



# Disorder Relevant or Disorder Specific: Fear of Losing Control in OCD and Panic Disorder

Joel W. D. Lewin<sup>1,2</sup> · Victoria Edwards<sup>2,3</sup> · Adam S. Radomsky<sup>4</sup> · Paul M. Salkovskis<sup>1,5</sup>

Received: 7 July 2025 / Accepted: 3 September 2025  
© The Author(s) 2025

## Abstract

**Background** Fear of losing control may play an important role in multiple anxiety disorders. However, the disorder relevance/ specificity of the construct has not been examined. The authors previously developed the novel Fear of Losing Control Inventory (FOLCI), with which the present study aimed to investigate the disorder relevance/ specificity of fear of losing control in OCD and panic disorder.

**Methods** The FOLCI, the Beliefs About Losing Control Inventory-II (BALCI-II) and a battery of psychological measures were administered to three groups: OCD ( $N=36$ ), panic disorder ( $N=31$ ) and healthy controls ( $N=33$ ). Mixed model ANOVAs tested for differences between groups in terms of FOLCI and BALCI-II subscales.

**Results** As hypothesised, the OCD and panic groups reported greater fear of losing control than healthy controls across all FOLCI and BALCI-II subscales. Contrary to hypotheses, there were no significant differences between the OCD and panic groups in terms of the FOLCI's Agent of Harm, Delayed Catastrophe and Imminent Catastrophe subscales. As hypothesised, the panic group scored significantly higher than the OCD group on the Bodily Sensations subscale. Non-hypothesised differences were also observed, with the panic group scoring significantly higher than the OCD group on the Escape and Avoidance subscale, and the Thoughts and Feelings subscale.

**Discussion** Findings suggest fear of losing control is relevant to both OCD and panic disorder. The findings suggest some aspects—specifically fear of losing control of bodily sensations, emotions (and thoughts) and escape and avoidance behaviours driven by feared loss of control, may be specific to panic disorder. The present findings extend previous research by demonstrating the relevance of feared loss of control—and of the FOLCI and BALCI-II as measures—within clinical groups.

## Introduction

Transdiagnostically, anxiety disorders all concern threat or perceived danger to the person (Norton & Paulus, 2017). Certain threats are specifically related to specific anxiety

disorders (Salkovskis & Clark, 1993). These include fear of doing something that would be criticised or judged negatively in social phobia (Winton et al., 1995), fears of specific objects in specific phobias (Thorpe & Salkovskis, 1995), fear of being responsible for harm to self or loved ones in

✉ Joel W. D. Lewin  
joel.lewin@hmc.ox.ac.uk

✉ Paul M. Salkovskis  
paul.salkovskis@hmc.ox.ac.uk

Victoria Edwards  
Victoria.Edwards1@ouh.nhs.uk

Adam S. Radomsky  
Adam.Radomsky@concordia.ca

<sup>1</sup> Oxford Institute of Clinical Psychology Training and Research, University of Oxford, Oxford, UK

<sup>2</sup> Oxford Health NHS Foundation Trust, Oxford, UK

<sup>3</sup> Oxford University Hospitals NHS Trust, Oxford, UK

<sup>4</sup> Department of Psychology, Concordia University, Montreal, Canada

<sup>5</sup> Department of Experimental Psychology, University of Oxford, Oxford, UK

Obsessive Compulsive Disorder (OCD) (Salkovskis & Warwick, 1985), fear of imminent catastrophic physiological consequences in panic disorder (Clark, 1986) and fear of ill health in health anxiety (Salkovskis & Warwick, 1986). A fear that has recently received increasing attention among researchers is loss of control (Radomsky, 2022).

The importance of control and control related beliefs has been explored in relation to anxiety disorders. Fears of impending loss of control have been highlighted as a key panic-related cognition (Clark, 1986; Hedley et al., 2001), while the “illusion of control” has been found to mitigate panic symptoms (Sanderson et al., 1989). Sanderson et al. (1989) exposed two groups of participants with panic disorder to carbon dioxide enriched air for twenty minutes. For one group, an “illusion of control” was created by informing participants that the illumination of a light signalled they could decrease the carbon dioxide level by turning a dial. The dial was inactive, and both groups received the same carbon dioxide levels. However, the “illusion of control” group reported significantly lower levels of panic symptoms.

The importance of controlling thoughts was identified as one of six belief domains important in OCD by the Obsessive Compulsive Cognitions Working Group (OCCWG, 1997). Building on Evans et al.’s (1993) control mismatch, Moulding et al. (2008) found that people with OCD expressed greater desire for control and lower sense of control compared with healthy controls, a mismatch that was associated with OCD symptoms (Moulding et al., 2009). A recent systematic review found consistent positive associations between control-related beliefs and OCD symptoms, including the importance of controlling thoughts, the need to control thoughts, uncontrollability and danger, and beliefs about losing control, while a negative association was found between sense of control and OCD symptoms (Sandstrom et al., 2024). In terms of specific OCD symptoms, the strongest associations were found between control-related beliefs and repugnant obsessions (Sandstrom et al., 2024). Control-related beliefs have also been highlighted as important in several other anxiety disorders, such as social anxiety (Cloitre et al., 1992).

Recently Radomsky and Gagné (2020) proposed that feared loss of control may be a major driver of anxiety itself, developing the Beliefs About Losing Control Inventory (BALCI) as a tool to assess this issue. The BALCI was developed with a sample of undergraduates, with items derived from cognitive theories in general and of OCD in particular. Three factors were identified: (1) Negative beliefs about losing control over one’s thoughts, behaviour, and emotions; (2) Beliefs about the importance of staying in control; (3) Beliefs about losing control over one’s body/bodily functions.

Overall, BALCI scores were associated with OCD symptoms, measured with the Vancouver Obsessional Compulsive Inventory (VOCI) after controlling for obsessive belief domains, measured with the Obsessional Beliefs Questionnaire (OBQ-44). Factors one (negative beliefs about losing control over one’s thoughts, behaviour, and emotions) and three (beliefs about losing control over one’s body/bodily functions) were associated with higher overall OCD symptoms and all VOCI subscales (contamination, checking, obsessions, hoarding, “just right”, and indecisiveness) over and above the ‘Importance of Controlling Thoughts’ component of the OBQ-44, (Radomsky & Gagné, 2020).

Experimental manipulations have suggested there could be a causal relationship between beliefs about losing control and OCD symptoms. Manipulating beliefs about losing control through false feedback on a bogus EEG session, which informed participants that they were at high or low risk of losing control over their thoughts and behaviours, Gagné and Radomsky (2017) found that participants in the high risk of losing control condition exhibited significantly more frequent checking behaviour in a subsequent task that involved typing letter combinations. A similar false feedback manipulation (Gagné & Radomsky, 2020) told participants: (a) that having intrusive thoughts means one is likely to lose control over one’s behaviour; (b) that having intrusive thoughts is normal and does not mean one will lose control of one’s behaviour or act upon them. Participants in the first condition experienced significantly greater anxiety and recalled experiencing significantly more intrusive thoughts during a behavioural approach test involving knives.

Although the BALCI was initially conceptualised in terms of OCD symptoms, subsequent research has suggested fear of losing control may be relevant to the experience of anxiety across other disorders. In experiments focusing on social anxiety, manipulation of beliefs about losing control in samples of undergraduate students led to higher anticipatory anxiety, poorer perception of performance and greater perceived loss of control in social interaction tasks with a confederate (Gagné et al., 2021; Kelly-Turner & Radomsky, 2020, 2022).

Kelly-Turner and Radomsky (2024) subsequently expanded the BALCI, seeking to tap into a broader range of beliefs about losing control across thoughts, feelings, behaviours, emotions and physiological sensations. In the development of the BALCI-II (Kelly-Turner & Radomsky, 2024), four subscales were derived: (1) Overwhelming emotions; (2) Dangerous behaviour; (3) Madness; (4) Inflated beliefs about probability/severity of loss of control. The BALCI-II was associated with symptoms of OCD and social anxiety—but not panic—over and above general psychopathology and belief domains relevant to each disorder. Radomsky (2022) has emphasised the transdiagnostic nature

of fear of losing control. Radomsky (2022) has speculated specific domains of feared loss of control may vary by disorder, such as a focus on physical sensations in panic and social anxiety, and thoughts in OCD, the disorder-specificity of fears about losing control has not been examined. In the present study, the authors chose to focus on OCD and panic as both have been linked to fears of loss of control, but with very different emphases. For example, beliefs about losing control have been linked to fear of bodily sensations and harm to self in panic (Hedley et al., 2001), and to fear of causing harm to others in OCD (Clark & Purdon, 1993). However, the BALCI-II did not link to panic symptoms in the study by Kelly-Turner and Radomsky (2024), suggesting that some enhancement of loss of control measurement related to panic was needed.

