



# Occurrence and co-occurrence of nonsuicidal self-injury and disordered eating in a daily diary study: Which behavior, when?

Brianna J. Turner<sup>a,b,\*</sup>, Angelina Yiu<sup>c</sup>, Laurence Claes<sup>d,e</sup>, Jennifer J. Muehlenkamp<sup>f</sup>, Alexander L. Chapman<sup>a</sup>

<sup>a</sup> Department of Psychology, University of Victoria, Victoria, BC, Canada

<sup>b</sup> Department of Psychology, Harvard University, Cambridge, MA, USA

<sup>c</sup> Department of Psychology, Temple University, Philadelphia, PA, USA

<sup>d</sup> Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium

<sup>e</sup> Department of Psychiatry, Antwerp University, Antwerp, Belgium

<sup>f</sup> Department of Psychology, University of Wisconsin – Eau Claire, Eau Claire, WI, USA

## ARTICLE INFO

### Article history:

Received 21 March 2016

Received in revised form

18 June 2016

Accepted 10 September 2016

Available online 12 September 2016

### Keywords:

Self-injury

Eating disorder

Self-harm

Comorbidity

Experience sampling

## ABSTRACT

Although research has explored between-person traits that may account for the co-occurrence of nonsuicidal self-injury (NSSI) and disordered eating (DE), little is known about within-person processes that predict when each behavior occurs. This study describes the socioemotional contexts of NSSI and DE behaviors during a two-week daily diary period. Young adults (aged 18–35) who reported  $\geq 1$  episode of NSSI and  $\geq 1$  episode of DE (binge eating, purging, or fasting) during the diary period were included ( $N=25$ ). NSSI and DE co-occurred approximately one third of the time. Participants were more likely to act on NSSI thoughts following arguments and feelings of rejection. They were more likely to act on binge eating/purging thoughts after eating or watching television, and when they felt self-hatred. They were more likely to act on fasting thoughts after discussing upsetting memories, and when they were in a public setting. NSSI days were marked by more intense negative mood in the evenings relative to fasting days, and greater fatigue in the morning relative to binge eating/purging days. This study underscores the utility of using experience-sampling methods to develop and test within-person models to advance our understanding of co-occurring behaviors.

© 2016 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

Nonsuicidal self-injury (NSSI), defined as any deliberate and self-inflicted physical injury that occurs in the absence of an intention to die (International Society for the Study of Self-injury, 2007), and disordered eating (DE), defined as eating and weight control behaviors that are both maladaptive and atypical (Stice et al., 2009), frequently co-occur (Claes and Muehlenkamp, 2014). Among eating disorder patients, 32–70% endorse a lifetime history of NSSI (Claes et al., 2001; Favaro and Santonastaso, 1999), and 50–61% of people who engage in NSSI report a lifetime history of an eating disorder (Favazza and Conterio, 1989; Nixon et al., 2002). An emerging body of research has examined between-person factors that may explain the co-occurrence of NSSI and DE. Findings have implicated traits such as negative urgency (Claes et al., 2015a; Peterson and Fischer, 2012), emotion regulation difficulties

(Muehlenkamp et al., 2012; Ross et al., 2009), problems in identity formation (Claes et al., 2015b), mood and personality disorder symptoms (Yiu et al., 2014), and negative attitudes toward one's body (Muehlenkamp et al., 2011; Turner et al., 2015) in the co-occurrence of these two behaviors. Moreover, authors have proposed that NSSI and DE behaviors may be “functionally equivalent”, meaning they occur in response to similar contingencies and result in similar reinforcing consequences (Claes and Muehlenkamp, 2014). Currently, we know little about the within-person processes that may predict which of these behaviors occurs and under which circumstances. We have yet to discover whether different patterns of environmental (e.g., stressors) or emotional cues (e.g., negative mood) predict whether people are more likely to engage in NSSI versus DE on a given day. Clarifying common and differential processes associated with NSSI and DE within individuals who engage in both types of behavior may help clinicians determine what to focus on to help clients reduce these behaviors.

