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Self-Triggering? An Exploration of Individuals Who Seek Reminders of Trauma

Benjamin W. Bellet, Payton J. Jones, and Richard J. McNally
Department of Psychology, Harvard University

Abstract

Trauma survivors who self-trigger, or seek reminders of their traumatic events, have been noted in the clinical literature but have not yet been the subject of a systematic empirical inquiry. This article presents the results of two exploratory studies of self-triggering. In Study 1 ($N = 545$), we estimated the behavior's clinical relevance among trauma survivors. In Study 2 ($N = 360$), we examined descriptive characteristics of self-triggering as well as potential motivations for the behavior. We found that self-triggering is uniquely associated with more severe symptoms of posttraumatic stress disorder. Self-triggering takes place via a wide variety of methods and can become compulsive for many individuals. Reasons endorsed for self-triggering comprised several broad motives, but the desire to make meaning of one's trauma was most predictive of self-triggering frequency. Limitations, clinical implications, and directions for further research are discussed.

Keywords

trauma, posttraumatic stress disorder, self-triggering, open data, open materials

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Posttraumatic stress disorder (PTSD) is characterized by reexperiencing symptoms (e.g., flashbacks, intense fight-or-flight physiological responses) in response to cues reminiscent of one's trauma (American Psychiatric Association, 2013). Accordingly, individuals with PTSD typically avoid reminders that trigger such intense distress. Yet avoidance disallows habituation, thereby maintaining the person's PTSD (Foa, Steketee, & Rothbaum, 1989). Thus, PTSD is conceptualized by many theorists as a syndrome characterized and sustained by the avoidance of trauma-related cues (Dunmore, Clark, & Ehlers, 1999; Foa et al., 1989).

However, some personal accounts of trauma survivors seemingly conflict with the avoidance model of PTSD. A brief search of the Internet reveals that many participants on online forums for trauma survivors find themselves mystified by their tendency to "self-trigger" or intentionally expose themselves to reminders of their trauma in online content, literature, or other experiences (e.g., Setrain, 2010; for a list of links to similar survivor narratives, see https://osf.io/qkxz9/). More puzzlingly, many state that they self-trigger purposely to reexperience the symptoms of PTSD (e.g., Counts, 2015). Alarmingly, many users also report being unable to stop this behavior once they have begun despite the dysregulation and distress that it causes (e.g., Leisel, 2017). One trauma survivor summarized the behavior in this way:

> Why do I feel like I need to trigger myself, when I know it will hurt? Has anyone else ever done anything similar? Many PTSD victims have the symptom of avoidance, but I seem to have the exact opposite. I purposefully overload myself with memories. I'm just not sure what that purpose is. (Open Eyes, 2014, para. 5)

Corresponding Author:
Benjamin W. Bellet, Department of Psychology, Harvard University, 33 Kirkland St., Cambridge, MA 02138
E-mail: bbellet@g.harvard.edu

These contemporary personal narratives are consistent with some reports from clinicians who have published case studies of patients who feel compelled to expose themselves to situations reminiscent of their trauma (for a review, see van der Kolk, 1989). These patients have included combat veterans (Blank, 1985), survivors of sexual abuse (De Young, 1984; Herman, 1981), and individuals who have lost parents in childhood (Hilgard, 1953).

Empirical studies of this behavior are scarce. In one study, Fernando et al. (2011) found that British veterans of Bosnia peacekeeping deployments were more likely to watch a television drama related to the deployment than other service members who had not deployed to Bosnia. Notably, those who chose to view the drama were more likely to have experienced posttraumatic stress reactions before they viewed the show. Likewise, Redmond, Jones, Holman, and Silver (2019) found that among a representative sample of U.S. residents, a history of violent victimization was associated with a higher likelihood of watching a graphic beheading video made by the terrorist group Islamic State of Iraq and Syria. Notably, these behaviors do not appear to produce habituation of distress provoked by triggering cues in case or empirical studies.

Unanswered Questions

Survivors of trauma who deliberately expose themselves to triggers to produce acute distress is a clinically puzzling phenomenon that raises many questions. How is self-triggering different from self-directed exposure to triggers in the service of therapeutic habituation, as is conducted in prolonged exposure (PE) therapy (Institute of Medicine, 2008)? One might expect those who self-trigger to eventually habituate to such triggers and regain functioning, but many anecdotal accounts seem to suggest otherwise. Further, how prevalent is the practice among trauma survivors? For those who do self-trigger, do they always approach trauma cues or oscillate between avoidance and approach behaviors? Or do they selectively approach some triggers while avoiding others?

It also remains unclear whether self-triggering has any clinical significance. On the one hand, some individuals who self-trigger may eventually have less severe PTSD than those who do not. Routine exposure to trauma-related triggers may serve as a "homemade" form of PE therapy that causes distress in the short term but eventually relieves symptoms in the long term. On the other hand, rumination about traumatic events (i.e., thinking about why it occurred) prospectively predicts more severe PTSD symptoms (Michael, Halligan, Clark, & Ehlers, 2007). Thus, self-triggering may reflect abortive attempts to revisit a trauma in the process of ruminating about it, disallowing habituation while causing greater fixation on the event and more intrusion symptoms.

Third, if clinical relevance is established, myriad descriptive questions about the behavior related to its clinical implications arise. How often and by what means do most survivors self-trigger? To what extent is the behavior compulsive, distressing, or difficult to curtail? Are the compulsive, ego-dystonic online descriptions of the behavior representative of most self-triggering behavior?

Why Self-Trigger?

Another question with clinical implications concerns why individuals might self-trigger. We explore several possibilities.

Analogues to nonsuicidal self-injury motives

Some plausible motives for self-triggering can be taken from the nonsuicidal self-injury (NSSI) literature. Self-triggering is a behavior that appears to cause harm (although psychological as opposed to physical) and, like NSSI, appears to be difficult for some individuals to curtail (Wilkinson & Goodyer, 2011). NSSI can be motivated by the desire to stop feeling numb or dissociating (Nock & Prinstein, 2004), the desire to experience arousal (Klonsky, 2007), regulation of affect (Linehan, 1993), or the alleviation of feelings of guilt via self-punishment (Inbar, Pizarro, Gilovich, & Ariely, 2013; Nock, 2009). NSSI could also serve as a way to improve mood for those who are highly self-critical (Fox, Toole, Franklin, & Hooley, 2017). Because PTSD is often characterized by numbing symptoms and negative self-evaluations (American Psychiatric Association, 2013), these motivations are plausible. Why would survivors use trauma cues rather than other forms of self-injury? One possibility is that the event has become a salient and central aspect of their identity (Robinaugh & McNally, 2011), making reminders of trauma the first choice for achieving such ends.

Gaining control

Although most anecdotal accounts of self-triggering indicate that the behavior can become baffling and hard to control, some report engaging in the behavior to gain control over their symptoms of PTSD. As one survivor put it, "I have found myself seeking out triggers as well . . . I seek them out and face them to make my triggers less triggering for me" (NurseMandi, 2010). Indeed, confronting trauma-related cues to extinguish resultant fear responses is an aim of PE therapy (Foa, 2011). In a similar vein, one set of case studies (De Young, 1984) conceptualized approaching situations reminiscent of the trauma as "counterphobic behavior"

(i.e., an attempt to master anxiety by repeatedly approaching its source, resulting in a greater sense of control). Indeed, the rationale for one efficacious behavioral intervention for PTSD emphasizes establishing a sense of control over one's fear during exposure to reminders, not passively habituating to them (Başoğlu, Şalcığlu, Livanou, Kalender, & Acar, 2005).