Underpinning this distinction are the complementary notions of “disorder-specific” versus “disorder-relevant” factors (Salkovskis & Clark, 1993). Disorder-relevant factors likely play a role in aetiology and maintenance across disorders, but are not distinct across disorders. Disorder-specific factors, on the other hand, differ between disorders. It is suggested that the BALCI, and to some degree the BALCI-II, tap into disorder-relevant rather than disorder-specific beliefs. However, consideration of clinical phenomenology and cognitive theory suggests at least some aspects of loss of control may be disorder-specific and may actually differentiate different problems.

Drawing on cognitive theories of OCD and panic (e.g. Clark, 1986; Salkovskis & Warwick, 1985), Lewin et al. (2025) built on the BALCI-II to develop a questionnaire that aims to tap into aspects of feared loss of control that are potentially disorder-specific. Six subscales were derived (from a factor analysis) in developing the Fear of Losing Control Inventory (FOLCI): (1) Agent of Harm; (2) Thoughts and Feelings; (3) Self-appraisals; (4) Timescale; (5) Escape/ Avoidance; (6) Bodily Sensations. The present study aimed to use the FOLCI to determine whether fear of losing control is disorder-relevant, or whether aspects of this construct are disorder-specific, with a focus on OCD and panic disorder.

The following pre-registered ([https://osf.io/z93rt?view\\_only=d46dd03fd54341dcae090076366f06e6](https://osf.io/z93rt?view_only=d46dd03fd54341dcae090076366f06e6)) hypotheses were derived from cognitive theories of OCD and panic, and the development of the FOLCI in the first part of this study:

1a People identified as meeting criteria for OCD and panic disorder will have higher loss of control fears than healthy controls (in terms of FOLCI and BALCI-II subscales);

1b People identified as meeting criteria for OCD and panic disorder will not differ from each other in terms of Kelly-Turner & Radomsky’s (2024) BALCI-II<sup>1</sup>

People identified as meeting criteria for OCD and panic will differ from each other on subscales of the FOLCI, viz.:

2a The OCD group will score significantly higher than the panic group on the FOLCI’s Agent of Harm subscale.

2b The panic group will score significantly higher than the OCD group on the FOLCI’s Bodily Sensations subscale.

2c The OCD group will score significantly higher than the panic group on the FOLCI’s Delayed Catastrophe subscale.

2d The panic group will score significantly higher than the OCD group on the FOLCI’s Imminent Catastrophe subscale.

As an exploratory analysis, we also examined the association between FOLCI and BALCI-II scores and a general measure of impairment, the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002).

## Methods

### Participants and Procedure

A power calculation conducted using G\*Power 3.1.9.7 (Faul et al., 2007) indicated a total sample size of 90 participants (30 per group) would be required given a small-medium effect size ( $f=0.2$ ), ( $p=.05$ ), power=0.8, three groups, two repeat measures (FOLCI subscales), correlation among repeat measures of 0.3, and a non-sphericity correction of 1. This was conducted prior to FOLCI development in part one of the study, so two FOLCI subscales was specified. The seven subscales derived means this was a conservative power calculation.

The questionnaire was completed by 100 participants (68% female, 84% white, mean age=42.18, SD=18.05) across three groups: OCD ( $n=36$ ), panic ( $n=31$ ) and healthy controls ( $n=33$ ). See Table 1 for demographics.

Participants aged 18 and over who identify as experiencing OCD symptoms, panic or no mental health difficulties were recruited through social media (Facebook, Twitter, Instagram, Nextdoor). Participants from part one who expressed an interest were also invited to participate.

<sup>1</sup> Pre-registered hypotheses specified the BALCI rather than BALCI-II as the BALCI-II had not yet been published. A BALCI-II pre-print was supplied to the present authors by Kelly-Turner and Radomsky, and the BALCI-II was used with permission in the study in which the FOLCI was developed.

**Table 1** Categorical demographics variables with chi-square test statistics

	Group				Chi-square	Phi or Cramér's <i>V</i>
	OCD <i>n</i> (%)	Panic <i>n</i> (%)	Healthy control <i>n</i> (%)	Full sample <i>n</i> (%)		
<b>Gender</b>						
Female	25 (69.4)	25 (80.6)	18 (54.5)	68 (68)	$\chi^2=4.518^\dagger$	0.215
Male	8 (22.2)	3 (9.7)	14 (42.4)	25 (25)	df (2)	
Non-binary/ Agender	2 (5.6)	3 (9.7)	0 (0)	5 (5)	$p=.104$	
Prefer not to say	1 (2.8)	0 (0)	1 (3)	2 (2)		
<b>Ethnicity</b>						
White	29 (80.1)	27 (87.1)	28 (84.8)	84 (84)		
Asian	5 (13.9)	4 (12.9)	3 (9.1)	12 (12)		
Mixed / Multi-ethnic	1 (2.8)	0 (0)	1 (3)	2 (2)		
Middle Eastern	1 (2.8)	0 (0)	0 (0)	1 (1)		
Prefer not to say	0 (0)	0 (0)	1 (3)	1 (1)		
<b>Education</b>						
No degree	12 (33.3) <sup>a</sup>	20 (64.5) <sup>b</sup>	8 (24.2) <sup>a</sup>	40 (40)	$\chi^2=15.621$	0.282
Undergraduate degree	14 (38.9)	6 (19.4)	7 (21.2)	27 (27)	df (4)	
Postgraduate degree	10 (27.8)	5 (16.1)	16 (48.5)	31 (31)	$p=.004$	
Prefer not to say	0 (0)	0 (0)	2 (6.1)	2 (2)		
<b>Employment</b>						
Paid work	22 (61.1)	16 (51.6)	17 (51.5)	55 (55)	$\chi^2=0.496$	0.072
Unpaid work	0 (0)	2 (6.5)	1 (3)	3 (3)	df (2)	
On sick leave	2 (5.6)	1 (3.2)	0 (0)	3 (3)	$p=.78$	
Not employed	10 (27.8)	11 (35.5)	14 (42.4)	35 (35)		
Prefer not to say	2 (5.6)	1 (3.2)	1 (3)	4 (4)		

<sup>†</sup> for chi square calculation, gender categories were collapsed into two groups: (1) female; (2) not female, education categories were collapsed into: (1) no degree; (2) undergraduate degree; (3) postgraduate degree, employment categories were collapsed into: (1) employed; (2) not employed. Chi-square was not calculated for ethnicity as categories could not be collapsed to provide sufficient cell counts.

Superscript letters indicate results of chi-square tests, conducted between groups if the initial three-way test showed significant differences. The same superscript letters for a given variable indicate no significant differences between groups, while different letters indicate significant differences between specific groups ( $p < .05$ ).

A telephone or Microsoft Teams interview was booked during which the participant information sheet was discussed. This included full details of the study, so that participants could provide informed consent, and is required by the ethics committee. Questions were answered and the consent form was completed. Fifteen participants completed screening by email (2 panic, 13 healthy controls). The panic subsection of Module F and OCD subsection of Module G of the Structured Clinical Interview for DSM-5—Research Version (SCID-5-RV; First et al., 2015) were administered. Participants were allocated to the panic group if they met criteria for panic disorder but not OCD, and vice versa. Participants were allocated to the healthy control group if they met criteria for neither panic nor OCD, and did not report experiencing any other significant mental health difficulties. Participants were then provided with a participant number and a link to an online Qualtrics survey.

## Design and Procedure

This study consisted of a criterion group comparison, with diagnostic group as the grouping variable (OCD/ Panic/

Healthy Controls). Primary dependent variables were BALCI-II and FOLCI subscales, and the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002) in exploratory analyses.

## Measures

### Primary Dependent Variables

**BALCI-II** (Kelly-Turner & Radomsky, 2024). The 32-item BALCI-II is a self-report scale that assesses beliefs about feared loss of control. Each item is rated on a five-point Likert scale (0=None at all, 1=A little, 2=Somewhat, 3=A lot, 4=A great deal). With consent of the authors, in this study the scales were changed for clarity (0=Not at all true, 1=Slightly true, 2=Moderately true, 3=Very true, 4=Totally true). The BALCI-II has shown excellent internal consistency across all four subscales (Overwhelming Emotions  $\alpha=0.90$ ; Probability/Severity  $\alpha=0.91$ ; Dangerous Behaviour  $\alpha=0.92$ ; Madness  $\alpha=0.90$ ) and for the full scale ( $\alpha=0.96$ ) as well as good test-retest reliability, convergent and divergent validity (Kelly-Turner & Radomsky, 2024).

