

Breaking Up Is Hard to Do: The Impact of Unmarried Relationship Dissolution on Mental Health and Life Satisfaction

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This study examined the impact of unmarried relationship break-up on psychological distress and life satisfaction using a within-subjects design. Among unmarried 18- to 35-year olds ($N = 1295$), 36.5% had one or more break-ups over a 20-month period. Experiencing a break-up was associated with an increase in psychological distress and a decline in life satisfaction (from pre- to postdissolution). In addition, several characteristics of the relationship or of the break-up were associated with the magnitude of the changes in life satisfaction following a break-up. Specifically, having been cohabiting and having had plans for marriage were associated with larger declines in life satisfaction while having begun to date someone new was associated with smaller declines. An interesting finding, having higher relationship quality at the previous wave was associated with smaller declines in life satisfaction following a break-up. No relationship or break-up characteristics were significantly associated with the magnitude of changes in psychological distress after a break-up. Existing theories are used to explain the results. Implications for clinical work and future research on unmarried relationships are also discussed.

Keywords: break-up, unmarried, relationship dissolution, commitment, cohabitation, life satisfaction

Hearts will never be practical until they are made unbreakable.

– The Wizard of Oz (Fleming, 1939)

The Wizard of Oz wisely understood the hazards of having a heart—a heart can be broken. But, what causes a heart to break more or less? It is well known that individuals who have recently ended a romantic relationship report lower levels of well-being than those who are in relationships (e.g., Sbarra & Emery, 2005; Simon & Barrett, 2010), but little research has examined changes in well-being from

pre- to postdissolution of an unmarried adult relationship. This study prospectively examined how unmarried relationship break-up is related to mental health and life satisfaction in a longitudinal, national sample. Based in part on the investment model (Rusbult, 1980), we also examined characteristics of the relationship (such as duration and living together) that may exacerbate the negative impacts of breaking up. Further, based on the stressful-event-as-stress-relief model (Wheaton, 1990), we considered factors that may buffer against negative effects of a break-up (such as dating someone new).

The Benefits of Intimate Relationships

Research has shown that there are psychological and physiological benefits to intimate relationships, especially marriage (Kamp Dush & Amato, 2005; Kiecolt-Glaser & Newton, 2001). Romantic relationships, particularly high quality romantic relationships, confer benefits such as social support, companionship, love, and sexual involvement (Laumann, Gagnon, Michael, & Michaels, 1994; Waite & Gallagher, 2000). In particular, Kamp Dush and Amato (2005) found that individuals in exclusive married, cohabiting, or dating relationships each reported higher subjective well-being than individuals not dating at all or dating multiple people. Similarly, Braithwaite, Delevi, and Fincham (2010) found that college students in committed romantic relationships reported fewer mental health problems than

This article was published Online First April 25, 2011.

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Preparation of this article was supported in part by grants from the National Institute of Child Health and Human Development (NICHD): one awarded to Scott Stanley, Galena Rhoades, and Howard Markman (5R01HD047564), the other awarded to Claire Kamp Dush (1K01HD056238). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIH or NICHD.

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single college students. Additionally, young adults who have recently experienced relationship dissolution report more sadness and anger than those in stable relationships (Sbarra & Emery, 2005) and high school students who have recently dissolved a romantic relationship show an increased risk for the onset of Major Depressive Disorder (Monroe, Rohde, Seeley, & Lewinsohn, 1999). Thus, ending a relationship likely leads to decreased well-being.

Hypothesis 1. Psychological distress will increase and life satisfaction will decline following the dissolution of a romantic relationship.

Relationship Investments and Postdissolution Adjustment

Building on interdependence theory (Thibaut & Kelley, 1959), the investment model (Rusbult, 1980) argues that committed intimate relationships are marked by the investment of resources such as self-disclosures, mutual friends, and shared possessions. By virtue of the passage of time, longer relationships tend to include more investments (Rusbult, 1980). As time passes, more memories are made, intimate knowledge is exchanged, activities and friends are shared; lives become more intertwined. Thus, factors that increase relationship investments should be associated with more difficulty adjusting to a break-up (Stanley, Rhoades, & Markman, 2006). Indeed, after a break-up, individuals who had dated their partners for a longer time were more distressed than those who dated their partners for less time (Simpson, 1987).