Likewise, if trauma survivors perceive reexperiencing symptoms as inevitable, they may wish to decide the time and place of their occurrence, affording them a sense of control. Indeed, research indicates that stressors are less distressing when they are perceived as more controllable (Thompson, 1981) and predictable (Grupe & Nitschke, 2013; Mineka & Kihlstrom, 1978). Those who self-trigger may also gain a sense of control by keeping themselves in a persistent state of distress and thereby avoiding "contrast effects" (i.e., rapid and unexpected transitions from a euthymic or positive mood to a negative mood). Indeed, research suggests that those with pathological anxiety may persistently worry to prevent sudden shifts in affect as a result of negative events (Crouch, Lewis, Erickson, & Newman, 2017).

Affect matching

Self-triggering may reflect an attempt to reduce the discrepancy between one's internal emotional state and external environment. Those with PTSD may find symptoms such as hyperarousal confusing because they appear to have no readily identifiable causal agent that gives rise to them. Therefore, seeking triggers may be a way of achieving "affect matching," that is, rendering internal emotional states less discrepant with external events. Anxiety is perhaps less mysterious and therefore more tolerable when the reasons for it (trauma-related triggers) are identifiable and experienced concurrently with such an emotion. Indeed, although individuals can "repair" their mood by refocusing on positive thoughts or experiences (Joorman, Siemer, & Gotlib, 2007), they may also seek out experiences concordant with familiar emotional states (e.g., sadness), even though such experiences are aversive (Eerola & Peltola, 2016; Millgram, Joormann, Huppert, & Tamir, 2015).

Search for meaning

Finally, self-triggering may signify an individual's attempt to make meaning of his or her trauma. Meaning-oriented approaches posit that trauma shatters the individual's preexisting assumptions about the world and self, such as the notion that God is benevolent or the world is safe (Janoff-Bulman, 1989, 1992). When a survivor's way of understanding the world has been compromised, life is experienced as unpredictable, distressing, and fearful (Park, Mills, & Edmondson, 2012). Therefore, many survivors may desire to make such memories meaningful in light of other autobiographical memories to reduce schematic discrepancies and reconstruct a coherent worldview (Park, 2010). Difficulty making meaning of trauma is associated with a greater severity of PTSD and more mental health referrals (Currier, Holland, Chisty, & Allen, 2011). In related work, Pennebaker (1990, 1997) found that individuals' mood and health outcomes improved after they wrote about emotionally important experiences in their lives, including very stressful ones. Some theorists (Wilson, Gilbert, & Centerbar, 2002) posit that this effect is observed because making sense of why a negative event has occurred (i.e., rendering the event consistent with an individual's broader understanding of the world) shortens the duration of negative affect resulting from that event. Within this framework, self-triggering could be an attempt to make meaning of a traumatic event by reexperiencing it and thereby reduce the extent to which the memory of the event interferes with one's life.

Answers to these questions about self-triggering may be of great use to both research and clinical practice. It is possible that there exists a subset of individuals with PTSD who at times seek out triggers. If this is the case, avoidance-based models of PTSD may not fully capture the heterogeneity of survivors' relationships to reminders of trauma.

Current Studies

We analyzed data from two studies that asked participants in trauma and mental health-related online forums about their experiences with self-triggering. In Study 1, we recruited trauma survivors, querying them in general in an effort to determine whether there are differences between those who self-trigger and those who do not in regard to clinically relevant variables. In the second study (Study 2), we recruited only trauma survivors who reported self-triggering. Here we sought to explore the forms, frequency, compulsivity, and self-reported reasons for self-triggering. We also planned to determine whether the frequency of self-triggering behaviors is associated with other relevant characteristics and behaviors (e.g., rumination, NSSI). Further, we planned to investigate whether the frequency of self-triggering explains unique variance in PTSD severity. Finally, we sought to investigate how self-reported motivations for self-triggering should best be conceptualized and which of them best explains the severity of the behavior.

Method

Participants

For both studies, participants were recruited via advertisements on online forums oriented toward the topics of trauma, PTSD, and mental health. We only posted advertisements if we had received permission to do so from website administrators or if posting research studies was permitted without prior approval by site policy. For a list of online forums from which participants were recruited, see https://osf.io/f4s67/. Because we sought in Study 1 to examine group differences between trauma survivors who self-trigger and those who do not, advertisements for this study stated that our survey was only about the experiences of trauma survivors and made no mention of self-triggering. Study 2 was conducted at the same time as Study 1 and recruited participants from the same sites, but we explicitly asked for participants who seek out reminders of trauma or self-trigger. Participants who completed Study 1, reported lifetime self-triggering behavior, and volunteered to be recontacted were also invited to participate in Study 2 via e-mail. We also recruited participants for Study 2 via snowball sampling methods (i.e., volunteers who completed the survey could invite others to participate as well).

Participants in both studies were excluded from participation if they failed to pass a human-participant verifier check, if they were under the age of 18 years, or if they had not experienced at least one traumatic event, as assessed by the Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013a). Study 2 had an additional screening criterion, such that participants who did not endorse lifetime self-triggering behavior were excluded. Because it was possible that a given participant was active in multiple online forums from which we recruited, our online-survey software for both studies sent a browser cookie to participants after they began the study that disallowed them from reentering the survey. We planned to collect participants for both studies until we obtained at least 300 valid responses for Study 2, thereby providing sufficient power for a planned exploratory factor analysis (Tabachnick & Fidell, 2013). Participants' responses in both studies were excluded from analyses if they had experienced their most distressing traumatic event less than a month prior to the survey or answered any content-based attention checks embedded in the surveys incorrectly. This left 545 participants in Study 1 and 360 participants in Study 2.

Measures

We analyzed selected items from these two studies related to our current research questions; the two studies contained other measures addressing other issues about self-triggering outside the scope of this article. Only the parts of measures that were analyzed for the current set of studies are described here. For full versions of all measures, see https://osf.io/qf6p2/.

Life Events Checklist for DSM-5. The Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013a) assesses lifetime exposure to traumatic events. It includes 17 different types of events, including an option for "any other very stressful event," and asks participants to specify how they experienced each event that they endorsed (i.e., "happened to me," "witnessed it," "learned about it," "part of my job," and "not sure"). We asked participants to indicate the one event from the LEC-5 that most closely described their "worst event" (i.e., "the event that bothers you the most today"). Our version of the LEC-5 included an 18th option that stated, "I have not experienced any event similar to those listed above" to exclude individuals who had not experienced a stressful event consistent with a Criterion A trauma as conceptualized by the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM–5*; American Psychological Association, 2013).