Internal consistency in the present study was excellent (full scale  $\alpha=0.98$ ; Overwhelming Emotions  $\alpha=0.94$ ; Probability/Severity  $\alpha=0.95$ ; Dangerous Behaviour  $\alpha=0.96$ ; Madness  $\alpha=0.93$ ).

**Fear of Losing Control Inventory (FOLCI;** Lewin et al., 2025). The 56-item FOLCI is a supplementary measure of beliefs about losing control developed by Lewin et al. (2025) to investigate whether fear of losing control is disorder-specific or disorder-relevant in the context of panic and OCD (see Supplementary Table 1). A pool of potential items for the FOLCI was developed by drawing on: (a) theoretical principles rooted in cognitive theories of OCD and panic (e.g. Clark, 1986; Salkovskis & Warwick, 1985) (b) Kelly-Turner and Radomsky's (2024) BALCI-II, and perceived gaps therein pertaining to OCD and panic disorder; (c) consultation with service users and experienced clinicians. Exploratory factor analysis found six subscales, with good to excellent internal consistency (full scale  $\alpha=0.98$ ; Agent of Harm  $\alpha=0.97$ ; Thoughts and Feelings  $\alpha=0.96$ ; Self-appraisals  $\alpha=0.96$ ; Timeframe  $\alpha=0.96$ ; Escape/ Avoidance  $\alpha=0.85$ ; Bodily Sensations  $\alpha=0.94$ ).

The Agent of Harm subscale taps into beliefs that losing control would result in one causing harm to others (e.g. "If I lost control, I might hurt someone"). The Thoughts and Feelings subscale consists of items related to losing control of thoughts (e.g. "I am afraid of losing control of my thoughts") and feelings (e.g. "I am likely to lose control of my emotions"). The Self-appraisals subscale taps into beliefs regarding what it would mean about oneself if one lost control (e.g. "If I lost control, it would mean I am a weak person"). The Timeframe subscale includes items related to the timeframe within which a feared catastrophe would occur after a feared loss of control (see below). The Escape/Avoidance subscale incorporates items related to behaviours aimed at preventing a feared loss of control, including escape (e.g. "It is important to ensure I can easily escape a situation in case I lose control") and avoidance (e.g. "The best way for me to avoid losing control is to avoid stressful situations"). The Bodily Sensations subscale taps into beliefs about losing control related to bodily sensations (e.g. "Feeling an unusual sensation in my body means I am likely to lose control").

The FOLCI includes 25 items from the BALCI-II and 31 new items. Each item is rated on a five-point Likert scale (0=Not at all true, 1=Slightly true, 2=Moderately true, 3=Very true, 4=Totally true). In order to test H4 and H5, developed through exploratory analyses (Lewin et al., 2025), the Timescale subscale was broken down into two separate subscales: Immediate Catastrophe ((1) If I lost control, something bad could happen [in the following days]; (2) within minutes; (3) within seconds; (4) immediately; (5) If I lost control, it would result in an immediate catastrophe)

and Delayed Catastrophe ((1) If I lost control, something bad could happen [later]; (2) in the following weeks; (3) If I lost control it would eventually lead to a catastrophe; (4) If I lost control, it could result in a cascade of consequences). Both subscales showed excellent internal consistency (Immediate Catastrophe  $\alpha=0.94$ ; Delayed Catastrophe  $\alpha=0.93$ ). In the present study, a further item was added to the Delayed Catastrophe subscale to balance the number of items so there were five in each (If I lost control something bad could happen in the following years). In the previous study, one week test-retest reliability (measured with Spearman's correlation coefficient) for the subscales fell within the range of 0.7–0.88.

In the present study, the FOLCI showed good to excellent internal consistency (full scale  $\alpha=0.99$ ; Agent of Harm  $\alpha=0.96$ ; Thoughts and Feelings  $\alpha=0.97$ ; Self-appraisals  $\alpha=0.96$ ; Delayed Catastrophe  $\alpha=0.94$ ; Immediate Catastrophe  $\alpha=0.93$ ; Escape/ Avoidance  $\alpha=0.86$ ; Bodily Sensations  $\alpha=0.92$ ).

## Secondary Dependent Variables

**The Work and Social Adjustment Scale (WSAS;** Mundt et al., 2002). Functional impairment was assessed with the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002). The five-item scale assesses functional impairment across five domains (work, home management, social leisure activities, private leisure activities and relationships), with each item rated on a 9-point Likert scale (0 = "not at all impaired" to 8 = "very severely impaired"). The WSAS has demonstrated acceptable to excellent internal consistency ( $\alpha=0.70$  to 0.94), test-retest reliability, convergent and discriminant validity and sensitivity to change (Mundt et al., 2002). WSAS internal consistency was good in the present study ( $\alpha=0.89$ ).

## Screening and Mental Health Measures

A number of variables were administered in order to characterise the samples in terms of diagnosis, OCD symptoms, panic symptoms, general anxiety and depression.

**Structured Clinical Interview for DSM-5—Research Version (SCID-5-RV;** First et al., 2015). The panic subsection (Module F) and OCD subsection (Module G) of the Structured Clinical Interview for DSM-5—Research Version (SCID-5-RV; First et al., 2015) were used to screen participants according to DSM-V criteria for panic disorder and OCD. The SCID-5-RV modules were administered by first author, JL, a trainee clinical psychologist trained and supervised in administering these tests by fourth author, PS. Recordings of 20% of screening interviews were double

rated by second author VE. Interrater reliability reached almost perfect agreement ( $\kappa=0.865$ ; Cohen, 1960).

**Obsessive Compulsive Inventory-Revised (OCI-R;** Foa et al., 2002). OCD symptoms were assessed with the Obsessive Compulsive Inventory-Revised (OCI; Foa et al., 2002). The 18-item self-report questionnaire measures distress caused by OCD symptoms with a five-point Likert scale (0 = “not at all,” to 4 = “extremely”) and includes six subscales (washing, checking, ordering, obsessing, hoarding and mental neutralising). Scores range from 0 to 72, with a recommended cutscore of 21 (Foa et al., 2002). It has shown good to excellent internal consistency and test-retest reliability, and good convergent and discriminant validity in a mixed clinical and non-clinical sample (Foa et al., 2002). The OCI-R showed excellent internal consistency in the present study ( $\alpha=0.94$ ), compared with  $\alpha=0.90$  in the development and validation study (Foa et al., 2002).

**Panic Disorder Severity Scale (PDSS;** Shear et al., 1997). The Panic Disorder Severity Scale (PDSS; Shear et al., 1997) is a 7-item self-report scale that measures severity of panic disorder symptomatology (panic attack frequency, associated distress, anticipatory anxiety, agoraphobic and interoceptive avoidance, and occupational and social functional impairment) on a five-point Likert scale, with total scores ranging from 0 to 28. It has shown good internal consistency ( $\alpha=0.88$ ), test-retest reliability and convergent and discriminant validity, and has a recommended cutoff score of 8 (Shear et al., 2001). Internal consistency in this study was excellent ( $\alpha=0.95$ ).

**Generalised Anxiety Disorder Assessment (GAD-7;** Spitzer et al., 2006). Symptoms of anxiety were assessed with the Generalised Anxiety Disorder Assessment (GAD-7; Spitzer et al., 2006). The seven-item self-report scale measures GAD symptoms (e.g. feeling nervous, anxious, or on edge and worrying too much about different things) on a 4-point Likert scale (0=not at all to 3=nearly every day). Scores range from 0 to 21, with scores of 0–4 indicating minimal anxiety, 5–9 mild anxiety, 10–14 moderate anxiety and 15–21 severe anxiety, and a cutoff score of 10 (Spitzer et al., 2006). The scale has shown excellent internal consistency ( $\alpha=0.92$ ), good test-retest reliability, good convergent (Spitzer et al., 2006) and discriminant validity (Rutter & Brown, 2017). Internal consistency in this study was excellent ( $\alpha=0.94$ ).

**The Eight Item Patient Health Questionnaire Depression Scale (PHQ-8;** Kroenke et al., 2009). Depression symptoms were assessed with the eight-item self-report Patient Health Questionnaire depression scale (PHQ-8; Kroenke et al., 2009). The scale assesses depression symptom severity by asking how often someone has been bothered by certain symptoms during the previous two weeks (e.g. “little interest or pleasure in doing things”), with responses on

a four-point Likert-scale (0=not at all to 3=nearly every day). The scale has shown good internal reliability ( $\alpha=0.87$ ; Arias de la Torre et al., 2023) and construct validity, with a cutoff score of 10 (Kroenke et al., 2009), while the PHQ-9 (which includes an extra question related to risk) has shown excellent test-retest reliability (Kroenke et al., 2001). Internal consistency in the present study was excellent ( $\alpha=0.94$ ).