In addition to relationship duration as a marker of investment, cohabiting relationships are characterized by greater investments than dating relationships. For example, cohabiting couples often pool resources, such as payment for rent, utilities, and groceries (Kenney, 2004), and report more barriers to leaving than dating couples (Rhoades, Stanley, Markman, 2010). Because cohabiting couples invest more in their relationships than do dating couples, they may be more negatively impacted by relationship dissolution.

Being committed to a future with one's partner is also associated with more emotional investments in the relationship (Wieselquist, Rusbult, Foster, & Agnew, 1999). Thus, we expected that having made plans to marry (indicating a commitment to a future together) would be associated with steeper declines in mental health and well-being after a break-up.

Children also represent a significant shared investment and many unmarried couples have children. The nonmarital fertility rate reached its highest recorded rate in U.S. history in 2008 with 40.6% of children being born to unmarried parents (Hamilton, Martin, & Ventura, 2010). In 2009, 38% of cohabiting couples had at least one child living with them (U.S. Census Bureau, 2010). Because of the time and financial demands children require, it is likely that the presence of children increases difficulties for parents after the relationship ends. Mothers are most often the legal guardian of the child, and the stress of single parenthood can negatively impact mothers' mental health (Meadows, Brooks-Gunn, & McLanahan, 2008). For fathers, they often lose regular

contact with their children after the romantic relationship with the mother ends, which can negatively impact fathers' mental health (Meadows, 2009).

Children and other investments such as shared residences or overlapping social networks can also make contact with an ex-partner unavoidable. Maintaining a relationship after dissolution is often stressful and difficult, especially as relationship boundaries are renegotiated and the terms of the dissolution are decided (e.g., Emery & Dillon, 1994). For unmarried couples, especially those with children or shared property, the lack of legal guidelines for the dissolution (e.g., Bowman, 2004) could make continuing contact after the break-up even more conflictual or stressful. A daily diary study of college students who had recently broken-up supports the idea that more contact with the ex-partner would be associated with greater distress, as individuals felt more sadness on the days when contact with the ex-partner occurred (Sbarra & Emery, 2005).

Hypothesis 2. Relationship duration, living together, having had plans for marriage, sharing a child, and continued contact with an ex-partner will be associated with larger increases in psychological distress and larger declines in life satisfaction pre to postdissolution.

Can a Break-Up Be a Relief?

On the other hand, a break-up may relieve stress, at least in some cases. Role strain arises when the obligations of the role one plays become difficult for the individual to fulfill (Goode, 1960). As an example, if an individual is unhappy in his or her relationship, it may be difficult for him or her to experience the benefits of the emotional and sexual intimacy characteristic of most romantic relationships. Fitting with this perspective, research has shown that being in a poor quality marriage is associated with poorer mental health (Kamp Dush, Taylor, & Kroeger, 2008). Taking this notion of role strain one step further, the stressful-event-as-stress-relief model argues that a stressful event (in this case relationship dissolution) can actually alleviate the stress of trying to maintain a role that no longer fits (Wheaton, 1990). In support of this model, partners who initiate relationship dissolution tend to report less postdissolution distress than noninitiators (Sprecher, 1994; Sprecher, Felmlee, Metts, Fehr, & Vanni, 1998). Thus, relationship dissolution may provide some relief from poor quality relationships, particularly for the initiator. Put another way, having been rejected seems to be associated with more distress after a break-up.

We were not able to directly assess who initiated the break up or feelings of rejection, but did have data on how much the participant wanted to end the relationship compared to the partner. We expected that wanting to end the relationship would buffer individuals from the negative effects of relationship dissolution. Similarly, we expected that beginning a new romantic relationship would act as a buffer, as a new relationship could be seen as an event that relieves the stress of the role of being in an unhappy relationship or the role of being single. Prior work suggests that repartnering buffers against declines in life satisfaction

following union dissolution (Soons, Liefbroer, & Kalmijn, 2009).

Hypothesis 3. Wanting to break-up, low predissolution relationship quality, and dating someone new will be associated with smaller increases in psychological distress and smaller declines in life satisfaction pre- to postdissolution.