PTSD Checklist for DSM-5. The PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013b) is a questionnaire that asks participants to answer various questions about the way in which they experienced their most distressing event (e.g., how long ago they experienced it, whether it happened once or more than once). It then assesses to what extent participants have been bothered by 20 different PTSD symptoms in the past month in reference to that event on a Likert scale (0 = *not at all*, 4 = *extremely*). For our studies, we modified the first part of the PCL-5 that asks questions about how the trauma was experienced. As in the original PCL, participants indicated when they experienced their worst event and specified whether they had experienced it once or recurrently. We then added a question that asked participants how well they remembered their worst event on a Likert scale (0 = *I don't remember any of it*, 5 = *every detail, like it was yesterday*). We also used the PCL-5 to assign provisional PTSD diagnoses by determining whether participants' responses satisfied the *DSM–5* diagnostic rules for PTSD and exceeded a previously validated cutoff on the total severity score for the measure. A provisional diagnosis was determined by the presence (indicated by an item score of at least *moderately*) of at least one intrusion symptom, one avoidance symptom, two symptoms of negative alterations in cognition and mood, and two symptoms of alterations in arousal and reactivity, as well as a total severity score exceeding 33 (Bovin et al., 2016). The PCL-5 has demonstrated convergent validity in its associations and diagnostic agreement with other well-validated measures

of posttraumatic symptoms (Wortmann et al., 2016), and it demonstrated good internal consistency in both Study 1 (α = .92) and Study 2 (α = .91).

Treatment-Seeking Questionnaire. The treatment-seeking questionnaire is a study-specific measure that assesses lifetime and current treatment-seeking behaviors for PTSD symptoms (both psychotherapy and pharmacologic treatment).

Demographics Questionnaire. We asked participants to report their date of birth, self-reported gender, race, ethnicity, and highest level of family educational attainment.

Psychiatric History Questionnaire. We assessed the presence of a list of self-reported current and lifetime psychiatric disorders, with an *other* option that allows a free response for any disorders not listed.

Centrality of Events Scale. The Centrality of Events Scale (CES; Berntsen & Rubin, 2006) is a seven-item questionnaire that measures the extent to which an event has become a central aspect of the participant's identity. The CES has demonstrated convergent validity in its positive correlations with the severity of disorders involving preoccupation with past events, even when controlling for other peritraumatic risk factors (Boelen, 2009). The CES demonstrated good internal consistency in the current studies (α = .84).

Self-Triggering Questionnaire. The self-triggering questionnaire (STQ) is a study-specific questionnaire that assesses the methods, frequency, compulsivity, and motives for participants' self-triggering behavior in reference to their most stressful life event.

Methods. We asked participants to rate their frequency of use for different self-triggering methods (e.g., "watching movies or videos that remind me of my worst event") on a Likert scale (0 = *I have never done this*, 4 = *I have done this quite often*) and to specify which method they used most often.

Frequency. We asked participants to indicate how long after their most distressing traumatic event they began self-triggering, how often they have self-triggered since the event on a Likert scale (1 = *once every 2 or more years*, 8 = *every day*), and how often they have self-triggered in the past month (1 = *not at all*, 6 = *every day*).

Compulsivity. We asked participants how difficult it is to resist the urge to self-trigger (0 = *not difficult at all*, 4 = *extremely difficult*), how difficult it is to stop after they have begun (0 = *not difficult at all*, 4 = *extremely difficult*), whether they have had to self-trigger with more frequency or intensity to achieve the same effect over time (0 = *no*, 1 = *yes*), and how much they desire to stop the behavior altogether (0 = *no desire to stop*, 5 = *very strong desire to stop*).

Reasons. We asked participants about the frequency with which they self-trigger for a list of different reasons (e.g., *because I want to punish myself*). These reasons reflected the diverse range of previously hypothesized motives for self-triggering: arousal-seeking, avoidance of feeling numb, self-punishment, emotion regulation, the desire to gain control of PTSD symptoms, "affect matching," and the desire to make meaning of the traumatic event. Because of the exploratory nature of our study, we also included reasons that may not have fit into any of these categories but were recurrent in survivors' anecdotal accounts of the behavior (e.g., "because without my symptoms, I don't know who I am"). Participants responded to each item on a Likert scale (0 = *never*, 4 = *always*). The internal consistency among these items was good (α = .87). Participants were also asked to indicate which item is most often the reason they self-trigger.

NSSI questionnaire. The NSSI questionnaire is a study-specific measure that asks participants whether they have ever engaged in NSSI, how often they engaged in NSSI before their worst event (0 = *not at all*, 8 = *every day*), after their worst event (0 = *not at all*, 8 = *every day*), and within the past month (0 = *not at all*, 5 = *every day*).

Ruminative Responses Scale. The Ruminative Response Scale (RRS; Treynor, Gonzalez, & Noelen-Hoeksema, 2003) assesses the extent to which participants tend to ruminate in response to negative emotions. We used the 10-item version of the scale. The RRS is a well-established measure of ruminative response styles and has displayed convergent validity in its association with the severity of depressive symptoms (Treynor, et al., 2003). The RRS displayed good internal consistency in the current study (α = .81).

Procedure

Study 1. After clicking the link to the study from the online advertisement, participants completed a human-participant verifier task, verified their age and English fluency, and completed the LEC-5. Participants who met all screening criteria then read an institutionally approved informed consent form and clicked a radio button to indicate their understanding and consent to participate. Next, participants completed the modified PCL-5 and treatment-seeking questionnaire and answered a single-item question that asked about the lifetime presence of self-triggering behavior:

> Some people who have experienced difficult events seek experiences (video, literature, places, etc.) that remind them of that event. This behavior is known by some as "self-triggering." Have you ever self-triggered with reminders of the "worst event" you chose? This does not include "exposures" assigned by a therapist.

Next, participants completed the demographics and psychiatric history questionnaires. They were then asked whether they would like to be recontacted for future studies. If participants answered "yes," they were asked to provide their personal e-mail address. Finally, participants were provided with a debriefing form. Participants in Study 1 were compensated for their participation by being given a slot in a lottery for a $50 Amazon gift card. Participants who endorsed self-triggering behavior and volunteered to be recontacted were sent an e-mail inviting them to participate in Study 2.

Study 2. Participants in Study 2 were also primarily recruited from online forums. Because the study included unmasked inclusion criteria that might have motivated participants to overreport self-triggering in the screening phase, we did not offer compensation for this study; participants took part only because they were willing to share their experiences. Because no compensation was offered and this study primarily concerned descriptive aspects of self-triggering, we used other methods to maximize recruitment. Participants for this study were also recruited through messages sent to participants from Study 1 who endorsed self-triggering behavior and volunteered to be recontacted. Participants were also recruited via snowball sampling methods (i.e., participants who completed Study 2 were invited to provide other people with a link to the study in return for entry into a lottery for a $50 Amazon gift card).

After clicking the link to the study, participants completed the same screening procedure as in Study 1 but also answered the same question concerning lifetime self-triggering behavior as was presented in Study 1 as part of the screening procedure. If participants met the study criteria, they then read an institutionally approved informed consent form and clicked a radio button to indicate their understanding and consent to participate. They then completed the modified PCL-5, treatment history questionnaire, CES, self-triggering questionnaire, NSSI questionnaire, RRS, demographics questionnaire, and psychiatric history questionnaire. Participants were also asked how they found out about Study 2 (i.e., by visiting an online forum, volunteering to be recontacted in Study 1 and receiving an invitation e-mail, being invited to participate by a friend, or another option with an open-response entry). Finally, participants were provided with a debriefing form.

Analyses

All analyses were conducted in the R programming environment (Version 3.6.3; R Core Team, 2020). The R code for all analyses is available at https://osf.io/hv534/. For the deidentified data sets associated with Studies 1 and 2, see https://osf.io/3mtfj/ and https://osf.io/e2gd7/, respectively. Missing values in the items corresponding to the PCL, RRS, and CES were replaced via mean imputation when calculating sum scores.

