severe OCD patients with and without comorbid PTSD. In Body Dysmorphic Disorder and Trichotillomania comorbidity groups the OCD populations had distinct symptom profiles. This exploratory study systematically examines prevalence and clinical correlates of PTSD comorbidity in an inpatient Obsessive-Compulsive Disorder (OCD) population.

Methods

Consecutive patients from an OCD Intensive Residential Treatment program were included (N=153). Clinician-rated and patient-rated measures were administered at baseline and repeated at discharge. The prevalence and characteristics of PTSD were determined and clinical characteristics were statistically compared between groups with (N=38) and without (N=115) comorbid PTSD. The symptom categories of patients with comorbid PTSD and OCD were examined. Descriptive analysis was performed using SPSS and the groups with and without PTSD were compared using chi-square and t-tests. Frequencies of specific PTSD symptoms were determined.

Results

The prevalence of PTSD among OCD patients was 22.5% (N=38). Regarding specific symptoms, 47.4% (N=18) of those with PTSD 'almost always' had upsetting memories of their trauma, 73.7% (N=28) felt that their future plans or hopes would not come true, 47.4% (N=18) had difficulty concentrating, 39.5% (N=15) had insomnia, and 47.4% (N=18) had irritability (Table 1). Those with PTSD were more likely to have past psychiatric hospitalizations (83.8% versus 50.9%; chi-square 12.4, $p < 0.001$), and less likely to report current alcohol use (23.7% versus 42.2%; chi-square=4.13, $p = 0.042$) than those with OCD alone (Table 2). Those with PTSD had greater severity of harm obsessions ($t = -3.38$, $p = 0.001$), superstitious obsessions ($t = -2.17$, $p = 0.035$), checking compulsions ($t = -2.13$, $p = 0.035$), and mental rituals ($t = -2.35$, $p = 0.022$). There were no group differences with respect to demographics, onset, family history, OCD or depression severity, reported illicit drug use, marital status, employment status, tics, or WSA, nor was there a significant difference in OCD treatment response ($p \geq 0.17$).



OCD with and without comorbid Post-Traumatic Stress Disorder (PTSD)

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Table 1:
YBOCS Outcomes for Treatment Length Subgroups

Symptoms Related to the event	Specific Frequency				
	N/A	Not at all / once	Weekly or less	2-4/week /half the time	5 +/week /almost always
Thoughts/images	28.4% (48)	27.8% (47)	13.6% (23)	11.2% (19)	18.9% (32)
Bad dreams	33.1% (56)	39.6% (67)	15.4% (26)	6.5% (11)	5.3% (9)
Reliving	30.2% (51)	38.5% (65)	15.4% (26)	8.9% (15)	7.1% (12)
Emotionally upset	24.3% (41)	20.1% (34)	25.4% (43)	14.8% (25)	15.4% (26)
Physical reaction	32.5% (54)	36.1% (60)	13.9% (23)	7.2% (12)	10.2% (17)
Trying to forget	28.5% (47)	33.3% (55)	11.5% (19)	12.7% (21)	13.9% (23)
Trying to avoid	32.5% (54)	33.7% (56)	6.0% (10)	10.2% (17)	17.5% (29)
Amnesia	38.3% (62)	43.2% (70)	8.6% (14)	5.6% (9)	4.3% (7)
Less interested	29.1% (48)	33.3% (55)	7.9% (13)	12.7% (21)	17.0% (28)
Feeling distant	28.5% (47)	32.7% (54)	6.1% (10)	12.1% (20)	20.6% (34)
Numbness	31.1% (51)	32.9% (54)	9.8% (16)	11.6% (19)	14.6% (24)
Hopelessness	29.1% (48)	29.1% (48)	7.9% (13)	6.7% (11)	27.3% (45)
Insomnia	27.3% (45)	34.5% (57)	13.3% (22)	7.9% (13)	17.0% (28)
Irritability	27.3% (45)	26.7% (44)	18.8% (31)	13.3% (22)	13.9% (23)
Poor concentration	26.8% (44)	29.9% (49)	5.5% (9)	17.7% (29)	20.1% (33)
Overly alert	32.1% (53)	40.0% (66)	6.1% (10)	7.9% (13)	13.9% (23)
Easily started	26.1% (43)	39.4% (65)	13.9% (23)	9.7% (16)	10.9% (18)

Table 2:
OCDI Admission and Discharge ^a Severity Scores

	OCD + PTSD ^a (N=38)	OCD - PTSD ^a (N=115)	Test statistic (p)
DEMOGRAPHICS			
Age in years (SD)	32.05 (10.8)	33.83 (13.1)	0.83 (0.41)
OCD Onset (SD)	16.02 (8.9)	15.77 (9.3)	-0.128 (0.90)
Percent female (N)	48.6% (18)	43.0% (49)	0.363 (0.55)
OCD admit severity ^b (SD)	25.58 (7.73)	25.90 (6.32)	0.232 (0.82)
OCD discharge severity ^b (SD)	18.87 (6.7)	15.84 (7.3)	-1.58 (.130)
COMORBIDITIES			
Current alcohol use (N)	23.7% (9)	76.3% (29)	4.13 (0.042)
Depression severity ^c (SD)	22.55 (11.60)	20.12 (10.25)	-1.08 (0.28)
Past admissions (N)	83.8% (31)	16.2% (6)	12.39 (<0.001)
Obsessions of harm (SD) ^d	6.86 (2.86)	4.51 (3.90)	-3.94 (<0.001)
Superstitious obsessions (SD) ^d	3.38 (4.19)	1.75 (3.2)	-2.17 (0.035)
Checking compulsions (SD) ^d	7.19 (3.0)	5.64 (4.0)	-2.45 (0.016)
Mental rituals (SD) ^d	6.51 (4.1)	4.69 (4.1)	-2.35 (0.022)

Conclusion

In this severe OCD sample, PTSD presented approximately three times more frequently than in the general population (6.8%). As has also been the case when severe OCD with comorbid BDD and hair pulling were examined, there were many significant differences in characteristics between the OCD groups with and without PTSD. There were specific symptom characteristics in the PTSD group versus OCD without PTSD. Of interest, comorbid cases are distinct across these comorbidities. This topic warrants further study.