

Project Description

Methods

Participants will be asked for basic demographic information (age, gender, ethnicity, country of origin), so that we can fully describe the sample as part of the report. Following collection of demographic data, participants will be asked to complete a series of questions and questionnaire measures.

Limerence measures

Existing studies of limerence rely on participants to self-report current or past limerence experiences using single questions after a description of the term. We will use a similar approach, providing a description of limerence (according to characteristic symptoms) and how it differs from 'falling in love' and 'crushes'. This description is based on existing literature on limerence, notably from Watkin & Vo (2008) and reports of those with lived experience (Willmott & Bentley, 2015).

Participants who report either being currently limerent or having previous experience of limerence will then be asked to complete two measures which explore: (1) individual differences in the experience of limerence symptoms and (2) the impact of obsessive thoughts and compulsions on everyday functioning.

- (1) *Willmott Limerence Scale*. The first measure is one recently developed by Lynn Willmott and is currently being validated. We have received permission to use this measure from the author. The scale consists of 25-items comprising two factors: rumination on fixed attachment and dissociation experiences and self-disintegration. Participants respond to items about their current or past LO (e.g., "I have/had been thinking about them more than anyone or anything else", "I have/had often constant anticipating/rehearsing events regarding future interactions with them") from 1 (strongly agree) to 5 (strongly disagree).
- (2) *Limerence specific OCD scale*. This scale is a modified version of the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS; Goodman et al., 1989) recently developed by Evans, Poerio & Kellett (in prep). The scale comprises two subscales, one assessing the impact of obsessive thinking about the LO, the other assessing the impact of compulsive behaviours related to the LO. For each item (e.g., "How much distress do your obsessive thoughts related to your LO cause you?"), participants rate levels of distress experienced from 0 (none) to 4 (near constant and disabling distress).

Several other questions will also ask about the history of Limerence experiences and current limerence state, taken from Evans, Poerio & Kellett (in prep):

Limerence history:

- (1) How many limerent episodes have you had in your life?
- (2) At what age did you start experiencing limerence?

Current/past limerence: Participants are then asked the following questions relating to their current or most recent LO:

- (1) Are you currently in a limerent episode? (Yes/No)
- (2) If yes, when did this limerent episode start, and if no, how long did your limerent episode last?
- (3) What is your current relationship to this LO?
- (4) What type of contact do you now have with this LO? Response options: in contact, some contact (i.e., see them or look at their social media but do not engage with them), no contact)
- (5) Thinking about the past week, how much on average, have you: (a) spent engaging with this LO? and (b) spent thinking about this LO? Participants respond using a sliding scale from 0 (none) to 100 (a lot).

Questionnaire measures completed by all participants:

- (1) *Obsessive Compulsive Cognitions* will be measured with the Obsessive Belief Questionnaire (OBQ-44) is a 44-item revision of the original Obsessive Belief Questionnaire (Obsessive Compulsive Cognitions Working Group, 2005). This measure explores features associated with obsessive-compulsive (OC) symptoms, specifically, the three facets of (1) Responsibility and threat estimation, (2) Perfectionism and intolerance for uncertainty, and (3) Importance and control of thoughts. Statements (e.g., “I often think things around me are unsafe”) are rated from 1(disagree very much) to 7(agree very much).
- (2) *Maladaptive Daydreaming* will be measured with the Maladaptive Daydreaming Scale (MDS-16; Somer et al., 2017). The scale measures four factors (1) the strong, addictive urge to engage in daydreaming (Yearning), (2) daydreaming impairing functioning and interfering with long-term life goals or daily chores (Impairment), (3) physical movement associated with daydreaming such as accompanying facial expressions, mouthing the words, rocking, or pacing (Kinesthesia), and (4) music as a facilitator of the daydreaming (Music). Questions (e.g., “Some people notice that certain music can trigger their daydreaming. To what extent does music activate your daydreaming?”) are answered on 11-point scale ranges from 0% (e.g., never, no distress at all) to 100% (e.g., extremely frequent, extreme distress). To further examine immersive daydreaming, the Immersive Daydreaming Checklist (Wen et al., 2022) will also be administered to ask participants about the common themes and functions of their daydreams (this checklist consists of 4 questions).
- (3) Anxiety and Depression will be measured using short form questionnaires recommended by the Wellcome Trust. Anxiety will be measured with the Generalised Anxiety Disorder (GAD-7; Spitzer et al., 2006), a 7-item scale assessing anxiety symptoms over the past two weeks (e.g., “Feeling afraid, as if something awful might happen”). Depression will be measured using the Patient Health Questionnaire (PHQ-8; Kroenke et al., 2009), an 8-item scale assessing depressive symptoms (excluding aspects of suicidal ideation or self-harm) over the past two weeks (e.g., “Little interest or pleasure in doing things”). Responses to both scales are measured from 0(not at all) to 3(nearly every day).
- (4) *Dissociation/derealisation* will be measured with (1) the 2-item Cambridge Depersonalisation Scale (CDS-2; Sierra & Berrios, 2000) where participants respond

regarding their feelings over the past two weeks from 0(not at all) to 3(nearly every day), and (2) the Cernis Felt Sense of Anomaly Scale (CEFSA; Cernis et al., 2021), a 35-item scale measuring dissociative experiences over the past two weeks (e.g., “I feel like a stranger to myself”) from 0(never) to 5(always).

- (5) *Attachment Style* will be measured with the short form of the Attachment Style Questionnaire (ASQ-SF; Karantzas et al., 2010). Participants consider their close relationships and rate their agreement to 29 statements (e.g., “It is important to me that others like me”) from 1(totally disagree) to 6(totally agree).
- (6) *Coping Style* will be measured using the brief version of the Coping Orientation to Problems Experienced Inventory (Brief-COPE; Carver, 1997), a 28-item questionnaire exploring three core facets of coping styles (1) problem-focused, (2) emotion-focused, and (3) avoidant as well as more granular strategies such as the use of humour, social support, and acceptance. Participants are asked to think about how they typically cope with stressful events and rate each coping strategy (e.g., “I express my negative feelings”) from 1(I usually don’t do this at all) to 4(I usually do this a lot).
- (7) *Childhood experiences* will be measured with two checklists that assess the presence or absence of adverse and protective events that may have occurred for an individual before the age of 18.
 - a. Adverse Childhood Experiences (ACEs) will be measured using the Inventory of Adverse Childhood Experiences (Finkelhor et al., 2015). Participants are asked to respond ‘yes’ or ‘no’ to 10 categories of experiences (e.g., “Before your 18th birthday... did a parent or other adult in the household often or very often: swear at you, insult you, put you down, or humiliate you? Or Act in a way that made you afraid that you might be physically hurt?”).
 - b. Protective and Compensatory Experiences (PACEs) in childhood will be measured using the PACEs survey (Morris et al., 2018). Participants are asked to respond ‘yes’ or ‘no’ to 10 categories of experience which are thought to mitigate categories of ACEs (e.g., “Before your 18th birthday... Did you have someone who loved you unconditionally? (You did not doubt that they cared about you)”).