Study 1. We first examined demographic characteristics and the prevalence of individuals who had self-triggered in the sample. To determine whether self-triggering behaviors were clinically relevant, we examined group differences between those who have self-triggered and those who have not in relation to PTSD diagnostic status and severity, treatment-seeking behaviors, and clinically relevant characteristics of traumatic events (i.e., types of traumatic events, age at the time of the event, time since the event, and clarity of memory for the traumatic event). We adjusted p values within this set of analyses for the false discovery rate (FDR; Benjamini & Hochberg, 1995).

Study 2. We examined the demographic and psychiatric characteristics of the sample and then computed descriptive statistics of the methods, frequency, compulsivity, and motives for self-triggering. To further investigate the clinical relevance and cognitive correlates of self-triggering behaviors, we then determined whether the frequency of self-triggering behavior in the past month was correlated with PTSD severity, NSSI frequency, CES scores, and RRS scores. We then conducted a multiple regression to determine whether self-triggering frequency predicts unique variance in PTSD severity when controlling for other known risk factors and cognitive correlates of PTSD. To investigate motivations for self-triggering, we conducted an exploratory factor analysis on the "Reasons" section of the self-triggering questionnaire, considering the factors that emerged as broad types of motivations for self-triggering. To determine whether these motivations were actually related to the severity of self-triggering behavior, we computed factor scores for each type of motivation for each participant and calculated correlations between each factor score and the frequency of self-triggering in the past month. Finally, we conducted an ordinal logistic regression with these factor scores as predictors of self-triggering frequency to determine which motivations best predict self-triggering severity when accounting for all other motivations.

Results

Study 1

Demographic and psychiatric characteristics. The mean age of participants in Study 1 was 28.66 years (*SD* = 9.97). The sample consisted predominantly of participants identifying as female (*n* = 410, 75.2%), with the rest identifying as male (*n* = 103, 18.9%) or specifying a gender other than male or female (*n* = 32, 5.9%). The predominant self-reported race was White (*n* = 465, 85.3%), followed by Black (*n* = 9; 1.7%), Asian/Pacific Islander (*n* = 18, 3.3%), multiracial (*n* = 42, 7.7%), or "other" (*n* = 8, 1.5%). Regarding ethnicity, the sample contained some participants identifying as Hispanic (*n* = 37, 6.8%); the rest identified as non-Hispanic (*n* = 505, 92.7%) or did not specify an ethnicity (*n* = 3; 0.6%). Regarding socioeconomic status, participants' median family educational attainment was a bachelor's degree. Most reported at least one lifetime psychiatric diagnosis (*n* = 432, 79.3%). A majority reported at least one current diagnosis (*n* = 391, 71.7%), and 57.6% of participants reported two or more current diagnoses. A majority of participants (*n* = 383, 70.3%) met criteria for a probable current diagnosis of PTSD, as assessed by the PCL-5. A majority had sought treatment for their PTSD symptoms at some point in their lives, whether psychotherapeutic (*n* = 457, 83.9%) or pharmacologic (*n* = 361, 66.2%). Surprisingly, a large majority of participants had engaged in self-triggering behavior at least once in their lives (*n* = 404, 74.1%).

The most prevalent traumatic event in the sample was direct experience of sexual assault (*n* = 213, 39.1%), followed by direct experience of "any other very stressful event" (*n* = 66, 12.1%), direct experience of physical assault (*n* = 50, 9.2%), and direct experience of "other unwanted or uncomfortable sexual experience" (*n* = 49, 9.0%). All other categories of traumatic events had a prevalence of less than 5%. Because of the wide dispersion of prevalence among different types of events, we dichotomized the traumatic events between those that were unequivocally interpersonal (direct experience of sexual assault, other uncomfortable sexual experience, physical assault with or without a weapon, combat/exposure to a war zone, and captivity) and noninterpersonal (all other events) for further analyses. A majority of traumatic events were interpersonal (*n* = 326, 60.0%).

Clinical relevance. After adjusting for the FDR for all group comparisons of clinical relevance, results indicated that those who had self-triggered also had significantly higher PCL severity scores (*M* = 48.91) than those who had not self-triggered (*M* = 40.89), $t(229.35) = -4.77$, $p < .001$, Hedges's $g = -.47$, and had a higher likelihood of meeting criteria for a provisional PTSD diagnosis (75.2% vs. 56.0%), $\chi^2(1) = 17.57$, $p < .001$, Cramér's $V = .18$. A χ^2 test of independence revealed no difference in treatment-seeking behavior, whether the treatment was psychotherapeutic, $\chi^2(1) = 2.32$, $p = .19$, $V = .07$, or pharmacologic, $\chi^2(1) = 1.49$, $p = .29$, $V = .05$.

We next examined the relationship of self-triggering to different characteristics of traumatic events relevant to PTSD risk; see Table 1 for a depiction of all FDR-corrected group comparisons for trauma characteristics. Those who had self-triggered were more likely to have experienced interpersonal trauma, more likely to have experienced repeated trauma, and less likely to have a clear memory of their traumatic event. In a follow-up analysis we sought to determine whether these relationships were merely a function of the fact that PTSD severity is associated with both self-triggering and with traumatic events that were recurrent (King, King, Foy, & Gudanowski, 1996), interpersonal (Breslau, 2001), or poorly remembered (Halligan, Michael, Clark, & Ehlers, 2003). Therefore, we conducted a series of logistic regressions, with lifetime self-triggering behavior as the dependent variable, the trauma characteristic of interest as a predictor variable, and PTSD severity as a covariate (For a summary of these analyses, see https://osf.io/qkvnh/). We found that lifetime self-triggering behavior was uniquely predicted by having experienced interpersonal trauma (*OR* = 1.67) and repeated trauma (*OR* = 2.16) but not the clarity of memory for the traumatic event.

Study 2

Demographic and psychiatric characteristics. Most participants in Study 2 were recruited from online forums (*n* = 295, 81.9%). The rest had participated in Study 1 and volunteered to be recontacted via e-mail (*n* = 48, 13.3%), were told about the study by a friend (*n* = 7, 1.9%), or did not specify a recruiting source (*n* = 10, 2.8). The mean age for Study 2 was 28.41 years (*SD* = 9.56). The sample consisted predominantly of participants identifying as female (*n* = 253, 70.3%), with the rest identifying as male (*n* = 72, 20%) or a gender other than male or female (*n* = 35, 9.7%). The predominant self-reported race was White (*n* = 297, 82.5%), followed by Asian/Pacific Islander (*n* = 12, 3.3%), Black (*n* = 9, 2.5%), Native American/Alaska Native (*n* = 3, 0.8%), multiracial (*n* = 34, 9.4%), or "other" (*n* = 4, 1.1%); one participant did not specify a race. The sample contained a minority of participants who self-identified their ethnicity as Hispanic (*n* = 36, 10.0%); the rest identified as non-Hispanic (*n* = 326, 90.6%) or did not specify an ethnicity (*n* = 4, 1.1%). Participants' median family educational attainment was a bachelor's degree. A majority of participants reported at least one lifetime psychiatric diagnosis (*n* = 285, 79.2%); 75.6% reported at least one current diagnosis (*n* = 272) and 59.2% reported at least two

Table 1. Summary Statistics and Group Comparisons of Trauma Characteristics for Study 1