Present Study

Though several studies have examined distress in samples of unmarried individuals who had recently experienced a break-up (e.g., Sbarra & Emery, 2003; Simon & Barrett, 2010), this is one of the first to examine change in outcomes pre- to postdissolution. We tested whether dissolving an unmarried relationship was associated with increases in psychological distress and decreases in life satisfaction. We measured both psychological distress and life satisfaction because we wanted windows on both negative and positive aspects of well-being. We also examined characteristics of the relationship and break-up that may exacerbate or buffer against these changes. We used longitudinal data from a large, national study of unmarried adults ages 18 to 35. These data were well-suited for our research questions because relationship status as well as psychological distress and life satisfaction were assessed frequently (every 4 months) over a 20-month period. Given this frequency, we were able to use multilevel modeling analyses that allowed us to examine within-subjects effects. Thus, we compared psychological distress and life satisfaction before and after break-ups within individuals, rather than merely comparing those who had or had not experienced a break-up. The benefit of our within-person approach is that it controls for stable individual characteristics, such as personality or family background (i.e., selection effects), that can be associated both with the stability of a relationship and with outcomes (Johnson, 2005). Lastly, we examined whether gender moderated our findings because the divorce literature suggests that there are sometimes differential impacts of dissolution for men and women (see Amato, 2000).

Method

Participants

Participants ($N = 1295$) in the current study were individuals who took part in the first wave of a larger, longitudinal project on romantic relationship development (see Rhoades et al., 2010). All participants were unmarried but in a romantic relationship with a member of the opposite sex at the time of recruitment. The sample was 63% female and 37% male. Participants ranged in age from 18 to 35 ($M = 25.57$, $SD = 4.81$), had a median of 14 years of education and made \$15,000 to \$19,999 annually, on average. In terms of ethnicity, this sample was 8.3% Hispanic or Latino and 91.7% not Hispanic or Latino. In term of race, the sample was 75.9% White, 14.4% Black or African American, 3.2% Asian, 1.1% American Indian/Alaska Native, and .3% Native Hawaiian or Other Pacific Islander; 3.8% reported being of more than one race, and 1.2% did not report a race.

In terms of race and ethnicity, this sample is comparable to the English-speaking population of the United States for those in this age range.

Procedure

To recruit participants for the larger project, a calling center used a targeted-list telephone sampling strategy to call households within the contiguous United States. This strategy involves calling telephone numbers of individuals who have been placed on a sampling list based on information gathered from a multitude of sources such as public records, magazine subscriptions, returned warranty card information, and other sources in which individuals record their names, addresses, and telephone numbers. We chose this method because it was less expensive and more efficient than a random-digit dialing strategy (Dillman, 2000) and because legislation around random-digit dialing does not allow calling cell phones, which we thought would be important for the age group we were targeting. We did not ask for the specific individual whose name was on the sampling list, but rather allowed any person in the household who met criteria to participate (one per household).

To qualify to receive a mailed survey, telephone respondents needed to be between 18 and 34 (at the time of the phone call) and be in an unmarried relationship with a member of the opposite sex that had lasted two months or longer. Those who qualified, agreed to participate, and provided complete mailing addresses ($N = 2,213$) were mailed forms within 2 weeks of their phone screening. Of those who were mailed forms, 1,447 individuals returned them (65.4% response rate); however, 152 of these survey respondents indicated on their forms that they did not meet requirements for participation, either because of age or relationship status, leaving a sample of 1,295. After the first mailed survey (T1), participants were mailed follow-up surveys every 4 months. Data from the first six waves of data collection (representing a 20-month period from T1 to T6) were used in the current study. Of the original 1,295 participants, 92.7% completed at least one additional assessment after T1 and 56.1% completed all six waves (M number of assessments = 4.80, $SD = 1.67$, $Mdn = 6$). (Analyses comparing those who completed all six waves to those who completed fewer indicated no significant differences on demographic or outcome measures, with the exception that women (69%) were more likely than men (60%) to complete all six waves.) Some individuals ($n = 232$) became married during the course of the study. Because divorce is likely different from an unmarried break-up in some ways, we excluded data that were collected after a participant had become married. Thus, all of the break-ups represented in the data presented here are unmarried.

