

# Intrusive thoughts, avoiding intrusive thoughts, and hyperarousal predict romantic breakup distress

## Abstract

Romantic breakup distress is prevalent and can have severe psychological and physiological effects including symptoms that mimic a heart attack. This Survey Monkey study assessed predictors of Breakup Distress Scale scores including scores on The Impact of Events Scale, The Trauma Symptoms Checklist-38, and The Missing the Partner Scale. A stepwise regression analysis suggested that the scores on The Impact of Events Scale (intrusive thoughts, avoidance of intrusive thoughts, and hyperarousal) explained 59% of the variance in scores on the Breakup Distress Scale. The Trauma Symptoms Checklist-38 scores contributed to another 7% of the variance, and the Missing the Partner Scale scores added another 3% for a total of 69% of the variance. These data suggest that a brief survey including these scales could be used to identify those who might need intervention for romantic breakup distress.

**Keywords:** intrusive thoughts, avoiding intrusive thoughts, and hyperarousal predict romantic breakup

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## Distress

Romantic breakups typically cause distress including depression, anxiety, immune dysfunction and heartbreak syndrome that mimics a heart attack.<sup>1</sup> Earlier research focused on these immediate effects of romantic breakups. For example, romantic breakups were one of the most frequently nominated “worst events” in a large phone survey of traumatic events, and a prospective risk factor for the onset of major depression disorder in that study.<sup>2</sup> And, other data suggest relationships between breakup distress and heart attack symptoms<sup>3</sup> and immune dysfunction.<sup>1</sup> More recent research has focused on risk factors or significant predictor variables for romantic breakup distress including intrusive thoughts, avoiding intrusive thoughts, and missing the partner.<sup>4</sup>

Intrusive thoughts are compulsive thoughts that are difficult to control and are related to unexpected events like romantic breakups.<sup>5</sup> In a study on romantic breakup distress in university students (N=186), intrusive thoughts contributed to 28% of the variance in romantic breakup distress.<sup>6</sup> In that study, the intrusive thoughts items included “having trouble getting the ex-partner out of your mind” and “having dreams about that person”. The limited variance that intrusive thoughts explained could relate to their being measured by only two items. These results were also not generalizable given that 78% of the sample was comprised of Hispanic female university students. Intrusive thoughts also predicted romantic breakup distress in a 7-month-long longitudinal study.<sup>7</sup> However, in that study, confounding variables included greater brooding and less reflection.

Avoidance of intrusive thoughts or suppressing them is reputed to paradoxically increase intrusive thoughts.<sup>8</sup> That research suggested that mentally suppressing the idea of “white bears” causes a rebound, i.e. more thoughts about “white bears”. And the suppression of intrusive thoughts has led to hyperarousal including increases in blood pressure and heart rate and the release of catecholamines and cortisol that can, in turn, affect digestive and immune function.<sup>9</sup>

Trauma symptoms have also contributed to variance in romantic breakup distress at least in one sample of University students.<sup>6</sup> The

Trauma Symptoms Checklist that was used in that study included several somatic symptoms, e.g. headaches, sleep problems, stomach problems, anxiety attacks and having trouble breathing. The scores on the Trauma Symptoms Checklist contributed to the variance in Breakup Distress Scale scores, but only 8% of the variance.

Missing the Partner Scale scores significantly differed when participants with high Breakup Distress Scale scores were compared to those with low scores in another study on university students.<sup>10</sup> The Missing the Partner Scale in that survey included three items that related to missing the partner: “I missed our daily activities/rhythms”, “I missed talking/emotional closeness” and “I missed touching/physical closeness”. This scale was based on a model called “psychobiological attunement” or “relationships as regulators”, suggesting that relationships provide optimal stimulation for each partner.<sup>11</sup>

Although scores on these scales were significantly related to those on the breakup distress scale in these studies, the relative importance of these variables has not been determined given that they were studied in separate samples. Further, their results may not be generalizable given that the samples were limited to university students who had experienced relatively short relationships.<sup>4</sup> To determine profiles of those at risk for romantic breakup distress, these variables including intrusive thoughts, trauma symptoms, and missing the partner would need to be explored in the same sample to determine the relative variance predicted by each of the variables. The purpose of the present study was to determine the relative variance that intrusive thoughts, trauma symptoms, and missing the partner contributed to romantic breakup distress in a sample that included a wider age range of participants than just university students.

## Method

### Recruitment

Participants were recruited via a study flyer posted on Facebook that listed inclusion criteria for the study, sample items and a link to Survey Monkey where the survey was completed. The inclusion criteria were

being at least 18-years-old and having recently experienced a romantic breakup. The survey was comprised of demographic questions and four scales (i.e., the Breakup Distress Scale, The Impact of Events Scale, The Trauma Symptoms Checklist-38, and The Missing the Partner Scale).