### Attention Check Measure

Two questions were included in the survey to check the attentiveness of participants ((1) For this question, please click [‘Moderately true’]; (2) ‘Slightly true’). Out of 100 participants, 98 responded correctly to both, while two participants responded correctly to one (Panic=1; Healthy Control=1). As such, no participants were excluded based on attentiveness.

### Ethical Considerations

This study received ethical approval from The University of Oxford Research Ethics Committee (R87791/RE001). Participants provided informed consent and were offered the right to withdraw their data up until survey completion. Details of support services were provided in a debrief page.

### Data Analysis

Statistical analyses were conducted using IBM SPSS Statistics for Windows, Version 29.0.2.0. Between-group differences on demographic and psychological variables were examined using Chi-square tests, Welch’s one-way analysis of variance tests and post-hoc Dunnett T3 tests due to unequal variance between groups.

Primary hypotheses (H1-H5) were tested with mixed model ANOVAs, with BALCI-II or FOLCI subscales as the within-subjects factor, and group as the between-subjects factor. When interactions were significant, simple main effects of group were examined for each subscale using Welch’s ANOVA, due to unequal variance. Significant effects were examined using Dunnett T3 post-hoc tests to determine between group differences.

Exploratory regression analyses were conducted to test whether FOLCI or BALCI-II subscales accounted for more variance in terms of functional impairment measured with the WSAS.

## Results

### Sample Characteristics

Chi-square tests indicated no significant difference between groups in terms of gender, or employment status, but did indicate significant differences in terms of education (see Table 1) accounted for by significantly higher levels of education in the healthy control group than in the panic group. One-way Welch's ANOVAs and post-hoc Dunnett T3 tests indicated, as expected, healthy controls scored significantly lower than the panic and OCD groups in terms of PHQ-8, GAD-7, WSAS, OCI-R and PDSS scores (see Table 2). There was no significant difference between the OCD and panic groups in terms of PHQ-8, GAD-7 and WSAS scores. OCI-R scores were significantly higher in the OCD than panic group, while PDSS scores were significantly higher in the panic group than in the OCD group.

### Primary Hypotheses

#### BALCI-II

A mixed model ANOVA was conducted to examine differences between the three groups in terms of the four BALCI-II subscales. Mauchly's test indicated that the assumption of sphericity was not met, therefore degrees of freedom were adjusted with the Greenhouse-Geisser correction.

There was a significant main effect of subscale,  $F_{(2.59, 250.75)}=68.178$ ,  $p<.001$ ,  $\eta^2p=.413$ , and a significant main effect of group,  $F_{(2, 97)}=38.213$ ,  $p<.001$ ,  $\eta^2p=.438$ . These main effects were modified by a significant subscale  $\times$  group interaction,  $F_{(5.17, 250.75)}=3.231$ ,  $p=.007$ ,  $\eta^2p=.062$ . As such, the simple main effects of group for each subscale were examined with Welch's ANOVAs, given unequal variance.

There was a significant effect of group on the Overwhelming Emotions subscale,  $F_{(2, 64.43)}=48.753$ ,  $p<.001$ ,  $\omega^2=0.491$ , the Dangerous Behaviour subscale  $F_{(2, 48.99)}=32.445$ ,  $p<.001$ ,  $\omega^2=0.388$ , the Madness subscale  $F_{(2, 57.76)}=42.635$ ,  $p<.001$ ,  $\omega^2=0.457$ , and the Inflated Probability/Severity subscale  $F_{(2, 60.99)}=58.224$ ,  $p<.001$ ,  $\omega^2=0.536$ .

Post-hoc Dunnett T3 tests (see Supplementary Table 3) were conducted due to unequal between-group variance, and showed that healthy controls scored significantly lower than people with panic and OCD on all BALCI-II subscales, supporting H1a. The panic group ( $M=21.68$ ,  $SD=6.39$ ) scored significantly higher than the OCD group ( $M=16.92$ ,  $SD=9.16$ ) on the Overwhelming Emotions subscale (Hedge's  $g=0.6$ ,  $p=.045$ ), but the differences between the two groups were not significantly different on the Dangerous Behaviour, Madness or Probability/Severity subscales, providing mixed evidence for H1b that there would be no differences. See Fig. 1

#### FOLCI

A mixed-model ANOVA was conducted to examine differences between the three groups in terms of the seven FOLCI subscales. Mauchly's test indicated that the assumption of sphericity was violated, therefore degrees of freedom were adjusted with the Greenhouse-Geisser correction. See Fig. 2

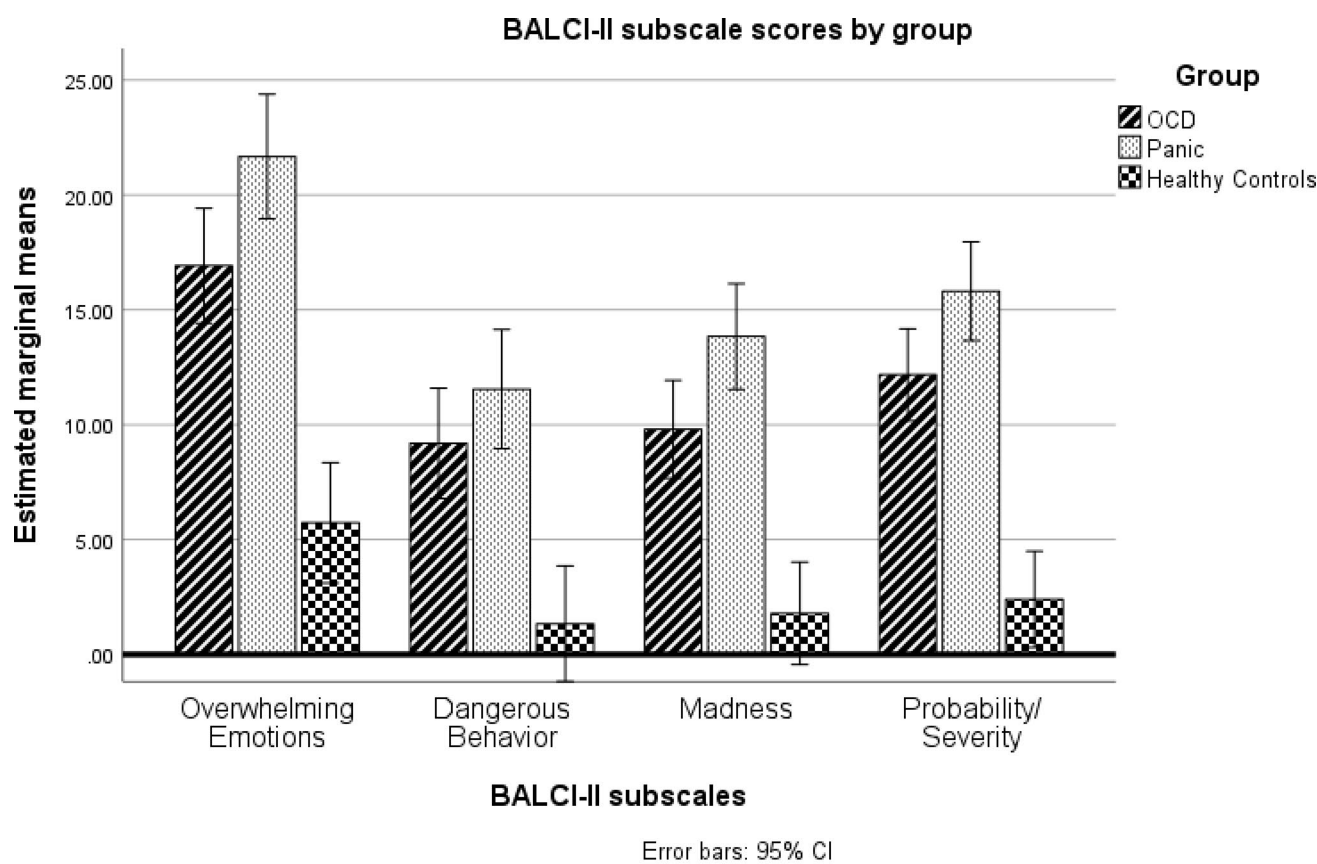
There was a significant main effect of subscale,  $F_{(3.33, 323.26)}=77.846$ ,  $p<.001$ ,  $\eta^2p=.445$ , and a significant main effect of group,  $F_{(2, 97)}=34.397$ ,  $p<.001$ ,  $\eta^2p=.415$ , indicating differences between groups. These main effects were modified by a significant subscale  $\times$  group interaction,  $F_{(6.67, 323.26)}=12.607$ ,  $p<.001$ ,  $\eta^2p=.206$ . As such, the main effects of group for each subscale were examined with Welch's ANOVAs, given unequal variance.