Micro-longitudinal methods hold promise for answering questions about the contexts in which individuals choose a particular behavior from a repertoire, as repeated observations of the

\* Correspondence to: Department of Psychology, University of Victoria, P. O. Box 1700 STN CSC, Victoria, British Columbia, Canada V8W 2Y2.

E-mail address: [briannat@uvic.ca](mailto:briannat@uvic.ca) (B.J. Turner).

same individual allow for within-person comparisons of the contexts surrounding different behaviors. Previous micro-longitudinal studies of NSSI, binge eating with and without purging, and fasting highlight similar emotional, social and environmental precipitants across these behaviors. For example, studies demonstrate that both intensity (Armeij et al., 2011; Berg et al., 2013; Engel et al., 2013; Haedt-Matt and Keel, 2011a; Smyth et al., 2007; Snir et al., 2015) and variability of negative affect (Anestis et al., 2012; Goldschmidt et al., 2014; Lavender et al., 2013; Vansteelandt et al., 2013) predict NSSI and DE. Moreover, studies show that NSSI and DE often occur in response to interpersonal stressors (Goldschmidt et al., 2014; Prinstein et al., 2009), and their associated negative emotions (e.g., feeling rejected or hurt; Nock et al., 2009; Snir et al., 2015), although behaviors themselves typically occur when people are alone (Nock et al., 2009). Micro-longitudinal studies have also investigated the role of food, hunger and weight-related cues in predicting DE (Haedt-Matt and Keel, 2011b; Leahey et al., 2011; Zunker et al., 2011). Thus, micro-longitudinal studies suggest that NSSI and DE may occur in response to similar emotional, interpersonal, and environmental cues. A critical question, therefore, is when and why an individual might prefer one of these behaviors over the other.

### 1.1. Aims and hypotheses

The current study extends the existing micro-longitudinal literature by directly comparing the emotional and social contexts of NSSI versus DE as they occur in daily life among young adults who engage in both behaviors. The current study used a naturalistic daily diary design as a first step in developing a within-person model of co-occurring NSSI and DE. The use of daily monitoring provides a significant advantage over traditional cross-sectional methods that ask participants to recall and describe contexts of NSSI or DE in an aggregated way; in this study, participants were asked to describe emotional, social, and environmental contexts for each specific episode of NSSI and DE on the day that it occurred during a two-week period. Although more frequent assessment schedules (e.g., with multiple reports per day) have yielded important insights into NSSI and DE, we used a single daily report in the current study for several reasons. First, the assessment schedule was limited to the least burdensome schedule that would still adequately capture variability in NSSI and DE. Previous micro-longitudinal studies have used a two-week monitoring period to observe DE (Goldschmidt et al., 2014; Smyth et al., 2007; Wegner et al., 2002) and NSSI (Nock et al., 2009), and have demonstrated that NSSI and DE typically occur a few times per week. Thus, we expected that the primary behaviors of interest could be accurately recalled in daily reports, rather than requiring more frequent daily assessments. Second, this study was not designed to examine emotion regulation functions of NSSI or DE, per se, but rather to describe the occurrence and contexts of NSSI and DE. In line with our decision to employ a retrospective daily assessment, we focused the assessment of affective context on stable, diffuse aspects of *mood* that persist over hours (i.e., valence, arousal, and energy; Wilhelm and Schoebi, 2007; see also Matthews et al. (1990)), rather than on specific *emotional states*, which fluctuate more rapidly (cf. Frijda, 1993).

