

INTRUSIVE THOUGHTS: A PRIMARY VARIABLE IN BREAKUP DISTRESS

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University students who were high versus low on breakup distress scores were given self-report measures to assess their intrusive thoughts about the romantic breakup and their somatic symptoms that followed the breakup as well as their extracurricular activities and social support that might alleviate their breakup distress. In a regression analysis, intrusive thoughts contributed to 28% of the variance on breakup distress scores, somatic symptoms added another 8%, and extracurricular activities added 2% for a total of 38% of the variance. Convergent validity for intrusive thoughts was evident by “intrusive thoughts” scales differentiating the high from the low breakup distress groups including the “Intrusive Thoughts Scale,” the “Controlling Intrusive Thoughts Scale,” the “Ruminative Thoughts Scale,” and the “Post-Traumatic Cognitions Scale.”

Intrusive thoughts are distressing, compulsive thoughts that are recurrent and difficult to control (Peirce, 2007). As Peirce (2007) noted, “it would not make adaptive sense to waste energy by repeatedly thinking those thoughts unless they served a vital purpose.” The relationship between stressful life events and intrusive thoughts has been explained as individuals having unrealistic beliefs, assumptions and expectations that have to be reconciled when something unexpected happens like a romantic breakup. Much of the research in this area has focused on whether suppression of intrusive thoughts increases or

decreases the intrusive thoughts. Most of that research suggests that mentally suppressing the idea of “white bears” causes a rebound, i.e. more thoughts about “white bears” (Wegner Schneider, Carter & White, 1987).

Suppression of intrusive thoughts has paradoxical effects in that it produces the very thoughts that are to be avoided (Marcks & Woods, 2005). Deliberate thought suppression regardless of its content has more negative consequences than non-suppression (Belloch, Morillo & Gimenez, 2004). Negative appraisals of intrusive thoughts concern both the content of the intrusion (e.g. “it was

my fault”) and/or the intrusion itself (e.g. “the fact that I have these uncontrolled memories means that I am damaged”) (Starr & Moulds, 2006). Individuals in this study who assigned their intrusive memories more negative meaning were more likely to find the intrusions distressing and to engage in avoidance strategies such as rumination, disassociation and suppression. A similar study on Japanese undergraduate students suggested that negative rumination was a significant predictor of depression (Ito, Takenaka, Tomita & Agari, 2006). However, ruminative responses as a whole were not a significant predictor of depression after controlling for negative rumination.

In depression, intrusive thoughts have been labeled ruminative thoughts (Nolen-Hoeksema, 2000). In that study on ruminative thoughts in people who lost a loved one, those who used more ruminative thoughts around the time of their loss had more depressive symptoms for 18 months after their loss than those who were less ruminative. One of the successful therapies for these intrusive memories is “imaginal re-living” of the event. In a study using reliving, the decreasing intrusion frequency was gradual, as was the decreasing distress, vividness and perceived “nowness” of the event (Speckens, Ehlers, Hackmann, & Clark, 2006). This process happened more slowly in those who had experienced more severe events, who had greater anger and who had greater perceived “nowness” of the intrusive memories as assessed on the Post-Traumatic Cognitions Inventory (Foa, Tolin, Ehlers, Clark & Orsillo, 1999) and the Intrusion Questionnaire (Speckens et al, 2006).

Some have suggested that intrusive memories may lead to chronic stress and, in turn, to disease (Baum, Cohen & Hall, 1993). The arousal and the associated increases in blood pressure and heart rate and the release of catecholamines and cortisol can, in turn, affect digestive and immune function. Because the

intrusive memories are accompanied by the same physiological, biochemical, biobehavioral and affective responses that follow the traumatic event, the sustained changes would be expected to have negative effects on the immune system.

Suppressing intrusive thoughts during wakefulness can lead to dreams, which could happen for the sake of “giving the person peace during awake time” (Hobson, Pace-Schott & Stickgold, 2000). Sleep disturbances in the form of insomnia have been reported in as many as 43% of individuals experiencing breakup distress for as long as 13 months after the loss (Ford & Kamerow, 1989). Comorbid depression has been noted to worsen sleep quality (Germain, Caroff, Buysse & Shear, 2005).

The purpose of the present study was to determine the relative effects of intrusive thoughts, controlling intrusive thoughts and having somatic symptoms like sleep disturbances on the degree of breakup distress as well as the potential alleviating effects of extracurricular activities and social support. A self-report measure called the Breakup Symptoms and Solutions Scale was created for this study including subscales on intrusive thoughts, somatic symptoms, extracurricular activities and social support. In addition, because intrusive thoughts and controlling/suppressing intrusive thoughts have continually emerged in the literature as significant factors in breakup distress, we included several measures of intrusive thoughts and controlling intrusive thoughts to determine their convergent validity.