	Group summary statistics				
Variable	Total sample	Self-triggering	No self-triggering	Comparison statistics	Effect size
Type of traumatic event				$\chi^2(1) = 11.29$, $p < .01$	$V = .14$
Interpersonal	326 (59.8%)	259 (64.1%)	67 (47.5%)		
Noninterpersonal	219 (40.2%)	145 (35.9%)	74 (52.5%)		
Repeated trauma or not				$\chi^2(1) = 18.0$, $p < .001$	$V = .18$
Repeated	417 (76.5%)	328 (81.2%)	89 (36.9%)		
Single event	128 (23.5%)	76 (18.8%)	52 (63.1%)		
Memory for trauma				$U = 32{,}182$, $p = .03$[a]	$\delta = .13$
Remember every detail	191 (35.0%)	129 (31.9%)	62 (44.0%)		
Cannot remember a few important parts	181 (33.2%)	138 (34.2%)	43 (30.5%)		
Cannot remember many important parts	134 (24.6%)	108 (26.7%)	26 (18.4%)		
Remember almost none of it	33 (6.1%)	26 (6.4%)	7 (5.0%)		
Remember none of it	6 (1.1%)	3 (1.0%)	3 (2.1%)		
Age at time of trauma	$M = 17.40$ ($SD = 9.26$)	$M = 17.05$ ($SD = 8.61$)	$M = 18.42$ ($SD = 10.89$)	$U = 29{,}644$, $p = .41$	$\delta = .05$
Time since trauma	$M = 11.86$ ($SD = 11.25$)	$M = 11.75$ ($SD = 10.73$)	$M = 12.16$ ($SD = 12.65$)	$U = 27{,}156$, $p = .41$	$\delta = -.05$

Note: All p values reflect corrections for the false discovery rate. V = Cramér's V; δ = Cliff's delta.

[a]Group comparison for memory for trauma was conducted as a Mann-Whitney U test, with memory for trauma as an ordinal variable (0 = *remember none of it*, 4 = *remember every detail*).

current diagnoses (n = 213). The majority of participants met criteria for a probable diagnosis of PTSD (n = 254, 70.6%), and the majority of participants had sought treatment for PTSD symptoms at some point in their lives, whether psychotherapeutic (n = 313, 86.9%) or pharmacologic (n = 243, 67.5%). A large majority of participants had engaged in NSSI at some point in their lives (n = 281, 78.1%). The rate of NSSI within this group tended to be low before the traumatic event (*Mdn* = *not at all*) but increased considerably after the traumatic event (*Mdn* = *once every few months*). The median rate of NSSI in the past month, however, was *not at all*.

The prevalence of lifetime NSSI behavior in our sample was very high, even compared with the highest known estimate in a traumatized sample (i.e., 52% among childhood sexual-abuse survivors; Briere & Gil, 1998). This statistic raised questions about the prevalence of individuals with personality disorder-related features in our sample. Indeed, like our participants, the population of those with borderline personality disorder is characterized by a high rate of exposure to interpersonal trauma (Gunderson, 2001) and a rate of NSSI behavior comparable to that of our sample (Soloff, Lis, Kelly, Cornelius, & Ulrich, 1994). We conducted a set of follow-up analyses to test this possibility. First, we calculated the lifetime prevalence of self-reported personality disorder diagnoses in our sample on the basis of their responses to the psychiatric history questionnaire; 16.4% of participants (n = 59) reported a lifetime diagnosis. The rate of lifetime NSSI behavior among those diagnosed (89.8%) was greater than the rate among those not reporting a diagnosis (75.7%) to a small but statistically significant extent, $\chi^2(1) = 4.92$, $p = .03$, $V = .12$.

The most prevalent traumatic event in the sample was direct experience of sexual assault (n = 166, 46.1%), followed by direct experience of "any other very stressful event" (n = 45, 12.5%), direct experience of physical assault (n = 30, 8.3%), and direct experience of "other unwanted or uncomfortable sexual experience" (n = 27, 7.5%). All other categories of traumatic events had a prevalence of less than 5%. The majority of these traumatic events were interpersonal (n = 235, 65.3%). Participants' median clarity of memory for their traumatic event was that there were "a few important parts" they did not remember. A large majority (n = 292, 81.1%) had experienced repeated trauma. On average, participants were 17.2 years old at the time of the trauma (*SD* = 8.76) and had experienced the event 11.69 years before the survey (*SD* = 11.19).

Self-triggering characteristics.

Methods. See Figure 1 for a depiction of the frequencies of methods of self-triggering that participants selected as their primary method. Participants typically used a wide range of methods for self-triggering (*Mdn* = 6). Going to online pages or forums was most often endorsed as the primary method among those selected, perhaps unsurprisingly given our recruitment method. Yet 9% chose "other" as their primary method. The free response for these participants indicated that this method often took the form of engaging in sexual activity or relationships that were reminiscent of their worst event or listening to music that reminded them of their worst event.

Frequency. See Figure 1 for a summary of the frequencies with which participants self-triggered. On average, participants started self-triggering 4.57 years after their worst event (*SD* = 6.61). The median frequency of self-triggering (both since the traumatic event and in the past month) was once per week. Alarmingly, however, the largest proportion of frequency selected by participants for both time frames was 2 to 6 times per week.

Compulsivity. See Figure 1 for a depiction of self-triggering compulsivity metrics in our sample. Participants usually found resisting the urge to self-trigger to be "very difficult." Participants tended to find that their attempts to stop self-triggering after starting were met with moderate difficulty. A substantial minority of participants (35.8%) found that they needed to self-trigger with increased dose (i.e., more frequency or with more intensity) to achieve the same effect. Participants tended to have a moderate desire to stop self-triggering altogether.

Reasons. Participants typically endorsed a wide range of reasons for self-triggering behavior (*Mdn* = 17). The most prevalent reason that participants endorsed as their strongest reason for self-triggering was "to make sense of my worst event" (17.3%), followed by the desire to "release emotional pressure that has built up inside of myself" (10.6%), "to punish myself" (7.8%), "to gain control over my symptoms" (7.0%), "to stop feeling numb" (6.7%), and to ensure that the memory of the worst event does not "fade, or become forgotten" (5.6%). All other reasons for self-triggering endorsed as the strongest had a prevalence of less than 5%.

Associations with symptoms, cognitive styles, and NSSI. We assessed the relation of these clinically relevant variables and self-triggering frequency in the past month with Spearman correlations. Self-triggering frequency showed a small positive correlation with PTSD symptom severity ($r_s = .25$, $p < .001$) and the centrality of the traumatic events to participants' identities ($r_s = .15$, $p = .003$) but did not demonstrate a correlation with tendency toward ruminative response style that was statistically significant ($r_s = .06$, $p = .22$). Self-triggering frequency