## Participants

The sample was comprised of 102 individuals (77% female), ranging from 18 to 55 years ( $M=28.17$ ,  $SD=9.06$ ). AG\* power analysis suggested a sample size of  $N=76$ . The ethnic distribution was 51% Non-Hispanic White, 20% Asian, 6% Black, 4% Hispanic and 19% other. Of the various types of relationships, 77% were girlfriend/boyfriend, 19% lived together, and 4% were married. The length of the relationships ranged from 0-3 months (3%), 3-6 months (13%), 6-9 months (16%) and greater than 12 months (68%). The months since the breakup had occurred ranged from 0-3 months (54%); 3-6 months (11%); 6-9 months (12%); and greater than 12 months (23%).<sup>11</sup>

## Scales

**The breakup distress scale**<sup>12</sup> was adapted from the Inventory of Complicated Grief<sup>13</sup> to reflect problems that related to breakup distress rather than grief in general, and they were rated on a different Likert scale ranging from ratings of 1 for “not at all” to 4 for “very much so”. The Breakup Distress Scale includes 16 of the original 19 items. The internal consistency of the scale reported in the Field et al 2009 study where it was originally used was high (Cronbach’s  $\alpha=.94$ ). The scale items include:

1. I think about this person so much that it’s hard for me to do things I normally do;
2. Memories of the person upset me;
3. I feel I cannot accept the breakup I’ve experienced;
4. I feel drawn to places and things associated with the person;
5. I can’t help feeling angry about the breakup;
6. I feel distressed over what happened;
7. I feel stunned or dazed over what happened;
8. Ever since the breakup it is hard for me to trust people;
9. Ever since the breakup I feel like I have lost the ability to care about other people or I feel distant from people I care about;
10. I have been experiencing pain since the breakup;
11. I go out of the way to avoid reminders of the person;
12. I feel that life is empty without the person;
13. I feel bitter over this breakup;
14. I feel envious of others who have not experienced a breakup like this;
15. I feel lonely a great deal of the time since the breakup; and
16. I feel like crying when I think about the person. The 4-point ratings on the individual items are added for the total score.

**The impact of events scale-revised**<sup>14</sup> includes 22 items on 3 subscales including intrusive thoughts, avoidance of intrusive thoughts, and hyperarousal that are rated on 5-point Likert scales. The scale ratings range from 0 (not at all) to 4 (extremely). The items include

1. 7 intrusive thoughts about the event including: “Any reminder brought back feelings about it”, “I had trouble staying asleep”, “Other things kept making me think about it”, “I thought about it when I didn’t mean to”, “Pictures about it popped into my mind”, “I had waves of strong feelings about it”, “I had dreams about it.
2. 8 avoidance of the intrusive thoughts including “I avoided letting myself get upset when I thought about it”, “I felt as if it hadn’t happened or wasn’t real”, “I stayed away from reminders of it”, “I tried not to think about it”, “I was aware that I still had a lot of feelings about it, but I didn’t deal with them”, “My feelings about it were kind of numb”, “I tried to remove it from my memory”, and “I tried not to talk about it”.
3. 7 hyperarousal items related to the intrusive thoughts and avoidance of the intrusive thoughts including “I felt irritable and angry”, “I was jumpy and easily startled”, “I found myself acting or feeling like I was back at that time” “I had trouble falling asleep”, “I had trouble concentrating”.

“Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, and “I felt watchful and on-guard”. The internal consistency for this scale was also high (Cronbach’s  $\alpha=.91$ ). This scale has been referenced as a measure of posttraumatic stress symptoms in a study on its psychometric properties.<sup>15</sup>

**The trauma symptoms checklist-38** used in this study is an adapted version of the Trauma Symptoms Checklist-40<sup>16</sup> that addresses 38 physical and psychological symptoms that relate specifically to breakup:

1. 6 physical symptoms items including headaches, weight loss, stomach problems, dizziness, passing out, and having trouble breathing;
2. 6 sleep disturbances including insomnia, restless sleep, nightmares, waking up early in the morning, not feeling rested in the morning, and waking up in the middle of the night;
3. 10 sexual disturbances including sexual problems, low sex drive, sexual over activity, not feeling satisfied with your sex life, fear of men, having sex that you didn’t enjoy, fear of women, bad thoughts or feelings during sex, being confused about your sexual feelings and sexual feelings when you shouldn’t have them; and
4. 16 psychological problems including feeling isolated from others, “flashbacks” (sudden, vivid, distracting memories), anxiety attacks, loneliness, “spacing out” (going away in your mind), sadness, trouble controlling your temper, uncontrollable crying, trouble getting along with others, memory problems, feeling that things are “unreal”, unnecessary or over-frequent washing, feelings of inferiority, feeling tense all the time, feelings of guilt, and feeling that you are not always in your body. The internal consistency for this scale was high (Cronbach’s  $\alpha=.92$ ).