Outcome Measures

Psychological distress. We used 12 items from the longer Mood and Anxiety Symptom Questionnaire (Clark & Watson, 1991) to assess general psychological distress at each wave. We chose these 12 items based on factor analyses that

indicate that they measure general psychological distress rather than symptoms specific to anxiety or depressive disorders (see Keogh & Reidy, 2000). Example items are: “during the last week, I felt dissatisfied with everything” and “during the last week, I felt tense or ‘high strung.’” Other work has further validated the use of these items in measuring psychological distress and has shown the 12-item measure to be reliable (α in prior work = .94; Wortel & Rogge, 2010). Each item was rated on a 1 (*not at all*) to 5 (*extremely*) scale. This measure was scored by averaging the items. Higher scores indicate more distress ($M = 2.28$, $SD = 0.97$, $Range = 1$ to 5 , $\alpha = .93$).

Life satisfaction. To measure global life satisfaction at each wave, we used the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Items such as “In most ways my life is close to my ideal” and “If I could live my life over, I would change almost nothing” are rated on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). This scale has demonstrated validity and reliability in prior research (Pavot & Diener, 2009). This measure was scored by averaging the items; higher scores indicate higher life satisfaction ($M = 4.52$, $SD = 1.40$, $Range = 1$ to 7 , $\alpha = .89$).

At T1, life satisfaction was negatively correlated with psychological distress ($r = -.51$, $p < .001$). A factor analysis with all of the psychological distress and life satisfaction items supported a distinction between the constructs, as the psychological distress items loaded on one factor (factor loadings for distress items ranged from .56 to .76, cross-loadings for life satisfaction items ranged from $-.19$ to $-.22$) and the life satisfaction items loaded on a second factor (factor loadings for life satisfaction items ranged from .58 to .85, cross-loadings for distress items ranged from $-.01$ to $-.36$). These two factors explained 60.18% of the total variance.

Relationship and Break-Up Characteristics

For analyses regarding the ways that relationship and break-up characteristics were related to the magnitude of the changes in psychological distress and life satisfaction after a break-up, we used data from only those participants who experienced one or more break-ups during the study ($n = 487$). The following measures were given to this subsample of participants.

Length of relationship. Following a break-up, participants were asked, “How long were you and this person in a relationship?” ($M = 28.2$ months, $SD = 29.1$, $Range = 1$ to 168 months). Two participants had answers on this variable that were impossible given their ages. Their length of relationship scores were changed to 168 (the next highest score in the sample) for analyses.

Cohabitation status. Respondents were asked, after the break-up, if they had been cohabiting when the break-up happened: “Were you and your partner living together? That is, were you sharing a single address without having separate places to go to?” Twenty-five percent of the break-ups were among cohabiting partners.

Plans for marriage. Participants were asked at the wave prior to the break-up, “Have the two of you together made a specific commitment to marry?” Those who said they were engaged or had mutual plans to marry (31%) were coded as 1 and those without plans were coded as 0.

Child together. We used data from the wave prior to the break-up about participants’ parenting status. In this sample, 10% of the relationships were ones in which partners had a biological child together. Having a child together was coded as 1, no child was 0.

Continued contact. After the break-up, we measured the frequency with which ex-partners were still talking with the item, “How often do you talk to this person now that the relationship has ended?” Participants responded on a 1 (*Never*) to 5 (*Every day*) scale. The anchors in between these two end points were “Every few months” (2), “Every few weeks” (3), and “Every few days” (4; $M = 2.92$, $SD = 1.46$).

Desire to break up. After a break-up, participants rated “who wanted to end the relationship more” on a 1 (*Me*) to 7 (*My partner*) scale with 4 being labeled “Equal.” This item was dichotomized such that individuals with a score of 5 or above were coded as 1 and those with a score of less than 5 being coded as 0. Fifteen percent responses were in the “equal” category and we collapsed them into the 0 category. A score of 1 therefore indicates that the partner wanted to end the relationship more than the participant, which may be indicative of the participant feeling rejected by his or her partner. Thirty-one percent of the relationships were ones in which the partner wanted to end it more than the participant.

Relationship quality. Relationship quality was measured at the wave prior to the break-up with the 4-item version of the Dyadic Adjustment Scale (Sabourin, Valois, & Lussier, 2005; Spanier, 1976). This measure includes items about thoughts about dissolution, frequency of confiding in one another, and a general item about how well the relationship is going. Response options vary across the four items. As suggested by the authors (Sabourin et al.) the scale was scored by summing the items ($\alpha = .81$). Higher scores indicate higher relationship quality ($M = 14.1$, $SD = 4.1$, $Range = 1$ to 21).