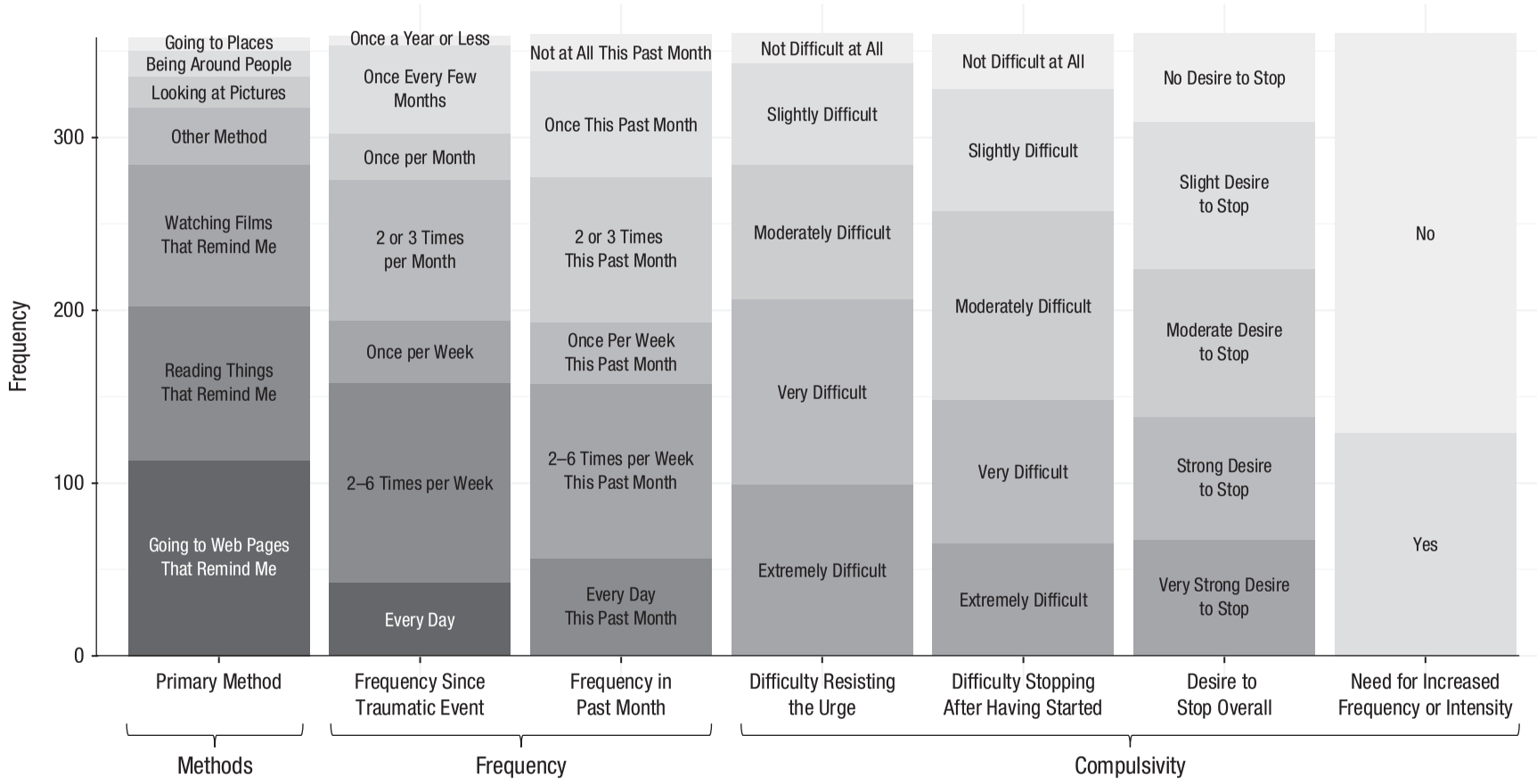

Fig. 1. Characteristics of self-triggering behavior in Study 2.

Table 2. Hierarchical Multiple Regression of Self-Triggering and Other Risk Factors Predicting PTSD Severity

	Step 1[a]			Step 2[b]		
Variable	*b*	*SE*	*t*(348)	*b*	*SE*	*t*(343)
Interpersonal vs. noninterpersonal trauma[c]	4.60	1.58	2.92**	3.93	1.52	2.59*
Recurrent vs. nonrecurrent trauma[d]	0.92	1.86	.49	.96	1.77	0.54
Time since trauma	−0.08	0.08	−1.07	−0.04	0.07	−0.49
Age at trauma	−0.14	0.10	−1.43	−0.11	0.10	−1.16
RRS score	1.19	0.19	6.32***	1.12	0.18	6.23***
CES score	1.06	0.16	6.68***	0.98	0.15	6.46***
Self-triggering frequency, past month[e]						
Once overall	—	—	—	14.56	3.16	4.61***
2–3 times overall	—	—	—	12.82	3.08	4.16***
Once per week	—	—	—	15.19	3.46	4.40***
2–6 times per week	—	—	—	18.71	3.03	6.17***
Every day	—	—	—	18.15	3.22	5.64***

Note: PTSD = posttraumatic stress disorder; RRS = Ruminative Responses Scale; CES = Centrality of Events Scale.
[a]$\Delta F(6, 348) = 25.35$***; $\Delta R^2 = .30$. [b]$\Delta F(5, 343) = 8.89$***; $\Delta R^2 = .80$. [c]Responses were dummy-coded (0 = *noninterpersonal*, 1 = *interpersonal*). [d]Responses were dummy-coded (0 = *single instance*, 1 = *recurrent*). [e]Statistics for levels of self-triggering frequency represent contrasts from lowest level (no self-triggering in the past month).
*$p < .05$. **$p < .01$. ***$p < .001$.

in the past month also showed a small positive relationship with past-month NSSI frequency ($r_s = .14$, $p = .02$). To determine whether self-triggering explains unique variance in PTSD severity above and beyond other known risk factors for PTSD, we conducted a hierarchical linear regression with PTSD severity as the dependent variable (see Table 2). In Step 1, we included the RRS score, the CES score, whether the trauma was interpersonal, time since trauma, age at the time of trauma, and whether the trauma was repeated. We included self-triggering frequency in the past month as a predictor in Step 2 as an ordered factor. Past-month self-triggering frequency explained unique variance in PTSD severity over and above the other risk factors ($\Delta R^2 = .08$).

Factor analysis of self-triggering motivations. We used maximum likelihood estimation for the factor analysis of the questionnaire concerning reasons for self-triggering. We determined on the basis of a parallel-analysis comparison that a six-factor solution was most appropriate. Therefore, we conducted an exploratory factor analysis (EFA) with the number of factors set to six using an oblimin rotation. Fit statistics for the EFA indicated an acceptable fit, with a nonnormed fit index of .91 and a root mean square error of approximation of .06 (90% confidence interval = [.05, .06]). All items showed communalities greater than .2, indicating sufficient shared variance among items. An inspection of the pattern matrix (see Table 3) indicated that seven items did not clearly load on a single factor because they showed a difference of less than .20 between their highest and second-highest loadings. The remaining items all clearly loaded on one of six factors. Given their constituent items, the factors extracted appeared to correspond to motivations for self-punishment (e.g., "because I want to punish myself"), seeking arousal (e.g., "to generate excitement or exhilaration"), affect matching (e.g., "because when I'm feeling 'keyed up' or 'on edge,' I want an experience that matches my mood"), avoidance of numbing/dissociation (e.g., "to stop feeling numb"), making meaning of trauma (e.g., "to make sense of my worst event"), and gaining control of symptoms (e.g., "because I'd rather know when symptoms will come rather than being surprised by them"). We also examined the internal consistencies of the items within subscales corresponding to these factors (see Table 3). Internal consistency for all subscales was acceptable or better, with the exception of the subscale corresponding to gaining control of symptoms, which was poor. To determine whether each motivation was associated with self-triggering behavior, we computed factor scores for all six motivations and computed their correlations with self-triggering frequency in the past month (see https://osf.io/xhnpk/). All motivation factor scores showed small but significant positive relationships with self-triggering frequency ($r_s > .10$). To determine which motivations best explain the severity of self-triggering behavior while accounting for all possible motivations, we conducted an ordinal logistic regression, with self-triggering frequency as the dependent variable and the factor scores as predictor variables. The desire to make meaning of the traumatic event emerged as the only significant predictor of self-triggering frequency ($OR = 1.76$). For an in-depth summary of this analysis, see https://osf.io/xhnpk/.