**Table 2** Continuous demographic and psychological variables with one-way ANOVA test statistics

	Group				df	F	p-value
	OCD	Panic	Healthy control	Full sample			
	M (SD)	M (SD)	M (SD)	M (SD)			
<b>Demographics</b>							
Age	41.33 (16.13)	37.9 (17.36)	47.12 (19.92)	42.18 (18.05)	2, 63.16	1.952	0.15
<b>Psychological variables</b>							
OCI-R	34.44 <sup>a</sup> (13.95)	24.55 <sup>b</sup> (13.61)	6.09 <sup>c</sup> (5.93)	22.02 (16.7)	2, 54.93	75.082	< 0.001
PDSS	6.58 <sup>a</sup> (5.29)	14.94 <sup>b</sup> (5.29)	0.64 <sup>c</sup> (1.56)	7.21 (7.24)	2, 49.62	117.122	< 0.001
GAD-7	11.14 <sup>a</sup> (5.6)	13.29 <sup>a</sup> (5.72)	2.18 <sup>b</sup> (2.14)	8.85 (6.74)	2, 52.91	80.254	< 0.001
PHQ-8	10.72 <sup>a</sup> (6.36)	14.32 <sup>a</sup> (6.75)	2.64 <sup>b</sup> (2.7)	9.17 (7.34)	2, 54.19	55.993	< 0.001
WSAS	18.33 <sup>a</sup> (8.52)	20.45 <sup>a</sup> (7.8)	4 <sup>b</sup> (4.85)	14.26 (10.24)	2, 60.36	69.248	< 0.001

Superscript letters indicate results of post-hoc Dunnett T3 tests (see Supplementary Table 2 for details). The same superscript letters for a given variable indicate no significant differences between groups, while different letters indicate significant differences between specific groups ( $p<.05$ ).

OCI-R=Obsessive Compulsive Inventory-Revised; PDSS=Panic Disorder Severity Scale; GAD-7=Generalized Anxiety Disorder-7; PHQ-8=The eight-item Patient Health Questionnaire depression scale; WSAS=Work and Social Adjustment Scale.



**Fig. 1** Estimated marginal means of BALCI-II subscales by group, with 95% confidence interval (CI) error bars

There was a significant effect of group on the Agent of Harm subscale, Welch's  $F(2, 51.75)=23.723$ ,  $p<.001$ ,  $\omega^2=0.315$ , the Thoughts and Feelings subscale, Welch's  $F(2, 61.87)=64.248$ ,  $p<.001$ ,  $\omega^2=0.561$ , the Self-appraisals subscale, Welch's  $F(2, 55.85)=25.791$ ,  $p<.001$ ,  $\omega^2=0.334$ , the Delayed Catastrophe subscale, Welch's  $F(2, 56.44)=31.594$ ,  $p<.001$ ,  $\omega^2=0.382$ , the Immediate Catastrophe subscale, Welch's  $F(2, 52.01)=36.46$ ,  $p<.001$ ,  $\omega^2=0.417$ , the Escape/Avoidance subscale, Welch's  $F(2, 64.48)=53.334$ ,  $p<.001$ ,  $\omega^2=0.514$  and the Bodily Sensations subscale, Welch's  $F(2, 55.95)=38.33$ ,  $p<.001$ ,  $\omega^2=0.43$ .

Post-hoc Dunnett T3 tests were conducted due to unequal variance, and showed that healthy controls scored significantly lower than people with panic and OCD on all FOLCI subscales, supporting H1a (see Table 3 and Supplementary Table 3). There were no significant differences between the panic and OCD groups on the Agent of Harm, Delayed Catastrophe, or Imminent Catastrophe subscales, meaning H2a, H2c and H2d were rejected. However, the panic group scored significantly higher than the OCD group on the Bodily Sensations subscale ( $g=0.74$ ,  $p=.009$ ), supporting H2b. Exploratory analyses revealed that the panic group also scored significantly higher than the OCD group on

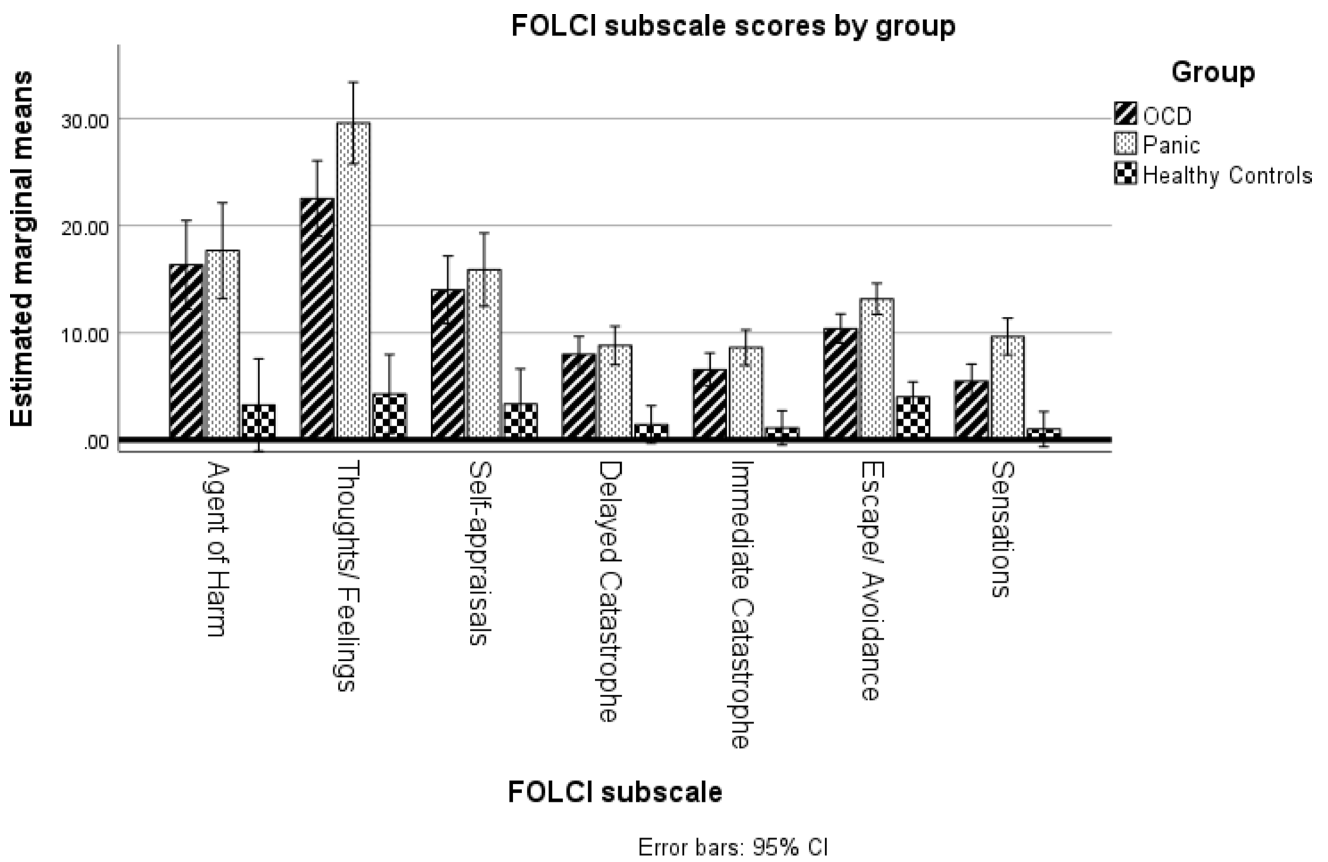
the Escape/Avoidance subscale ( $g=0.64$ ,  $p=.027$ ) and the Thoughts and Feelings subscale ( $g=0.59$ ,  $p=.0497$ ).

### Exploratory Analyses

Two multiple regressions were carried out using the WSAS as the dependent variable in the two clinical groups, with (a) BALCI-II and (b) FOLCI subscales as independent variables and group as dummy variable. Full details can be found in Supplementary Tables 3 and 4. BALCI-II predicted 20.7% of the variance of WSAS and was significant ( $p=.006$ ); in the separate analysis the FOLCI accounted for 18.4% and did not reach significance ( $p=.085$ ). Adding group as a dummy variable did not significantly add to either regression.