Methods

Participants

The initial sample was comprised of 283 university students. Of this sample, 186 (66%) had experienced a breakup on average 3.6 months before this study. The breakup sample (N=186) was divided into high and low breakup distress groups based on a median

split on the Breakup Distress Scale scores. No differences were noted between these groups on demographic variables (ethnicity, age and grade) except for gender. For the high and low distress groups respectively: 1) age averaged 25.0 and 23.3; 2) grade averaged 13.6 and 13.3; and 3) ethnicity was distributed Hispanic (67% and 70%), Caucasian (16% and 12%), African-American (12% and 14%) and other (5% and 4%) (all *ps* non-significant). The high Breakup Distress Scale score group had a proportionately greater number of females than the low distress group (79% vs. 73%, $X^2=5.03$, $p<.01$), and females had higher scores on the Breakup Distress Scale ($M=10.2$ vs. 7.1, $F=6.41$, $p=.01$).

Procedures

University students were recruited for this anonymous questionnaire study from psychology classes at a southeastern university. The students were given extra credit for their participation. During one of their class sessions, the students completed a questionnaire that was comprised of demographic questions, the Breakup Symptoms and Solutions Scale that included subscales on intrusive thoughts, somatic symptoms, extracurricular activities and social support and the Breakup Distress Scale. In addition, the Intrusive Thoughts Scale, the Difficulty Controlling Intrusive Thoughts Scale, the Ruminative Thoughts Scale and the Posttraumatic Cognitions Scale were given to determine the convergent validity of intrusive thoughts scales.

Measures

The *Breakup Distress Scale* (BDS) was adapted from the Inventory of Complicated Grief (ICG) (Prigerson, Maciejewski, Reynolds, Bierhals, Newsom, Fasiczka et al, 1995). The internal consistency of the 19-item ICG was high (Cronbach's $\alpha=.94$). The ICG total score showed a fairly high association with the Beck Depression Inventory (BDI) total score ($r = .87$).

The Breakup Distress Scale was adapted from the ICG by referring to the breakup person instead of the deceased person, and only 16 of the 19 ICG items that were appropriate to breakups were included (Field, Diego, Pelaez, Deeds, & Delgado, 2009). A different rating scale was also used, i.e. a Likert scale with responses ranging from 1 (not at all) to 4 (very much so) including: 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 my 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 *Breakup Symptoms and Solutions Scale* designed for this study includes 12 items (each rated on a 4-point Likert scale) that were divided into subscales labeled intrusive thoughts, somatic symptoms, extracurricular activities and social support. Intrusive thoughts items included: 1) Have you been having trouble getting this person out of your mind?, and 2) Have you been dreaming about this person?. *Somatic Symptoms* included 4 items: 1) Has the breakup affected your sleep? 2) Has the breakup affected your appetite? 3) Did the breakup really hurt you? and 4) Has it affected your physical health? *Extracurricular Activities* included: 1) Have you been able

to listen to your favorite music? 2) Has the breakup been making you feel less social? and 3) Has the breakup led to increased physical exercise? The *Social Support* items included: 1) Were you able to talk to your friends about your breakup? 2) Were you able to talk to your family about your breakup? and 3) Did you seek professional help about your breakup?).

The *Intrusion Questionnaire (IQ)* (Speckens et al, 2006) was comprised of 4 items rated on a Likert scale from 1 (not at all) to 4 (very much so) including: 1) Approximately how often per day would you say the intrusive thoughts occur?; 2) How distressing are the intrusive thoughts?; 3) How vivid are the intrusive thoughts?; and 4) How much does the event appear to be happening now instead of happening in the past?

The *Difficulty Controlling Intrusive Thoughts Scale* (DCITS, Field et al, 2009) was adapted from the Thought Control Questionnaire-Insomnia (TCQI) (Harvey, 2001). Nineteen of the 30 items were selected and rated on a different scale, i.e. a Likert Scale ranging from 1 (not at all) to 4 (very much so) including: 1) I get angry at myself for having intrusive thoughts; 2) I tell myself not to think about them now; 3) I tell myself not to be so stupid; 4) I try to push the thoughts out of my head; 5) I say, "Stop" to myself; 6) I occupy myself with work instead; 7) I keep myself busy; 8) I do something I enjoy; 9) I try to block them out by reading, watching TV, or listening to the radio; 10) I do something physical; 11) I focus on different negative thoughts; 12) I worry about more minor things; 13) I replace an intrusive thought with a more trivial bad thought; 14) I dwell on other worries; 15) I think about past worries instead; 16) I focus on the thoughts; 17) I ruminate about the thoughts; 18) I count sheep or other things; and 19) I get out of bed and I write about them.

The *Ruminative Responses Scale* (Nolen-Hoeksema & Morrow, 1991) abridged version is comprised of 7 items from the

original 22-item scale that describes ruminative responses to the depressing situation that are focused on the consequences of depressed mood. These items include: 1) I think about how sad I feel; 2) I think about how I don't feel up to doing anything; 3) I think I won't be able to do my job/work because I feel so badly; 4) I think about how hard it is to concentrate; 5) I think about how alone I feel; 6) I get absorbed in thinking about why I am sad and find it difficult to think about other things; and 7) I think about how I don't seem to feel anything anymore.