Table 3. Factor Loadings of Items Describing Different Motivations for Self-Triggering With Six-Factor Solution, Maximum Likelihood Factoring, and Oblimin Rotation

	Factor					
Item	1	2	3	4	5	6
Because I want to punish myself	**.84**	−.02	−.01	.06	.01	.00
To express anger toward myself for being worthless or stupid	**.88**	.01	−.03	.02	.00	.01
Because I am feeling unhappy with myself or disgusted with myself	**.84**	.02	.07	−.06	.00	−.03
To generate excitement or exhilaration	.00	**.70**	−.05	.11	−.12	.06
To entertain myself by doing something extreme	−.03	**.88**	.03	.00	.05	−.09
To feel as if I am doing something risky or dangerous	.18	**.65**	.02	.02	−.01	.04
Because when I am feeling keyed up or on edge I want to have an experience that matches my mood	.09	.21	**.60**	.00	−.02	.15
Because when I am feeling down or blue I want an experience that matches my mood	−.01	−.05	**.76**	.11	.02	−.07
Because when I am feeling emotional distress I want to have an experience that matches my mood	.01	−.03	**.96**	−.03	.00	−.01
To stop feeling numb	.01	−.06	.00	**.81**	−.02	.09
To feel something (as opposed to nothing), even if it is distress	.01	.07	.01	**.87**	.02	−.06
To make sure I am still alive when I do not feel real	.09	.10	.11	**.50**	.06	.08
To make sense of my worst event	−.01	−.05	.08	−.04	**.66**	.08
To try to remember part of my worst event that I forgot	.02	−.02	.01	.15	**.60**	−.08
To figure out why my worst event happened	.05	−.01	−.08	−.03	**.69**	.11
Because I do not want the memory of my worst event to fade or become forgotten	−.06	.14	.08	.11	**.49**	−.16
Because I would rather know when symptoms will come rather than being surprised by them	.07	−.12	.07	.17	−.02	**.65**
Because I want to gain control over my symptoms	−.03	.03	−.07	−.01	.13	**.66**
Internal consistency of component items (α)	.89	.81	.86	.82	.70	.66

Note: Boldface type indicates clear factor loadings. Items with unclear loadings were removed from the table.

Sensitivity analyses. Because some participants were recruited for Study 2 after completing Study 1, these participants would have completed the measures included in both studies twice. Thus, it was possible that filling out some of the measures twice changed the responses of these participants in psychometrically meaningful ways. In light of this possibility, we conducted a follow-up sensitivity analysis, repeating the Study 2 analyses but omitting responses from participants who had been recontacted from Study 1. This enabled us to see whether any of our results changed (for a comprehensive review of these analyses, see https://osf.io/b4cxz/). Our findings were not substantively changed, but some minor differences emerged. For example, the factor analysis indicated the inclusion of an additional item in the factor related to gaining control of symptoms (i.e.,"to calm myself down"). In addition, two of the factor scores no longer showed significant zero-order correlations with self-triggering frequency at the $p = .05$ level (i.e., affect matching and avoidance of numbing). Finally, in the ordinal logistic regression in which all self-triggering motivation factor scores were used to predict self-triggering frequency, both the desire to make meaning of trauma and the desire to punish oneself were significantly associated with self-triggering frequency.

Discussion

Our studies constitute the first systematic inquiry into trauma survivors who deliberately expose themselves to stimuli that trigger reexperiencing symptoms of PTSD. Nearly three quarters of the participants in Study 1 reported self-triggering at some point in their lives. However, because we recruited participants from online forums for trauma survivors, (i.e., recruiting sources highly likely to be frequented by those who self-trigger in the first place, as highly avoidant individuals would likely steer clear of such sites), this statistic is likely influenced by a bias in sampling and should in no way be considered a prevalence estimate of the behavior in the trauma survivor population as a whole. Nevertheless, that so many survivors who self-trigger could be readily found in the population indicates that the behavior's prevalence is nontrivial. Our results also

suggest that self-triggering is clinically relevant, as it explains unique variance in PTSD severity over and above other known risk factors. Further, the majority of individuals who self-triggered in both samples had sought treatment for their PTSD symptoms, underscoring the relevance of this behavior to the clinical population. We also found that those who have experienced interpersonal trauma and those who have experienced repeated trauma are especially likely to self-trigger, even when taking into account PTSD severity.

Our findings also illuminate the relationship between self-triggering and clinically relevant cognitive styles and behaviors that could explain its occurrence. Self-triggering was significantly related to the centrality of traumatic events to survivors' identities, a well-established predictor of PTSD severity (Boals & Ruggero, 2016; Robinaugh & McNally, 2011). Perhaps those who see trauma as more central to their identity are more likely to self-trigger. Indeed, depressed individuals are more likely than nondepressed control subjects to approach sadness-inducing stimuli, possibly because they see being sad as part of who they are (Millgram et al., 2015). Likewise, some trauma survivors may seek trauma-related triggers because they see their traumatic event as part of who they are. Conversely, continual self-triggering may encourage survivors to view their trauma as more central to their identities. Self-triggering did not show a significant association with survivors' tendency to ruminate. This may indicate that it is either distinct from, or a behavioral replacement of, rumination. However, inherent in the definition of rumination is the *passive* focus on one's negative emotions (Nolen-Hoeksema, 1991). Because self-triggering could be viewed as an *active* attempt at approaching the source of one's distress, the lack of relationship observed makes sense.

Our inquiry into how NSSI relates to self-triggering showed a significant but very small association. Nevertheless, the lifetime prevalence of NSSI among those who self-trigger was very high, even given the fact that NSSI is more likely in those who have experienced trauma (Thomas, Lund, & Bradley, 2015). Our follow-up analyses indicate that this high prevalence is not entirely attributable to the presence of personality-related psychopathology in our sample. However, our analyses could not address undiagnosed or nonreported personality disorders or personality disorder-relevant traits that may have been present among participants. Taken together, our findings suggest that self-triggering is related to but distinct from NSSI; the reason for the high rate of co-occurrence between the two sets of behaviors warrants further study.

From a descriptive standpoint, it appears that many of the anecdotal descriptions of self-triggering are borne out in the data. Alarmingly, self-triggering can become compulsive, ego-dystonic, and difficult to curtail for many individuals. The fact that a considerable proportion of survivors wish to stop but find it hard to do so is in itself a compelling reason for more research and clinical focus on this behavior. Self-triggering was conducted in a wide variety of ways, with many participants endorsing multiple methods. The high prevalence of online self-triggering may be a product of our sample's selection bias but may also be indicative of aspects of modern culture that may encourage the frequency of this phenomenon. Diverse and easily accessible variety of material on the internet may afford more opportunities for self-triggering, with the ability to select material that more closely resembles a survivor's index trauma.

Participants endorsed a wide variety of reasons for self-triggering, and many self-triggered for multiple different reasons. We found that these reasons for self-triggering could be collapsed into several broad motives. Some of these motives were related to achieving desired emotional states (seeking arousal or avoiding emotional numbing) or to self-punishment, similar to motives that have been endorsed for NSSI (Nock & Prinstein, 2004).