This study aimed to: 1) describe the frequency, functions, and contexts of NSSI and DE within a young adult sample recruited for engagement in NSSI, and 2) compare the intensity and variability of three aspects of mood (negative valence, agitation, and fatigue) on days when NSSI, DE, or neither behavior occurred. Although there is a shortage of research comparing episodes of NSSI and DE, the extant literature suggested a few hypotheses. Hypothesis 1 was that participants would be more likely to engage in DE when thoughts began during or following exposure to food- or weight-

related cues (Leahey et al., 2011), for example while eating, watching television, or spending time with others, whereas participants would be more likely to act on NSSI thoughts when they were alone (Shingleton et al., 2013). Hypothesis 2 was that participants would predominantly endorse emotion regulation functions across both types of behaviors. Given the scarcity of direct comparisons of the emotional context of NSSI versus DE, we did not have a priori hypotheses regarding specific emotional states or interpersonal stressors that would be differentially associated with DE or NSSI, nor did we have a priori hypotheses regarding differences in the relative contribution of intensity or variability of mood to the prediction of NSSI versus DE.

## 2. Method

### 2.1. Participants

Participants from this study were drawn from a larger investigation of the emotional and interpersonal context of NSSI (see Turner et al., 2016). Young adults ( $N=60$ , aged 18–35) recruited from community websites and post-secondary campuses were eligible to participate if they endorsed recent and repeated NSSI, as indicated by a) at least ten lifetime NSSI episodes, b) at least one NSSI episode in the past 12 months, and c) thoughts or urges for NSSI within the past two weeks. Exclusion criteria included psychiatric conditions that could interfere with diary compliance, including a current major depressive or manic episode, substance dependence, or psychosis. Participants were excluded if they met diagnostic criteria for a major depressive episode, manic episode, or substance dependence during the two weeks prior to enrolling in the study, or if they met criteria for a primary psychotic disorder in their lifetime. Diagnoses were assessed using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID; First et al., 1996), with “good” to “substantial” agreement (Landis and Koch, 1977) between assessors and the first author (average kappa=0.62; absolute rates of rater agreement=80–100%).

The present analyses focused on 25 participants (92% female; mean age=23.12,  $SD=3.81$ ) who endorsed one or more episodes of NSSI and one or more episodes of DE (binge eating, purging, or fasting) during the diary period.<sup>1</sup> These participants identified as White (68%), Asian (12%), South Asian (12%) and other races/ethnicities (8%). Roughly half of the sample were students (52%), while the remaining participants were working full- (16%) or part-time (16%), or were unemployed (16%).

### 2.2. Procedures

Procedures for this study are described in detail in Turner et al. (2016). Briefly, after completing baseline self-report measures

<sup>1</sup> Given that the analyses focused on a subset of the full sample recruited for this study, we compared the full sample of self-injurious participants to the subset included in the present analyses. Compared to the full sample, participants in this subsample did not differ with respect to lifetime frequency of NSSI ( $t(58)=-1.21$ ,  $p=0.23$ ), number of current or lifetime psychiatric disorders ( $ts(58)=-1.28$  to  $-1.67$ ,  $ps > 0.10$ ), presence of current mood, substance use or anxiety disorders ( $\chi^2s=0.26-0.73$ ,  $ps > 0.25$ ), or severity of borderline personality symptoms ( $t(58)=-1.63$ ,  $p=0.11$ ), as assessed by the Personality Assessment Inventory (Morey, 1991). Moreover, there were no differences in endorsement of intrapersonal or interpersonal functions of NSSI between the subsample and full sample ( $ts(55)=0.63-1.59$ ,  $ps > 0.10$ ). Participants in the current subsample engaged in more versatile NSSI (i.e., used a greater number of methods;  $t(58)=-2.43$ ,  $p=0.02$ ), endorsed more severe eating disorder symptoms ( $t(58)=-2.70$ ,  $p=0.01$ ), and had more severe symptoms of depression,  $t(58)=-2.95$ ,  $p=0.01$ ), but not stress or anxiety ( $ts(58)=-0.98$  to  $-1.38$ ,  $ps > 0.10$ ), in the past week as assessed by the short form of the Depression, Anxiety and Stress scale (Lovibond and Lovibond, 1995).

Download English Version:

<https://daneshyari.com/en/article/4933763>

Download Persian Version:

<https://daneshyari.com/article/4933763>

[Daneshyari.com](https://daneshyari.com)