Dating someone new. Participants were asked at the wave just after a break-up if they were in a new relationship (yes or no). In 36% of the break-ups, participants were dating someone new by the time they completed the survey that immediately followed their break-up.

Results

Descriptive Findings

During the 20-month period of the study, 473 individuals (36.5% of the sample of 1295) experienced one or more break-ups. Of those 473, the majority (74.4%, $n = 352$) experienced only one break-up; 93 (19.7%) experienced two break-ups, 23 (4.9%) experienced three break-ups, and 5 (1.1%) experienced four break-ups during this time period. Because we used multilevel modeling to examine within-person change related to experiencing a break-up,

data about all of the break-ups an individual experienced during the study could be analyzed.

Tests of Hypotheses

The first hypothesis was that psychological distress would increase and life satisfaction would decrease following the dissolution of a romantic relationship. To test this hypothesis, we used the following multilevel-modeling equations and Hierarchical Linear Modeling 6.0 software (Raudenbush, Bryk, & Congdon, 2004).

$$\text{Level 1: } Y_{ii} = \pi_{0i} + \pi_{1i}(\text{Break-up})_{ii} + e_{ii}$$

$$\text{Level 2: } \pi_{0i} = \beta_{00} + r_{0i}$$

$$\pi_{1i} = \beta_{10} + r_{1i}$$

Two separate models were conducted for the first research question. In one model, the outcome variable (Y) was psychological distress and in a separate model the outcome was life satisfaction. In these equations, t indexed the time point and i indexed individuals. There were three separate error terms, all of which were assumed to be normally distributed: ϵ_{ii} was the residual error term; r_{0i} was a random intercept term at the individual level; and r_{1i} was a random slope term. *Break-up* was coded such that if a break-up had occurred since the last wave of data collection, *Break-up* = 1 and if the relationship was still intact, *Break-up* = 0. This way, the intercept term could be interpreted as the average score for when individuals remained in the same relationship. The results indicated that individuals reported more psychological distress and lower life satisfaction following a break-up compared to when they remained in the same relationship (see Table 1). Follow-up tests showed no significant moderation by gender (b for life satisfaction = -0.05 , $p = .61$, b for psychological distress = -0.03 , $p = .72$).

We computed effect sizes for the average changes in psychological distress and life satisfaction following a break-up by using an adaptation of Cohen's d for within-subjects designs (Morris & DeShon, 2002). This method takes into account the dependency between pre- and post-break-up scores; $d = .24$ for life satisfaction and $.24$ for psychological distress, suggesting that these are small, but not trivial, within-subjects effects (Kirk, 1996).

Another way to think about the magnitude of these changes is that following a break-up, 30.7% of the cases reported an increase in psychological distress that was greater than .5 standard deviations (SD ; a medium effect size [Kirk, 1996]) and 19.6% of the cases reported a decrease in psychological distress that was greater than .5 SD s. Change for the remaining 49.7% of cases was within .5 SD s of the level of psychological distress individuals experienced while in a relationship. For changes in life satisfaction following a break-up, 28.6% of the cases reported a decrease that was greater than .5 SD s; 16.1% of the cases reported an increase in life satisfaction that was greater than .5 SD s. Change for the remaining 55.3% of cases was within .5 SD s of the level of life satisfaction they experienced while in a relationship. Overall, in 43.4% of break-ups, there was a decline in well-being (as measured by either psychological distress or life satisfaction) that was greater than .5 SD s.

To address the remaining hypotheses, we examined characteristics of the relationship and break-up process (i.e., relationship duration, living together status, plans for marriage, sharing a child continued contact, desire to break-up, low predissolution relationship quality, and dating someone new) that might have been associated with the degree of change in psychological distress and life satisfaction following break-up. To conduct these analyses, we limited the sample to only those who had experienced one or more break-ups during the course of the study ($n = 473$) and we used all of their available data from time points in which they reported a break-up. We ran two separate multivariate models: one predicting psychological distress after a break-up and the other predicting life satisfaction after a break-up. Although the measures related to relationship and break-up characteristics were not very highly correlated with one another, on average (M absolute $r = .14$, see Table 2), all relationship and break-up characteristics were entered simultaneously as predictors so that overlapping variance was controlled (see Table 3).