### Discussion

This study aimed to examine whether fear of losing control is disorder-relevant and/or disorder-specific in the context of OCD and panic disorder. More specifically, the study sought, firstly, to determine whether people with OCD and panic would have higher loss of control fears than healthy



**Fig. 2** Estimated marginal means of FOLCI subscales by group, with 95% confidence interval (CI) error bars

**Table 3** Results of one-way welch’s ANOVAs testing differences between groups for BALCI-II and FOLCI subscales

Measure	OCD		Panic		Healthy control		F	df1	df2	$\omega^2$	p
	M	SD	M	SD	M	SD					
<b>BALCI-II</b>											
Overwhelming emotions	16.92 <sup>a</sup>	9.16	21.68 <sup>b</sup>	6.39	5.73 <sup>c</sup>	6.68	48.753	2	64.43	0.491	< 0.001
Dangerous behaviour	9.19 <sup>a</sup>	9.25	11.55 <sup>a</sup>	8.07	1.33 <sup>b</sup>	2.38	32.445	2	48.99	0.388	< 0.001
Madness	9.81 <sup>a</sup>	7.70	13.84 <sup>a</sup>	7.09	1.79 <sup>b</sup>	3.75	42.635	2	57.76	0.457	< 0.001
Probability/ severity	12.17 <sup>a</sup>	7.12	15.81 <sup>a</sup>	6.37	2.39 <sup>b</sup>	4.17	58.224	2	60.99	0.536	< 0.001
BALCI-II Total	48.08 <sup>a</sup>	29.72	62.87 <sup>a</sup>	23.70	11.24 <sup>b</sup>	15.10	61.209	2	59.95	0.549	< 0.001
<b>FOLCI</b>											
Agent of harm	16.33 <sup>a</sup>	15.89	17.68 <sup>a</sup>	13.54	3.24 <sup>b</sup>	5.07	23.723	2	51.75	0.315	< 0.001
Thoughts and feelings	22.53 <sup>a</sup>	12.48	29.58 <sup>b</sup>	11.07	4.27 <sup>c</sup>	7.75	64.248	2	61.89	0.561	< 0.001
Self-appraisals	14.00 <sup>a</sup>	11.50	15.87 <sup>a</sup>	10.68	3.33 <sup>b</sup>	5.02	25.791	2	55.84	0.334	< 0.001
Delayed catastrophe	7.97 <sup>a</sup>	5.59	8.81 <sup>a</sup>	6.19	1.42 <sup>b</sup>	2.80	31.594	2	56.44	0.382	< 0.001
Immediate catastrophe	6.56 <sup>a</sup>	5.57	8.61 <sup>a</sup>	5.48	1.12 <sup>b</sup>	1.96	36.460	2	52.01	0.417	< 0.001
Escape/Avoidance	10.39 <sup>a</sup>	4.87	13.16 <sup>b</sup>	3.55	4.00 <sup>c</sup>	3.64	53.334	2	64.48	0.514	< 0.001
Bodily sensations	5.47 <sup>a</sup>	5.85	9.65 <sup>b</sup>	5.22	1.00 <sup>c</sup>	2.51	38.334	2	55.95	0.430	< 0.001
FOLCI Total	83.25 <sup>a</sup>	54.38	103.35 <sup>a</sup>	44.98	18.39 <sup>b</sup>	22.88	56.087	2	56.39	0.527	< 0.001

Superscript letters indicate results of post-hoc Dunnett T3 tests (see Supplementary Table 3 for details). The same superscript letters for a given variable indicate no significant differences between groups, while different letters indicate significant differences between specific groups.

BALCI-II=Beliefs About Losing Control Inventory-II; FOLCI=Fear of Losing Control Inventory.

controls, and secondly, whether there would be differences between people with OCD and panic disorder in terms of specific components of feared loss of control.

As hypothesised, the OCD and panic disorder groups reported greater fear of losing control than healthy controls across all BALCI-II and FOLCI subscales (H1a). H1b—that people with OCD and panic would not differ from each other in terms of BALCI-II subscales—was partially supported. There were no significant differences in terms of the Dangerous Behaviour, Madness, and Inflated Probability/Severity subscales. However, the panic disorder group scored significantly higher than the OCD group in terms of the BALCI-II's Overwhelming Emotions subscale. We also note that even where there were no differences found, we cannot be confident of this conclusion as this would require a test of non-inferiority (as opposed to the absence of a significant difference).

The FOLCI was developed to supplement disorder-specificity in the BALCI and BALCI-II. The hypotheses that people with OCD would score significantly higher than the panic group on the FOLCI's Agent of Harm subscale (H2a), and the Delayed Catastrophe subscale (H2c) were not supported. Neither was the hypothesis that the panic disorder group would score significantly higher than the OCD group on the Imminent Catastrophe subscale. The only hypothesised aspect of disorder-specificity that was supported was H2b—that the panic group would score significantly higher than the OCD group on the Bodily Sensations subscale. Non-hypothesised differences were also observed, with the panic group scoring significantly higher than the OCD group in the Escape and Avoidance subscale, and the Thoughts and Feelings subscale.

Overall, these results support research suggesting fear of losing control may play an important role across multiple anxiety disorders (Kelly-Turner & Radomsky, 2024; Lewin et al., 2025). The present findings suggest that fear of losing control is relevant to both OCD and panic disorder, consistent with Radomsky's (2022) suggestion that it is, to some extent, a transdiagnostic factor. Previous research has examined fear of losing control with non-clinical samples of undergraduates (Kelly-Turner & Radomsky, 2024; Radomsky & Gagné, 2020). The present study extends that research by using samples meeting clinical criteria for OCD or panic disorder, which enabled the examination of both disorder-relevance and disorder-specificity.

The present study did find some evidence of disorder-specificity, with the panic group scoring significantly higher than the OCD group on the Bodily Sensations, Escape and Avoidance, and Thoughts and Feelings subscales. This reflects well-established findings emphasising the role of catastrophic misinterpretation of physical sensations, and safety-seeking behaviours in panic disorder (Aslam et al.,

2024). This finding also underscores an advantage of the FOLCI over the BALCI-II, which lacks these subscales that offer insights into potentially disorder-specific aspects of feared loss of control.

The panic group scored significantly higher than the OCD group on the BALCI-II's Overwhelming Emotions subscale, and the FOLCI's Thoughts and Feelings subscale. This was not hypothesised, and could be considered surprising, given the well-established relationship between the need to control thoughts and OCD symptoms (OCCWG, 1997), and that emotions (specifically anxiety) feature prominently in cognitive models of both panic (Clark, 1986) and OCD (Bream et al., 2017). One possible explanation is research indicating generalisation from fear of bodily sensations to fear of emotions (both positive and negative) in panic disorder (Berg et al., 1998; Williams et al., 1997). Baker et al. (2004) found that a panic sample reported greater inclination to control emotions than healthy controls, while Tull and Roemer (2007) found that, compared with healthy controls, a panic sample reported a greater need to control emotions or escape the situation to escape emotions when exposed to both negative and positive emotion film clips. This relationship between fear of bodily sensations, fear of emotions and the need to control emotions through internal and external safety-seeking behaviours may explain the panic group's elevated scores on the FOLCI's Bodily Sensations, Escape and Avoidance, and Thoughts and Feelings subscales, and the BALCI-II's Overwhelming Emotions subscales. The physiological sensations associated with intense emotions may mean that feared loss of control of emotions and physical sensations are linked for people with panic disorder.

While these FOLCI subscales offer specificity—the ability to differentiate between people with OCD and panic disorder—that is to some extent lacking in the BALCI-II, exploratory regression analyses underscored the value of the BALCI-II as a potential predictor of functional impairment. This supports the value of the BALCI-II as a transdiagnostic measure of fear of losing control, and of fear of losing control as playing an important role in psychological distress (Kelly-Turner & Radomsky, 2024).

## Limitations

This study has several limitations. Firstly, it used a sample of convenience. A sample of self-selecting participants may differ from the population of people less willing to participate. It meant the sample contained a greater proportion of females, and was more educated than the wider population. Future research could use randomly selected samples identified in clinical settings to enhance generalisability. Nonetheless, the sample in this study was screened with a clinical interview, with almost perfect agreement between interraters

indicating reliable presence of clinical levels of OCD and panic symptoms. While the screening process for OCD and panic disorder was rigorous, a full clinical interview to identify other comorbidities was not conducted, which presents a threat to internal validity. Future research could establish the presence of co-morbidity more rigorously.