The *Posttraumatic Cognitions Inventory (PTCI)* (Foa et al, 1999) abridged version is comprised of the seven items with the highest factor loadings on the original 33-item scale which is a Likert-type scale. The items include: 1) I used to be a happy person but now I am miserable; 2) I will never be able to feel normal emotions again; 3) My life has been destroyed by the breakup; 4) My reactions since the breakup show that I am a lousy copper; 5) I feel like I don't know myself anymore; 6) The breakup happened because of the way I acted; and 7) There is something about me that made the breakup happen.

RESULTS

Stepwise Regression

As can be seen in Table 1, a Stepwise Regression Analysis with the Breakup Distress Scale scores as the dependent measure revealed that the subscales of the Breakup Problems and Solutions Scale contributed to a significant amount of the variance on the Breakup Stress Scale scores as follows: 1) Intrusive thoughts scores contributed to 28% of the total variance at step 1; 2) Somatic symptoms added 8% to the total variance; and 3) Extracurricular activities contributed an additional 2% of the variance (negatively correlated with breakup distress). The entire model explained 38% of the variance on the Breakup Distress Scale scores.

Table 1. Stepwise regression on Break up Distress Scale scores

Step	R	R square	R ² change	F for change	p
1	.53	.28	.28	74.74	.000
2	.61	.36	.08	24.56	.000
3	.63	.38	.02	7.25	.008

Predictors in order of their entry

1 – Intrusive Thoughts

2 – Somatic Symptoms

3 – Extracurricular Activities

ANOVAs

To determine the convergent validity of the intrusive thoughts scales, ANOVAs were conducted on the 5 intrusive thoughts measures. As can be seen in table 2, the high breakup distress group had higher scores on: 1) The Intrusive Thoughts Scale; 2) The Intrusion Questionnaire; 3) The Difficulty Controlling Intrusive Thoughts Scale; 4) The Ruminative Responses Scale; and 5) The Posttraumatic Cognitions Inventory.

DISCUSSION

The group with higher Breakup Distress Scale scores scored higher on all of the intrusive thoughts measures. This was not surprising inasmuch as several investigators have suggested that intrusive thoughts are one of the most distressing heartbreak experiences (Peirce, 2007; Wegner et al, 1987), although they are also thought to be a cognitive

mechanism for “absorption of change or a complete shift in one’s worldview” (Peirce, 2007). The Difficulty Controlling Intrusive Thoughts Scale scores were also higher for the high scoring Breakup Distress group. Although the suppression of intrusive thoughts often leads to increased intrusive thoughts (Salkovskis & Campbell, 1994), depression (Nolen-Hoeksema, 1991), insomnia and dreams (Hobson et al, 2000), the dreams at least are thought to “give the person peace during awake time” (Hobson et al, 2000). The high scores on the Ruminative Responses Scale in the high distress students were also consistent with the literature inasmuch as ruminative responses have been reported in many bereaved individuals (Germain et al, 2005).

In the regression analysis, the predictor explaining most of the variance in the Breakup Distress Scale scores was the subscale of the Breakup Symptoms and Solutions Scale called Intrusive Thoughts. Two other subscales called the Somatic Symptoms and Extracurricular Activities added significant amounts of variance which together totaled 38% of the variance, suggesting that these factors were important contributors to the relationship breakup distress. This might have been expected inasmuch as these predictors have been associated with other kinds of grief (Fisher, 2004). Although, surprisingly, the social support subscale was not a significant predictor, a finding that is difficult to interpret.

Table 2. Mean scores on intrusive thoughts scales for high and low scoring Break-up Distress Groups (Standard deviations in parentheses).

Primary Variables	Breakup Distress Groups		F	p
	Low	High		
Intrusive Thoughts Scale	0.61(0.70)	1.66 (0.61)	119.86	.000
Intrusion Questionnaire	1.77(2.28)	4.87 (3.72)	47.54	.000
Difficulty Controlling Int. Thoughts Scale	11.83(9.84)	22.90 (11.96)	47.51	.000
Ruminative Responses Scale	3.59(2.98)	7.44 (5.11)	39.46	.000
Posttraumatic Cognitions Inventory	1.84(2.74)	4.80 (4.67)	27.57	.000

It should be noted that these results might not generalize to other university student populations inasmuch as the majority of students in this sample were Hispanic women (78%). Nonetheless, further research is needed in this predominantly Hispanic female psychology student population in light of other data showing cultural differences on the breakups of Cuban-Americans, Mexicans, and Spaniards (Rodriguez, Montgomery, Pelaez & Salas, 2003). In this Miami sample, on average, breakups were more frequent among the Cuban-Americans than among Mexican and Spanish students who tended to be more pragmatic in their approach to relationships. Other university student groups also need further study inasmuch as romantic breakups are the most frequently reported problem at student health centers and are notably detrimental to academic performance and emotional well-being (Field et al, 2009).

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