The second hypothesis was that relationship duration, living together, having had plans for marriage, sharing a child, and greater continued contact with an ex-partner would be associated with larger increases in psychological distress and larger declines in life satisfaction pre to post-

Table 1
Unmarried Break-Up, Psychological Distress, and Life Satisfaction

Fixed effects	Outcome: Psychological distress				Outcome: Life satisfaction			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>
Intercept	2.27***	0.02	99.75	1294	4.53***	0.03	130.68	1294
Break-up	0.20***	0.04	5.31	1294	-0.25***	0.05	-5.04	1294
Random effects	Variance component	<i>SD</i>	χ^2	<i>df</i>	Variance component	<i>SD</i>	χ^2	<i>df</i>
r_{0i}	0.54	0.73	2810.68***	471	1.34	1.16	3274.62***	472
r_{1i}	0.23	0.48	721.62***	471	0.48	0.69	758.22***	472
ϵ_{ii}	0.38	0.62			0.62	0.79		

Note. *B* = unstandardized regression coefficient; *SE* = standard error of regression coefficient; *t* = t-statistic; *df* = approximated degrees of freedom.

*** $p < .001$.

Table 2
Correlations Among Relationship and Break-Up Characteristics

	1	2	3	4	5	6	7
1. Length of relationship							
2. Living together	0.32***						
3. Plans for marriage	0.10*	0.18***					
4. Child together	0.42***	0.30***	0.12**				
5. Continued contact	0.22***	0.12**	0.02	0.24***			
6. Desire to break up	-0.02	-0.03	0.00	-0.08	-0.04		
7. Relationship quality	-0.21***	-0.12**	0.26***	-0.23***	-0.02	0.23***	
8. Dating someone new	-0.17***	-0.08	-0.02	-0.11*	-0.23***	-0.05	0.02

* $p < .05$. ** $p < .01$. *** $p < .001$.

dissolution. When these variables were entered simultaneously, none were significant predictors of psychological distress following a break-up. For life satisfaction, living together and having had plans for marriage were significantly associated with larger declines following a break-up, controlling for other variables in the model. In the same model, the association between more contact with the ex-partner and greater declines in life satisfaction approached significance at the two-tailed level ($p = .07$); because this finding was predicted, this test can be considered significant as a one-tailed test. Neither relationship duration nor having a child together was significantly related to life satisfaction.

The third hypothesis was that a desire to break-up, low predissolution relationship quality, and dating someone new would be associated with smaller increases in psychological distress and smaller declines in life satisfaction pre to post-dissolution. The results of the multivariate models indicated that none of these variables were related to changes in psychological distress after a break-up. For life satisfaction, we found the opposite of what we expected for predissolution relationship quality; when controlling for other variables in the model, having had *greater* relationship quality at the wave prior to the break-up was related to *smaller*

declines in life satisfaction after a break-up. In the same model, a desire to break up was not significantly related to changes in life satisfaction but dating someone new was associated with smaller declines in life satisfaction, as predicted.

Discussion

This study was one of the first to comprehensively examine the potential impact of unmarried relationship dissolution on mental health and well-being. By using a within-subjects design, we examined changes in these outcomes from pre- to postdissolution in a large, national sample. Our findings suggest that the end of a romantic relationship can represent a significant stressor, as it was associated with increases in psychological distress as well decreases in the way that individuals rate their satisfaction with life. Though the overall effect sizes were small, in 43% of the break-ups, individuals experienced a medium-sized decline in life satisfaction or a medium-sized increase in feelings of distress.

The methodology used in this study extends prior research in an important way. Although research by Soons et al. (2009) is an exception, most studies have compared

Table 3
Associations Between Relationship and Break-Up Characteristics With Psychological Distress and Life Satisfaction Following a Break-Up

Fixed effects	Outcome: Psychological distress				Outcome: Life satisfaction			
	B	SE	t	df	B	SE	t	df
Intercept	2.33***	0.21	11.21	341	3.63***	0.26	13.76	341
Length of relationship	0.002	0.00	1.34	415	-0.001	0.00	-0.36	416
Living together	0.15	0.12	1.28	415	-0.33*	0.15	-2.28	416
Plans for marriage	0.06	0.10	0.61	415	-0.27*	0.13	-2.06	416
Child together	-0.06	0.19	-0.36	415	0.08	0.23	0.35	416
Continued contact	0.03	0.03	1.07	415	-0.07†	0.04	-1.78	416
Desire to break up	0.004	0.11	0.04	415	-0.13	0.13	-0.95	416
Relationship quality	-0.001	0.01	-0.06	415	0.07***	0.02	4.22	416
Dating someone new	0.01	0.09	0.06	415	0.38**	0.12	3.11	416
Random effects	Variance component	SD	χ^2	df	Variance component	SD	χ^2	df
r_{0i}	0.70	0.83	1195.80***	341	1.05	1.03	1096.42***	341
ϵ_{it}	0.38	0.62			0.57	0.76		

Note. B = unstandardized regression coefficient; SE = standard error of regression coefficient; t = t-statistic; df = approximated degrees of freedom.