Secondly, the use of an online questionnaire for data collection means the researchers could not monitor participant attentiveness and understanding, meaning misinterpretation of items and careless responding cannot be excluded. Nonetheless, nearly all participants passed both attention checks, and internal consistency on all questionnaires and subscales was good to excellent, suggesting participants engaged thoroughly with the online survey. Moreover, the study used well validated psychometric measures. The novel FOLCI was developed in collaboration with people with lived experience of OCD and panic disorder, and was piloted to ensure ease of understanding.

Thirdly, the comparison of only two anxiety disorders (panic and OCD) obviously limits the extent to which loss of control can be regarded as truly transdiagnostic. Future studies should consider including other disorders.

## Implications

This study underscores the transdiagnostic relevance of fear of losing control. It supports a growing body of evidence indicating this construct may be an important factor across anxiety disorders (Radomsky, 2022), and reflects a broader shift towards the identification of cognitive factors that cut across diagnostic boundaries (Mansell et al., 2008). However, unlike previous studies, which have not recruited distinct clinical groups, and have not used measures designed to investigate the disorder-specificity of fear of losing control, this study identified certain aspects of fear of losing control which may differ between different anxiety disorders. The findings suggest that fear of losing control of bodily sensations, emotions (and thoughts), and the perceived importance of internal and external escape and avoidance behaviours to prevent a feared loss of control may be more important in panic disorder than OCD. Future research should expand this investigation of the disorder-relevance versus disorder-specificity of fear of losing control to other anxiety disorders, with social anxiety (Kelly-Turner & Radomsky, 2020, 2022) and generalised anxiety disorder offering potentially fruitful avenues of exploration.

Previous experimental research has shown that manipulating beliefs about losing control increases OCD symptoms such as checking (Gagné & Radomsky, 2017) and intrusions (Gagné & Radomsky, 2020), and social anxiety symptoms (Kelly-Turner & Radomsky, 2020, 2022). Such experimental manipulations could be extended to a wider range

of anxiety disorders, with the present findings suggesting the causal role of fear of losing control in panic disorder merits further investigation. Experimental research could provide further elaboration of the disorder-relevance versus disorder-specificity of feared loss of control. If a generic manipulation of beliefs about losing control of thoughts and feelings, for example, significantly impacted symptoms of both OCD and panic disorder, this would support a transdiagnostic interpretation. However, if the manipulation impacted clinical symptoms in one group, but not the other, it would support a disorder-specific interpretation.

The present findings also have potential clinical relevance. The OCD and panic groups both reported significantly greater fear of losing control than healthy controls across all BALCI-II and FOLCI subscales, while both measures were significantly associated with functional impairment, and OCD and panic symptoms, accounting for large amounts of variance. This suggests that fear of losing control is a potentially important belief domain to consider when assessing service users experiencing OCD and panic, and potentially anxiety disorders more broadly. A brief cognitive reappraisal intervention has been shown to reduce appraisals of past—and predictions of future—loss of control in an undergraduate sample (Fridgen & Radomsky, 2025). The present findings suggest such experimental interventions should be tested on clinical samples. The clinical relevance of fear of losing control as a target for intervention could be further established through experimental investigation of behavioural experiments targeting fears of losing control. This could involve instructing participants to deliberately try to lose control of thoughts, feelings or bodily sensations, through which they may learn that losing control is far less likely than they fear, and, as such, that maladaptive endeavours to maintain control are both futile and unnecessary. Both CBT and ACT emphasise “letting go” of control as part of treatment in anxiety disorders.

## Conclusion

This study sought to examine the disorder-relevance and specificity of fear of losing control in OCD and panic disorder. As hypothesised, the findings suggest fear of losing control is relevant to both disorders. Findings suggest some, although limited, disorder-specificity. The hypothesis that fears of causing harm as a result of losing control would be higher in the OCD group was not supported, and nor were hypotheses of specificity in terms of the timeframe within which a feared loss of control would result in a catastrophe. The findings suggest some aspects of feared loss of control—specifically fear of losing control of bodily sensations, emotions (and thoughts) and escape and avoidance

behaviours driven by feared loss of control, may be specific to panic disorder. The present findings extend previous research by demonstrating the relevance of feared loss of control—and of the BALCI-II as a measure—within clinical groups. Future research should focus on experimental manipulation of potentially disorder-specific components to further examine the disorder-relevance versus specificity of feared loss of control.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10608-025-10660-8>.

**Acknowledgements** The authors would like to thank Anxiety UK, OCD UK, No Panic, OCD Action and Maternal OCD for their support.

**Author Contributions** J.L., P.S. and V.E. conceptualised the study, and A.R. assisted in this process. J.L. led data collection. J.L., P.S. and V.E. conducted data analysis. J.L. wrote the main manuscript text. P.S., V.E. and A.R. reviewed and suggested revisions to the manuscript. P.S. was primary research supervisor, and V.E. was secondary research supervisor.

**Funding** This study did not receive any funding.

**Data Availability** Research data will be made available upon request to the corresponding author.

## Declarations

**Conflict of interest** The authors have no conflicts of interest to declare.

**Ethical Approval** This study was performed in line with the principles of the Declaration of Helsinki for experiments involving humans. Ethical approval was granted by The University of Oxford Research Ethics Committee (R87791/RE001).

**Informed Consent** Informed consent was obtained from all participants in this study, which included both consent to participate and consent to publish.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Aslam, S. Y., Zortea, T., & Salkovskis, P. (2024). The cognitive theory of panic disorder: A systematic narrative review. *Clinical Psychology Review*, *113*, 102483. <https://doi.org/10.1016/j.cpr.2024.102483>
- Baker, R., Holloway, J., Thomas, P. W., Thomas, S., & Owens, M. (2004). Emotional processing and panic. *Behaviour Research and Therapy*, *42*(11). <https://doi.org/10.1016/j.brat.2003.09.002>
- Berg, C. Z., Shapiro, N., Chambless, D. L., & Ahrens, A. H. (1998). Are emotions frightening? II: An Analogue study of fear of emotion, interpersonal conflict, and panic onset. *Behaviour Research and Therapy*, *36*(1), 3–15. [https://doi.org/10.1016/S0005-7967\(97\)10027-4](https://doi.org/10.1016/S0005-7967(97)10027-4)
- Bream, V., Challacombe, F., Palmer, A., & Salkovskis, P. M. (2017). *Cognitive behaviour therapy for obsessive-compulsive disorder*.
- Clark, D. M. (1986). A cognitive approach to panic. *Behaviour Research and Therapy*, *24*(4), 461–470. [https://doi.org/10.1016/0005-7967\(86\)90011-2](https://doi.org/10.1016/0005-7967(86)90011-2)
- Clark, D. A., & Purdon, C. (1993). New perspectives for a cognitive theory of obsessions. *Australian Psychologist*, *28*(3), 161–167.
- Cloitre, M., Heimberg, R. G., Liebowitz, M. R., & Gitow, A. (1992). Perceptions of control in panic disorder and social phobia. *Cognitive Therapy and Research*, *16*(5), 569–577. <https://doi.org/10.1007/BF01175142>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*, 37–46. <https://doi.org/10.1177/001316446002000104>
- Ariasde la, J., Vilagut, G., Ronaldson, A., Valderas, J. M., Bakolis, I., Dregan, A., Molina, A. J., Navarro-Mateu, F., Pérez, K., Bartoll-Roca, X., Elices, M., Pérez-Sola, V., Serrano-Blanco, A., Martín, V., & Alonso, J. (2023). Reliability and cross-country equivalence of the 8-item version of the patient health questionnaire (PHQ-8) for the assessment of depression: Results from 27 countries in Europe. *The Lancet Regional Health—Europe*, *31*, 31, 100659–100659. <https://doi.org/10.1016/j.lanep.2023.100659>
- Evans, G. W., Shapiro, D. H., & Lewis, M. A. (1993). Specifying dysfunctional mismatches between different control dimensions. *British Journal of Psychology*, *84*(2), 255–273. <https://doi.org/10.1111/j.2044-8295.1993.tb02478.x>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175–191. <https://doi.org/10.3758/BF03193146>
- First, M. B., Williams, J., Karg, R. S., & Spitzer, R. L. (2015). SCID-5-RV.
- Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. M. (2002). The Obsessive-compulsive inventory: Development and validation of a short version. *Psychological Assessment*, *14*(4), 485–496. <https://doi.org/10.1037/1040-3590.14.4.485>
- Fridgen, C. P. E. A., & Radomsky, A. S. (2025). Reappraising beliefs about losing control: An experimental investigation. *Journal of Behavior Therapy and Experimental Psychiatry*, *87*, 102004–102004. <https://doi.org/10.1016/j.jbtep.2024.102004>
- Gagné, J. P., & Radomsky, A. S. (2017). Manipulating beliefs about losing control causes checking behaviour. *Journal of Obsessive-compulsive and Related Disorders*, *15*, 34–42. <https://doi.org/10.1016/j.jocrd.2017.08.013>
- Gagné, J. P., & Radomsky, A. S. (2020). Beliefs about losing control, obsessions, and caution: An experimental investigation. *Behaviour Research and Therapy*, *126*, 103574–103574. <https://doi.org/10.1016/j.brat.2020.103574>
- Gagné, J. P., Radomsky, A. S., & O'Connor, R. M. (2021). Manipulating alcohol expectancies in social anxiety: A focus on beliefs about losing control. *Cognitive Therapy and Research*, *45*(1), 61–73. <https://doi.org/10.1007/s10608-020-10165-6>
- Hedley, L. M., Hoffart, A., & Sexton, H. (2001). The change process in a Cognitive-Behavioral therapy: Testing a cognitive, a behavioral, and an integrated model of panic disorder with agoraphobia.