The items are rated on a four-point Likert scale ranging from 0 (never) to 3 (often).

**The missing the partner scale**<sup>10</sup> includes four items:

1. I miss our daily activities/rhythms.
2. I miss our talking/ emotional closeness.
3. I miss our touching/physical closeness.

4. I used to be a happy person but now I am miserable. The four items are added for the total score.<sup>6</sup> Each item is rated on a Likert scale that ranges from 1 (totally disagree) to 4 (totally agree).

The internal consistency for this scale was high (Cronbach's alpha=.90).

## Results

A correlation analysis suggested the following coefficients for the correlations with The Breakup Distress Scale scores (all  $p$  values  $>.001$ ): 1)  $r=.65$  for the Missing the Partner Scale; 2)  $r=.74$  for the

Trauma Symptoms Checklist-38; and 3)  $r=.77$  for the Impact of Events Scale-Revised.

A stepwise regression analysis suggested that the Impact of Events Scale explained 59% of the variance in the Breakup Distress Scale scores. The Trauma Symptoms Checklist-38 added 7% to the variance, and the Missing the Partner Scale added another 3% to the variance. The total variance that these scales contributed to the Breakup Distress Scale scores was 69% (Table 1). The mean score on the Impact of Events Scale-Revised ( $M=41.65$ ,  $SD=19.28$ ) suggests that this sample was experiencing moderate to severe posttraumatic stress symptoms (PTSS) (score $>33$ =moderate PTSS).<sup>15</sup>

**Table 1** Stepwise regression on breakup distress scale

Scale	R	R <sup>2</sup>	Change in R <sup>2</sup>	F	p
Impact of Event Scale-Revised	.77	.59	.59	105.16	0.00
Trauma Symptoms Checklist-38	.81	.66	.07	70.60	0.00
Missing the Partner	.83	.69	.03	53.16	0.00

## Discussion

In earlier research on romantic breakup distress, intrusive thoughts contributed to 28% of the variance on romantic breakup distress, while trauma symptoms explained only 8% of the variance, and missing the partner scores were not entered into the regression although they differed across high and low distress groups.<sup>6,10</sup> These studies were considered limited by their sampling university students who had been in relatively short-term relationships. The current study data are, nonetheless, consistent with the earlier findings in that intrusive thoughts explained most of the variance followed by lesser amounts being explained by trauma symptoms and missing the partner.

The greater variance explained by intrusive thoughts in the current study compared to the earlier study (58% versus 28%) may relate to a number of factors. The current sample included a broader age range of adults (18-55 years versus university students who averaged 23 years of age in the earlier studies). In addition, the average duration of relationships was longer in the current sample (68% in relationships of greater than 12 months as opposed to 76% in relationships that averaged 3 months' duration in the earlier studies). Longer-term relationships may lead to more frequent intrusive thoughts, attempts to avoid intrusive thoughts, and hyperarousal.

Another possible explanation for the Impact of Events Scale explaining more of the variance in this study as opposed to the earlier research is that this scale included 22 items as opposed to the two item scale used in the earlier study ("Have you been having trouble getting this person out of your mind?" and "Have you been dreaming about this person?"). Further, the Impact of Events Scale used in this study included as many items on attempts to avoid intrusive thoughts as intrusive thoughts themselves. As already noted, attempts to avoid intrusive thoughts have the paradoxical effect of increasing intrusive thoughts and those attempts have been reported as having more negative consequences including depression.<sup>17</sup> The Impact of Events Scale also included hyperarousal items that are related to intrusive thoughts and attempts to avoid intrusive thoughts. And, as already noted, the suppression of intrusive thoughts has led to hyperarousal including elevated blood pressure and heart rate and increased cortisol and catecholamines that would be expected to affect digestive and immune function.<sup>9</sup>

That the Impact of Events Scale explained significantly more variance in the Breakup Distress Scale than the Trauma Symptoms

Checklist-38 could relate to the instructions for the scales. The Impact of Events Scale introduction asked "Thinking about your breakup, please rate the following", as if reminding the participant of the breakup itself. In contrast, the directions for the Trauma Symptoms Checklist-38 were "How often have you experienced each of the following since the breakup" reminding the participant of the period of time that had elapsed since the breakup rather than the immediate breakup. And, for 46% of the sample, that period had been more than 3 months during which time healing or posttraumatic growth could have occurred and somatic symptoms, which might be considered more serious than intrusive thoughts, were no longer being experienced.