† $p = .07$. * $p < .05$. ** $p < .01$. *** $p < .001$.

individuals in relationships to those who are single (e.g., Braithwaite et al., 2010; Kamp Dush & Amato, 2005) or compared those who have recently broken up to those who are partnered (e.g., Sbarra & Emery, 2005). These studies have been limited in that selection may account for some of the differences between partnered and single adults. For example, people who tend to have more problems with their mental health and feel less satisfied with their lives may also have more trouble entering and maintaining romantic relationships. Our within-subjects approach controlled for potential selection characteristics and showed that, on average, when an individual experiences an unmarried break-up, he or she reports an increase in psychological distress and a decline in life satisfaction.

We also found certain characteristics of the relationship or of the break-up to be associated with the magnitude of the decline in life satisfaction from pre- to postdissolution. As we had expected based on Rusbult's (1980) investment model of commitment, relationships that had been characterized by more investments were associated with greater declines after the break-up. In particular, we found that when individuals had been living with their partner or reported having had plans to marry their partner, their life satisfaction declined more.

The findings regarding cohabitation support assertions that cohabiting relationships are more difficult to terminate, both emotionally and logistically, than dating relationships, partly due to constraints such as financial investments or debt and shared leases or pets (Stanley et al., 2006). Constraints, which can also be conceptualized as investments, may keep some cohabiting couples together for longer than they would have remained together if they had not been cohabiting (Stanley et al., 2006). They may make it both more difficult to break up (see Rhoades et al., 2010) and, as the current findings suggest, harder to adjust after the relationship ends.

Also related to investments, we found the predicted association between contact with ex-partners and greater declines in life satisfaction from pre- to postdissolution. Relationships marked by greater levels of investments—those in which partners shared social networks, lived together, or have a child together—may necessitate postdissolution contact and the process of disentangling these relationship investments may be stressful, as research on divorce has suggested (Emery & Dillon, 1994). In addition, it may be that continued contact is related to, or exacerbates, ambivalence about the break-up. We did not measure the content of the communication with the ex-partner, but other work suggests that on-again/off-again kinds of relationships are common among young adults (Dailey, Pfiester, Jin, Beck, & Clark, 2009). Thus, it is likely that at least some participants in our sample were still talking to their ex-partners because they were involved in an on-again/off-again union, which may have negative implications both for relationship quality (see Dailey et al., 2009) and for life satisfaction. Future research should further explore how contact with an ex-partner may be associated with postdissolution adjustment, particularly as new technology is likely making continued contact easier (e.g., texting, Facebook).

An interesting finding, having a child together, which we expected would be a salient relationship investment or constraint against leaving, was not related to the magnitude of change in either psychological distress or life satisfaction following dissolution. Among those with break-ups, only 9.1% had children, so it may be that statistical power was too limited to find an effect of having children together. Future research with a larger sample or a sample of only parents could examine the way that children influence the impact of a break-up more directly. It may also be that the impact is further moderated by custody arrangements or by whether both parents continue to have contact with the child following the dissolution of the relationship.

In addition to examining relationship investments, we tested characteristics of the relationship and break-up that we conceptualized as being related to role stress (see Wheaton, 1990). Consistent with prior research (Soon et al., 2009), we found that dating someone new was associated with smaller declines in life satisfaction. We had also expected that a desire for the break-up would be associated with smaller increases in psychological distress and smaller declines in life satisfaction, however, we found no significant associations between a desire to break-up and the magnitude of change in these outcomes. These results differ from prior work that showed better adjustment following a break-up if one had been the initiator (Sprecher et al., 1998). It may be that asking about a desire to break-up is less useful than asking about who initiated the break-up, as there are subtle differences between these constructs. One could, for example, not really want to end a relationship, but be the one to initiate the break-up to avoid being rejected. Research on rejection indicates that being highly sensitive to feelings of rejection can interfere with being satisfied in romantic relationships (Downey & Feldman, 1996) and it may also play a part in the ways that break-ups happen and their impact on postdissolution adjustment.

