The Development of the Beliefs about Losing Control Inventory (BALCI)

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Abstract

Several domains of maladaptive beliefs have been shown to play a role in the development and maintenance of obsessive-compulsive disorder (OCD). However, beliefs about responsibility/threat overestimation, perfectionism/intolerance for uncertainty, and beliefs about the importance of/control over thoughts do not sufficiently explain OCD symptomatology. According to clinical observations, individuals with OCD also report concerns about a potential loss of control over their thoughts, behaviour, and emotions. Still, beliefs about losing control have not been empirically examined in detail. An inventory assessing beliefs about losing control (Beliefs about Losing Control Inventory; BALCI) was developed. Undergraduate student participants (N = 407) completed the BALCI along with other relevant self-report measures. Psychometric analyses indicated that the BALCI has excellent internal consistency and acceptable retest reliability. Moreover, convergent validity was demonstrated by strong positive relationships with the Anxiety Sensitivity Index and the Obsessive Beliefs Questionnaire, as was divergent validity via negative relationships with the Anxiety Control Questionnaire—Revised and the Sense of Control Scale. Critically, BALCI scores predicted significantly higher levels of OCD symptoms even after taking into account symptoms of depression, anxiety, and stress. The BALCI was also found to explain unique variance in OCD symptomatology above and beyond the three domains assessed by the Obsessive Beliefs Questionnaire. Thus, it appears that beliefs about losing control may be an important domain leading to and maintaining OCD symptoms, and the present findings suggest novel cognitive targets for cognitive-behavioral therapy.

Introduction

- Cognitive theory (e.g., Hofmann, Asmundson, & Beck, 2013; Rachman, 1997) posits that maladaptive beliefs play a central role in obsessive-compulsive disorder (OCD) and appear to contribute to the development and maintenance of OCD symptoms (OCCWG, 2005).
- However, beliefs about responsibility / threat overestimation, perfectionism / intolerance for uncertainty, and beliefs about the importance of / control over thoughts do not sufficiently explain OCD symptomatology (Taylor et al., 2006).
- According to clinical observations, people diagnosed with OCD also report concerns about a potential loss of control over their thoughts, behaviour, emotions, and bodily functions (e.g., Reuven-Magril, Dar, & Liberman, 2008).
- Similarly, Froreich, Vartanian, Grisham, & Touyz (2016) recently found a positive association between the fear of losing control and OCD symptoms.
- Still, this domain of beliefs about losing control has not been empirically examined in detail, and a reliable and valid measure is necessary to assess such beliefs in clinical and research settings.

Hypotheses

1) The Beliefs about Losing Control Inventory (BALCI) will have excellent reliability indexes.
2) The BALCI will be positively correlated with measures assessing anxiety sensitivity and other domains of OCD maladaptive beliefs (i.e., convergent validity).
3) The BALCI will be negatively correlated with measures assessing perceptions of control (i.e., divergent validity).
4) Beliefs about losing control (BALCI scores) will predict higher levels of OCD symptoms over and above symptoms of depression, anxiety, and stress.
5) Beliefs about losing control will explain unique variance in OCD symptomatology over and above other domains of OCD maladaptive beliefs.

Method

Participants

- Undergraduate student participants (N = 407) were recruited from the Concordia University community.
- Participants were on average 22.71 (SD = 4.91) years old.
- The sample was 88% female.

Procedure

- The Beliefs about Losing Control Inventory (BALCI) was developed to assess this domain of beliefs (32 items).
  - Sample items (0 = "Not at all"; 4 = "Very much")
    - *I am afraid of losing control of my mind.*
    - *It's important for me to keep my emotions from spiraling out of control.*
    - *If I get too anxious or upset, I will lose control.*
- Participants completed a series of questionnaires online.
- Seventy-four participants completed the BALCI twice to assess retest reliability.

Measures

- Beliefs about Losing Control Inventory (BALCI)
- Vancouver Obsessional Compulsive Inventory (VOCI; Thordarson et al., 2004)
- Obsessive Beliefs Questionnaire (OBQ-44; OCCWG, 2005)
- Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond, 1995)
- Anxiety Sensitivity Index (ASI; Reiss, Peterson, Gursky, & McNally, 1986)
- Anxiety Control Questionnaire-Revised (ACQ-R; Brown, White, Forsyth, & Barlow, 2004)
- Sense of Control Scale (SOCS; Lachman & Weaver, 1998)

Reliability

- Internal consistency (Cronbach's alpha)
  - α = .95
- Retest reliability
  - Approximately 33 days later (M = 32.95; SD = 7.70), 74 participants completed the BALCI a second time.
  - r = .77, p < .001

Validity

- Convergent validity
  - BALCI and ASI: r = .71, p < .001
  - BALCI and OBQ-44: r = .66, p < .001
- Divergent validity
  - BALCI and ACQ-R: r = - .58, p < .001
  - BALCI and SOCS: r = - .39, p < .001

OCD Symptomatology

Analyses

- To test hypotheses 4 and 5, multiple regression analyses were conducted.
- Hypothesis 4: Symptoms of depression, anxiety, and stress (DASS-21 scores) were entered at step 1 (IV) and beliefs about losing control (BALCI scores) were entered at step 2 (IV). OCD symptoms (VOCI scores) were entered as the DV.
- Hypothesis 5: The three domains of OCD beliefs (OBQ-44 scores) were entered at step 1 (IV) and beliefs about losing control (BALCI scores) were entered at step 2 (IV). OCD symptoms (VOCI scores) were entered as the DV.

Table 1. Summary of Hierarchical Multiple Regression Analyses

	R^2	ΔR^2	b	SE(b)	β
OCD symptoms	.411				
Step 1 Depression, anxiety, and stress		.314	.879	.149	.296*
Step 2 Beliefs about losing control		.097	.680	.083	.409*
OCD symptoms	.457				
Step 1 OCD maladaptive beliefs		.382	.344	.041	.399*
Step 2 Beliefs about losing control		.074	.583	.078	.350*

Note. *p < .001

Discussion

- The BALCI appears to have excellent internal consistency and acceptable retest reliability.
- The BALCI's convergent validity was demonstrated by strong positive correlations with measures of anxiety sensitivity and other domains of OCD maladaptive beliefs.
- The BALCI's divergent validity was demonstrated by negative correlations with measures of perceptions of control.
- Beliefs about losing control may be an important domain contributing to the development and maintenance of OCD symptoms beyond symptoms of depression, anxiety and stress, and other domains of OCD maladaptive beliefs.
- Beliefs about losing control should potentially be targeted during cognitive-behavioural therapy to reduce symptoms and integrated into cognitive models of OCD.
- Future research will establish the factor structure of the BALCI and confirm its excellent psychometric properties within clinical populations. This will justify the use of the BALCI in clinical and research settings as an assessment tool.

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