- Psychotherapy Research*, 11(4), 401–413. <https://doi.org/10.1093/ptr/11.4.401>
- Kelly-Turner, K., & Radomsky, A. S. (2020). The fear of losing control in social anxiety: An experimental approach. *Cognitive Therapy and Research*, 44(4), 834–845. <https://doi.org/10.1007/s10608-020-10104-5>
- Kelly-Turner, K., & Radomsky, A. S. (2022). Always saying the wrong thing: Negative beliefs about losing control cause symptoms of social anxiety. *Cognitive Therapy and Research*, 46(6), 1137–1149. <https://doi.org/10.1007/s10608-022-10325-w>
- Kelly-Turner, K., & Radomsky, A. S. (2024). Update and validation of the beliefs about losing control inventory-II (BALCI-II): A psychometric investigation. *Cognitive Behaviour Therapy*, 1–14. <https://doi.org/10.1080/16506073.2024.2410833>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine: JGIM*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Kroenke, K., Strine, T. W., Spitzer, R. L., Williams, J. B. W., Berry, J. T., & Mokdad, A. H. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders*, 114(1), 163–173. <https://doi.org/10.1016/j.jad.2008.06.026>
- Lewin, J. W. D., Edwards, V., Radomsky, A. S., & Salkovskis, P. M. (2025). *Measuring fear of losing control in relation to the experience of anxiety and related issues: Disorder relevant or disorder specific*. [Manuscript under review]. University of Oxford.
- Mansell, W., Harvey, A., Watkins, E. R., & Shafran, R. (2008). Cognitive behavioral processes across psychological disorders: A review of the utility and validity of the transdiagnostic approach. *International Journal of Cognitive Therapy*, 1(3), 181–191. <https://doi.org/10.1680/ijct.2008.1.3.181>
- Moulding, R., Doron, G., Kyrios, M., & Nedeljkovic, M. (2008). Desire for control, sense of control and obsessive-compulsive checking: An extension to clinical samples. *Journal of Anxiety Disorders*, 22(8), 1472–1479. <https://doi.org/10.1016/j.janxdis.2008.03.001>
- Moulding, R., Kyrios, M., Doron, G., & Nedeljkovic, M. (2009). Mediated and direct effects of general control beliefs on obsessive compulsive symptoms. *Canadian Journal of Behavioural Science*, 41(2), 84–92. <https://doi.org/10.1037/a0014840>
- Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. M. (2002). The work and social adjustment scale: A simple measure of impairment in functioning. *British Journal of Psychiatry*, 180(5), 461–464. <https://doi.org/10.1192/bjp.180.5.461>
- Norton, P. J., & Paulus, D. J. (2017). Transdiagnostic models of anxiety disorder: Theoretical and empirical underpinnings. *Clinical Psychology Review*, 56, 122–137. <https://doi.org/10.1016/j.cpr.2017.03.004>
- Obsessive compulsive cognitions working group. (1997). Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy*, 35(7). [https://doi.org/10.1016/S0005-7967\(97\)00017-X](https://doi.org/10.1016/S0005-7967(97)00017-X)
- Radomsky, A. S. (2022). The fear of losing control. *Journal of Behavior Therapy and Experimental Psychiatry*, 77, 101768–101768. <https://doi.org/10.1016/j.jbtep.2022.101768>
- Radomsky, A. S., & Gagné, J. P. (2020). The development and validation of the beliefs about losing control inventory (BALCI). *Cognitive Behaviour Therapy*, 49(2), 97–112. <https://doi.org/10.1080/16506073.2019.1614978>
- Rutter, L. A., & Brown, T. A. (2017). Psychometric properties of the generalized anxiety disorder Scale-7 (GAD-7) in outpatients with anxiety and mood disorders. *Journal of Psychopathology and Behavioral Assessment*, 39(1), 140–146. <https://doi.org/10.1007/s10862-016-9571-9>
- Salkovskis, P. M., & Clark, D. M. (1993). Panic disorder and hypochondriasis: Panic, cognitions and sensations. *Advances in Behaviour Research and Therapy*, 15(1), 23–48.
- Salkovskis, P. M., & Warwick, H. M. C. (1985). Cognitive therapy of Obsessive—compulsive disorder: Treating treatment failures. *Behavioural and Cognitive Psychotherapy*, 13(3), 243–255. <https://doi.org/10.1017/S0141347300011095>
- Salkovskis, P. M., & Warwick, H. M. C. (1986). Morbid preoccupations, health anxiety and reassurance: A cognitive-behavioural approach to hypochondriasis. *Behaviour Research and Therapy*, 24(5), 597–602. [https://doi.org/10.1016/0005-7967\(86\)90041-0](https://doi.org/10.1016/0005-7967(86)90041-0)
- Sanderson, W. C., Rapee, R. M., & Barlow, D. H. (1989). The influence of an illusion of control on panic attacks induced via inhalation of 5.5% carbon dioxide-enriched air. *Archives of General Psychiatry*, 46(2), 157–162. <https://doi.org/10.1001/archpsyc.1989.01810020059010>
- Sandstrom, A., Krause, S., Ouellet-Courtois, C., Kelly-Turner, K., & Radomsky, A. S. (2024). What’s control got to do with it? A systematic review of control beliefs in obsessive-compulsive disorder. *Clinical Psychology Review*, 107, 102372.
- Shear, M. K., Brown, T. A., Barlow, D. H., Money, R., Sholomskas, D. E., Woods, S. W., Gorman, J. M., & Papp, L. A. (1997). Multi-center collaborative panic disorder severity scale. *American Journal of Psychiatry*, 154(11), 1571–1575. <https://doi.org/10.1176/aip.154.11.1571>
- Shear, M. K., Rucci, P., Williams, J., Frank, E., Grochocinski, V., Vander Bilt, J., Houck, P., & Wang, T. (2001). Reliability and validity of the panic disorder severity scale: Replication and extension. *Journal of Psychiatric Research*, 35(5), 293–296. [https://doi.org/10.1016/S0022-3956\(01\)00028-0](https://doi.org/10.1016/S0022-3956(01)00028-0)
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine*, 166(10), 1092. <https://doi.org/10.1001/archinte.166.10.1092>
- Thorpe, S. J., & Salkovskis, P. M. (1995). Phobic beliefs: Do cognitive factors play a role in specific phobias? *Behaviour Research and Therapy*, 33(7), 805–816. [https://doi.org/10.1016/0005-7967\(95\)00022-P](https://doi.org/10.1016/0005-7967(95)00022-P)
- Tull, M. T., & Roemer, L. (2007). Emotion regulation difficulties associated with the experience of uncued panic attacks: Evidence of experiential avoidance, emotional nonacceptance, and decreased emotional clarity. *Behavior Therapy*, 38(4). <https://doi.org/10.1016/j.beth.2006.10.006>
- Williams, K. E., Chambless, D. L., & Ahrens, A. (1997). Are emotions frightening? An extension of the fear of fear construct. *Behaviour Research and Therapy*, 35(3), 239–248. [https://doi.org/10.1016/S0005-7967\(96\)00098-8](https://doi.org/10.1016/S0005-7967(96)00098-8)
- Winton, E. C., Clark, D. M., & Edelman, R. J. (1995). Social anxiety, fear of negative evaluation and the detection of negative emotion in others. *Behaviour Research and Therapy*, 33(2), 193–196. [https://doi.org/10.1016/0005-7967\(94\)E0019-F](https://doi.org/10.1016/0005-7967(94)E0019-F)