A simpler explanation for the Impact of Events Scale explaining more of the variance than the other two scales is that the items on the Impact of Events Scale are more similar to those on the Breakup Distress Scale. For examples:

1. "Intrusive thoughts" on the Impact Scale and "incessant thoughts" on the Breakup Scale.
2. Avoidance thoughts on both scales including "numb" on the Impact Scale and "stunned" on the Breakup Scale.
3. Hyperarousal as in "irritable and angry" on the Impact Scale and "bitter" on the Breakup Scale.

The Trauma Symptoms Checklist-38, in contrast, included more serious, physical symptoms. And, the Missing the Partner Scale involved missing specific aspects of the relationship like touching and daily activities which are more dissimilar from the Breakup Distress Scale items than those of the Impact of Events Scale.

These potential interpretations are tenuous at best and they highlight the limitations of this study as well as suggest future directions for this research. Larger multivariate studies are needed that assess potential mediating variables based on more sophisticated analyses as, for example, structural equations analyses. Breakup reasons and posttraumatic growth may further elucidate the breakup distress phenomenon. Further, observational studies, as opposed to self-report studies, that assess qualities of relationships as they are occurring and after they do or do not lead to a breakup might further inform this literature. Nonetheless, the data from this study suggest that profiles could be formed from scales such as these to identify those who need interventions to help reduce intrusive thoughts, avoidance of intrusive thoughts, and hyperarousal following romantic breakups.

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## Conflicts of interest

The author declares that there is no conflict of interest to declare.

## References

- Field T. Romantic Breakup Distress, Betrayal and Heartbreak: A Review. *International Journal of Behavioral Research and Psychology*. 2017;5(2):217–225.
- Monroe SM, Rohde P, Seeley JR, et al. Life events and depression in adolescence. Relationship loss as a prospective risk factor for first onset of major depressive disorder. *J Abnorm Psychol*. 1999;108(4):606–614.
- Potu, K, Raizada A, Gedela M, et al. Takotsubo cardiomyopathy (Broken Heart Syndrome): A short review. *SD Med*. 2016;69(4):169–171.
- Field T. Romantic breakup distress in university students: A narrative review. *International Journal of Psychological Research and Reviews*. 2020;3:30.
- Pierce AG. From intrusive to oscillating thoughts. *Archives Psych Nurs*. 2007;21(5):278–286.
- Field T, Diego M, Pelaez M., et al. Intrusive Thoughts: A Primary Variable in Breakup Distress. *College Student Journal*. 2013;47(4):578–584.
- Del Palacio-Gonzalez A, Clark DA, O’Sullivan LF. Cognitive processing in the aftermath of relationship dissolution: Associations with concurrent and prospective distress and posttraumatic growth. *Stress Health*. 2017;33(5):540–548.
- Wegner DM, Schneider DJ, Carter SR, et al. Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*. 1987;53(1):5–13.
- Baum A, Cohen, Hall M. Cortisol and intrusive memories as possible determinants of chronic stress. *Psychosomatic Medicine*. 1993;55(3):274–286.
- Field T, Diego M, Pelaez M, et al. Breakup distress and loss of intimacy in university students. *Psychology*. 2010;1(3):173–177.
- Field T. Relationships as regulators. *Psychology*. 2012;3(6):467–479.
- Field T, Diego M, Pelaez M, et al. Breakup distress in university students. *Adolescence*. 2009;44(176):705–727.
- Prigerson HG, Maciejewski CF, Reynolds CF, et al. The Inventory of Complicated Grief: A call to measure certain maladaptive symptoms of loss. *Psychiatry Res*. 1995;59(1-2):65–79.
- Weiss DS, Marmar CR. The Impact of Events Scale-Revised. In: Wilson, Keane TM, editors. *Assessing psychological trauma and PTSD*. New York: Guilford; 1996.
- Creamer M, Bell R, Farlla S. Psychometric properties of the Impact of Event Scale-Revised. *Behav Res Ther*. 2003;41(12):1489–1496.
- Briere, J. *Psychometric review of the Trauma Symptom Checklist-40 in B.H. Stamm, editor: Measurement of stress, trauma, and adaptation*. Lutherville: Sidran Press; 1996.
- Ito T, Takenaka K, Tomita T, et al. Comparison of ruminative responses with negative rumination as a vulnerability factor for depression. *Psychological Reports*. 2006;99(3):763–772.