In a similar vein, we had expected that lower relationship quality at the wave prior to the break-up would serve as a buffer to declines in well-being because the break-up would serve as stress relief. Instead, we found the opposite pattern. Having higher relationship quality before the break-up was associated with a smaller decline in life satisfaction after the break-up. Research on married couples indicates that marital quality is positively associated with general individual happiness (Ruvolo, 1998), thus it is possible that individuals with higher relationship quality were somewhat buffered against large declines in life satisfaction following the dissolution of their relationships. That is, it may be that a general tendency to see things positively explains why higher relationship quality was associated with smaller declines in life satisfaction. Other work suggests wide variability in how transitions into and out of marriage impact subjective well-being (Lucas, Clark, Georgellis, & Diener, 2003), so future research should examine moderators of the association between relationship quality and well-being after a break-up.

Overall, although we found that break-up was associated both with declines in life satisfaction and with increases in psychological distress, the relationship and break-up char-

acteristics we tested were only related to the changes in life satisfaction, not to changes in psychological distress. Although these two indices of well-being are moderately correlated, they measure different aspects of functioning, which may explain why relationship and break-up characteristics related more to changes in life satisfaction than in psychological distress. Answering items about life satisfaction requires a general appraisal of how one thinks or feels about his or her position in life whereas items about psychological distress are more specific and also more behavioral in nature. The items on our measure of distress assessed symptoms that may be indicative of mental health problems (e.g., "I felt depressed," "had trouble sleeping"). That measure also asked participants to rate the past week whereas life satisfaction was rated generally. Thus, it may be that the factors we tested, such as living together or dating someone new, relate more to global perceptions rather than behaviors or symptoms after a break-up.

Limitations, Implications, and Future Directions

Based on comparisons with recent U.S. Census data, this sample is fairly representative of same-aged English-speaking adults in the U.S. in terms of income, race, and ethnicity, but all participants were required to be in a relationship at the first assessment point. Thus, our results only generalize to individuals between 18 and 35 who, at one time, have been in a romantic relationship with someone of the opposite sex. Future research could examine these kinds of research questions among other samples, such as older adults, and could assess whether the impact of relationship dissolution differs across cultural groups. Another limitation is that the current study only measured a 4-month window for changes in psychological distress and life satisfaction. With a longer time-horizon, it is possible that the negative impact of relationship dissolution would have been less pronounced (see Sbarra & Emery, 2005) or that personal growth may have been observable (see Tashiro & Frazier, 2003). Lastly, some measures were limited to single items (e.g., continued contact) or retrospective reports (e.g., desire to break up).

With these limitations in mind, the current study provided new information about the ways that unmarried break-ups may impact adults. Although this study was unable to assess how long these changes last, the findings suggest that practitioners should be aware that ending an unmarried relationship may be difficult for the partners involved, at least in the short term. A break-up may be associated with problems in mental health and a general decline in one's feelings of satisfaction with life. Special attention may be warranted for relationships that were characterized by greater investments, as declines in life satisfaction were most pronounced for relationships with various types of investments. Individuals who have experienced a break-up recently may benefit from help processing it and how it is affecting the way they think about themselves, their roles, and the future. Some may also benefit from learning skills to cope with feelings of distress or dissatisfaction.

Additionally, there may be information that relationship

education programs (especially ones designed for young adults and for individuals attending without partners) could incorporate about relationship dissolution that would help mitigate its potential negative impact. For example, as individuals decide about whether to live with their partners or not, it may be helpful for them to think through their future plans and discuss what ending a living together relationship would be like (Rhoades, Stanley, & Markman, 2009). Such programs could also address how continuing contact with an ex-partner might be related to adjusting to a break-up.

In summary, the dissolution of an unmarried relationship was related to an increase in psychological distress and a decline in life satisfaction. We have also described a few characteristics that mitigate some of these negative impacts. Overall, this research supports the need for more attention to unmarried break-ups both in terms of research and clinical work.

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Received August 3, 2010

Revision received March 10, 2011

Accepted March 12, 2011 ■