However, several motives distinct from those in the NSSI literature also emerged. One of these was the desire to control symptoms of PTSD. This factor comprised items tapping the desire to render symptoms both more controllable (e.g., "because I want to gain control over my symptoms") and more predictable (e.g., "because I'd rather know when symptoms will come rather than being surprised by them"). For some, self-triggering may be an attempt to maintain a constant level of PTSD symptoms to avoid being surprised by sudden unexpected elevations in symptoms, similar to the contrast avoidance model of worry in anxiety disorders (Crouch et al., 2017). Another factor that emerged was the desire to make external experiences concordant with an internal state of distress. PTSD is a syndrome characterized for many by a persistent sense of threat in the absence of objective danger (i.e., hyperarousal; Ehlers & Clark, 2000). Exposing oneself to threatening stimuli may render the experience of persistent threat less sinister by providing a post hoc reason for the experience (i.e., placing oneself in an environment in which such an emotional state is more understandable).

Finally, the desire to make meaning of the traumatic event emerged as a distinct factor. The items subsumed by this factor spoke to an attempt to revisit the traumatic memory in an effort to render the narrative of the event more coherent, whether by identifying its causes (e.g.,

"to figure out why my worst event happened") or clarifying its content (e.g., "to remember parts of my worst event that I forgot"). All of the motivational factors derived from our measure were significantly associated with self-triggering frequency; many people may self-trigger for different reasons at different times, as do those who engage in NSSI (Nock, 2009).

However, when controlling for all other endorsed motives, only the desire to make meaning of the traumatic event predicted the severity of self-triggering. Indeed, the types of traumatic events experienced by those who self-trigger are perhaps those that are hardest to make sense of: events that are recurrent and interpersonal. Other work suggests that it may be more difficult for survivors to make meaning of recurrent interpersonal traumas (Cromer & Smyth, 2010), as they have shattered basic assumptions about the extent to which the world is safe or other humans can be trusted (Janoff-Bulman, 1989, 1992).

Although our study sheds light on the forms and motives of self-triggering, it is not yet clear what self-triggering patterns look like over time. It is possible that survivors selectively approach triggers while avoiding others or oscillate between wholesale approach and avoidance behaviors. More research is needed to determine the characteristic patterns of self-triggering behavior.

Our study has several limitations. As previously mentioned, the online recruiting source for our studies may have biased the prevalence of self-triggering behavior in our sample, as well as the prevalence of different methods used for self-triggering. Our samples comprised mainly white female participants whose median family educational attainment was a bachelor's degree, limiting the generalizability of our results to the trauma-survivor population as a whole. Further, our sample was highly symptomatic and characterized by very high rates of psychiatric disorders in general and a very high rate of provisional PTSD diagnoses in particular, even given the fact that all of our participants had experienced a traumatic event. Thus, our findings may not be generalizable to a more representative sample of trauma survivors as a whole who suffer from PTSD at considerably lower rates (Liu et al., 2017). The prevalence of sex-related trauma in our sample was also far higher than that of more representative survivor samples (Liu et al., 2017), further limiting the generalizability of our results. However, the anonymity afforded by the use of an online sample, as well as the purely volunteer basis on which participants took part in our second study, increases our confidence that the responses we did receive were candid and accurate reflections of survivors' experiences.

Another limitation is the exclusive use of retrospective self-reporting, especially when assessing the presence of self-triggering behavior and participants' motives for doing so. We determined the presence of lifetime self-triggering behavior by providing a description of what self-triggering entails and then asking participants whether they had engaged in the behavior. As a reviewer of an earlier version of the article pointed out, it is possible that some participants had been involuntarily exposed to trauma reminders but in retrospect construed such encounters to be the result of an intentional approach (e.g., intentionally watching a movie but then involuntarily being exposed to a trauma reminder in the movie). In addition, participants may have endorsed reasons for self-triggering that made intuitive sense in retrospect but do not accurately reflect their motives at the time; individuals' intuitions regarding the causes of their behavior can be plausible but spurious (Nisbett & Wilson, 1977). Future research on self-triggering should assess the presence of self-triggering and its motives in a manner less vulnerable to retrospective distortion. One such way is manipulating a proposed motive for self-triggering (i.e., inducing rumination about the meaning of a traumatic event) and then determining whether that manipulation results in higher rate of self-triggering behavior (i.e., choosing to view trauma-related content vs. non-trauma-related content).

There are other caveats concerning the interpretation of our results. Some participants in Study 2 were recruited after participating in Study 1 and thus would have completed measures common to both studies twice. This procedure was necessary, as participants from Study 1 could elect to complete Study 2 at any time they desired, and we had to account for the possibility that their symptoms or treatment-seeking behaviors had changed during that time. Further, we wanted to ensure the uniformity of response processes across all participants in Study 2. Our sensitivity analyses indicated that the inclusion of these participants did not substantively change our findings. However, some analyses addressing the composition of motivations for self-triggering and how such motivations relate to self-triggering severity did fluctuate slightly. Future research should ascertain whether our findings regarding the factor structure of self-triggering motivations and their relationship to self-triggering severity replicate in other samples.

Conclusion

Our findings suggest that self-triggering among trauma survivors is a potentially compulsive behavior with a nontrivial prevalence and is associated with more severe levels of posttraumatic symptoms. Much work remains to be done on the direction of causal relationships between self-triggering, posttraumatic symptoms, and other related behaviors and cognitions. The notion that those with PTSD invariably avoid trauma-related triggers

outside of a therapeutic context (American Psychiatric Association, 2013) may be an oversimplification of survivors' relationships to trauma-related cues. On the contrary, some survivors may at times fixate on such triggers. Distress stemming from the uncertain meaning of a traumatic event may outweigh the aversive properties of the memory itself, leading some to compulsively reexperience the event in hopes of restoring schematic consistency to their understanding of the world. It may be that for a subset of trauma survivors, making exposure to trauma narratives and triggers the sole focus of therapy may not be productive, as has been suggested in some case and empirical studies (Echiverri, Jaeger, Chen, Moore, & Zoellner, 2011; Hoge & Chard, 2018). Rather, an equally important goal may be to curtail an iatrogenic fixation on the traumatic event. This could be accomplished by aiding the client in making meaning of the event in a more productive manner (for a meaning-based intervention of this variety, see Southwick, Gilmartin, McDonough, & Morrissey, 2006) by enabling the client to accept the uncertainty surrounding its meaning or by rendering the event less central to the client's identity. Whether such approaches would be differentially effective for those who self-trigger, or would successfully reduce self-triggering behavior, remains an open question for further research.

Transparency

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Author Contributions

B. W. Bellet conceived the study, administered the online study, conducted all analyses, and wrote the first draft of the manuscript. P. J. Jones assisted with the study design and analyses and provided critical revisions. R. J. McNally assisted with the study design and provided critical revisions. All the authors approved the final manuscript for submission.

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The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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All data and materials have been made publicly available via Open Science Framework and can be accessed at https://osf.io/fmcp9/. The complete Open Practices Disclosure for this article can be found at http://journals.sagepub.com/doi/suppl/10.1177/2167702620917459. This article has received badges for Open Data and Open Materials. More information about the Open Practices badges can be found at https://www.psychologicalscience.org/publications/badges.

ORCID iD

Benjamin W. Bellet https://orcid.org/0000-0002-4338-3393

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