

# Thought Suppression and the Bizarreness of Intrusive Thoughts

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## Background

Contemporary cognitive-behavioral theories assume that patients develop OCD because they catastrophically misinterpret and then try to suppress ordinary intrusive thoughts (Rachman, 1997, 1998; OCCWG, 1997, 2005; Salkovskis, 1985). The catastrophic misinterpretations of their thoughts are believed to escalate ordinary intrusive thoughts into clinical obsession. According to these theories, the content of obsessional thoughts in patients with OCD is quite ordinary and similar to that of ordinary intrusive thoughts.

Rachman's theory suggests that people with OCD perceive their thoughts as bizarre, and therefore try to suppress them. Paradoxically, this suppression may increase the frequency of such thoughts as well as make them more distressing.

## Research Questions

The thought suppression paradigm is often used to test cognitive theories of OCD. Considerable evidence for the cognitive theory of OCD has been found with thought suppression studies although the findings have been mixed (Abramowitz, Tolin, & Sreet, 2001). However, no study to date has directly manipulated the *perceived bizarreness* of thought content to see how it affects the frequency of intrusive thoughts due to instructed thought suppression.

Cognitive theory assumes that a person with OCD must engage in monitoring of bizarre intrusive thoughts before the person can identify and suppress them (Wegner, 1989). Yet it is conceivable that just the monitoring of bizarre thoughts without suppression may increase intrusive thoughts. Monitoring of bizarre thoughts can prime other thoughts that are also perceived as bizarre. However, no study to date has examined if monitoring for bizarreness alone can affect the frequency.

Cognitive theory has also assumed that the content of abnormal clinical obsessions is similar to normal intrusive thoughts (Rachman & DeSilva, 1978). The crucial factor is believed to be the misinterpretation. Nonetheless, the content of normal and abnormal obsessions can actually be discriminated at beyond chance levels. This suggests that at least some of the obsessional thoughts of OCD patients have more abnormal or bizarre content (Rassin, Cougle & Muris, 2007; Rassin & Muris, 2006). However, no study as yet has examined the effects of suppression on the bizarreness of thought content.

## Hypotheses

**Hypothesis 1:** Suppressing bizarre content (*don't think bizarre thoughts about x*) will produce more intrusions than will traditional suppression (*don't think about x*).

**Hypothesis 2:** Monitoring for bizarre thought content will produce more intrusions than will traditional suppression.

**Hypothesis 3:** Suppression instructions will have an impact on the actual bizarreness of thought content, as well as frequency of thoughts.

## Method

### Participants and Procedures

Two hundred forty seven college student participants (74.5% female) were told that the study dealt with processes in the flow of consciousness. Participants range from 18 to 52 years old ( $M=20.44$ ,  $SD=4.165$ ). The sample was 48.2% Caucasian, 20.6% Asian, 11.4% African-American, 9.8% Hispanic, and 9.7% other.

## Method (continued)

### Procedures

Participants were randomly assigned to one of four conditions after being told to imagine a scene in nature of a frog:

1. No suppression: Instructed to have any thought that came to mind.
2. Standard Suppression: Instructed to try to not think any thoughts at all about frogs. They were also asked to engage in the same thought recording procedures.
3. Suppression of Bizarre Thoughts: Instructed to try to not think about any bizarre thoughts about frogs.
4. Monitoring-of-bizarre thoughts Instructed that it was ok to have any thoughts at all, including bizarre thoughts ("just keep an eye out for bizarre thoughts"), but to closely monitor such thoughts.

All groups were asked to check a box each instance that a thought about frogs came to mind that was "realistic," and another box each instance that a thought came to mind that was "bizarre," strange, illogical, or unrealistic." They also were asked to write down an example of each of these types of thoughts they might have if they came to mind. In the next interval after this one, all participants were given the instructions in the "No Suppression" condition, and asked to record any thoughts about frogs that came to mind. After each interval, participants assessed their effort in attempting to resist or suppress the target thoughts from their mind.

## Analyses and Results:

To determine the effect of the suppression conditions on the frequency of intrusive thoughts, a repeated measures ANOVA was conducted on the numbers of intrusive thoughts the participants checked off during the suppression and post-suppression phases. Suppression condition and Gender were the between-subjects factors and Time Interval (suppression, rebound) and Type of Intrusion (realistic or bizarre) were the repeated measures factors. This repeated ANOVA produced a significant Suppression Condition X Time Interval X Gender interaction,  $F(3,211)=3.611$ ,  $p<.014$ .

As displayed in Figure 1, male participants reported the highest number of intrusive thoughts during the Suppression interval in the Suppression-of-Bizarre-Thoughts and Monitoring-of-Bizarre thoughts groups ( $M$ 's =2.63, 2.3 respectively), with the Suppression and No Suppress groups showing the least intrusive thoughts ( $M$ 's = 1.39, 1.12, respectively). For female participants, the pattern was quite different. They tended to report the most intrusive thoughts in the standard Suppression group ( $M=1.82$ ) and fewer intrusive thoughts in the Suppression-of-Bizarre thoughts and Monitoring-of-Bizarre thought groups ( $M$ 's= 1.5, 1.44 respectively).

To determine the effect of the conditions on the content of intrusive thoughts, an ANOVA was conducted on the ratings of a blind team of coders of the "bizarreness" or "strangeness" of intrusive thought samples provided by participants. In the case of the coding data, a significant ANOVA,  $F(3, 115)=3.31$ ,  $p<.02$  on the content of the "realistic thought" sample during the suppression interval. This indicated that the most bizarre content was exhibited in the standard suppression condition. That is, participants in this condition had the highest bizarre content ratings.

**Table 1: Frequency and Bizarreness of Intrusive Thoughts**

	Suppression		Rebound	
	Frequency	Bizarreness	Frequency	Bizarreness
Suppression-of-bizarre thoughts	2.25	1.48	.94	4.60
Standard suppression	2.37	1.89	.96	4.90
No suppression	1.85	1.70	.86	5.32
Monitoring-of-bizarre thoughts	2.00	1.56	1.18	4.80

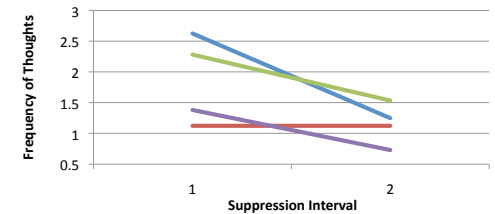
## Discussion

The suppression-of-bizarre thoughts and monitoring-of-bizarre thoughts conditions were found to produce the greatest number of intrusive thoughts during the suppression interval, particularly for males. These findings are generally in accord with cognitive theories but further highlight the importance of the perceived bizarreness of intrusive content in thought suppression.

The present intriguing findings imply that thought suppression in individuals with OCD can under some conditions cause them to produce intrusive thoughts that are even more bizarre and peculiar as judged by outside judges.

The study is limited by the fact that it is an analogue study on a non-clinical population. However, results reflect the need to give greater attention to the perceived and actual bizarreness of thought content in thought suppression and OCD.

**Figure 1: Condition X Time for Males**



**Figure 2: Condition X Time for Females**

