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Growth Following Romantic Relationship Dissolution

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Abstract of the Dissertation

Growth Following Romantic Relationship Dissolution

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The research examined individuals' positive changes or growth following dissolution of a significant romantic relationship. To properly contextualize occurrences of growth, occurrences of commonly reported negative effects following relationship dissolution were also assessed. Both general growth (i.e., growth not specific to relationship thinking and functioning) and relationship-relevant growth were assessed. Few studies have examined responses to relational trauma (e.g., a breakup), even though it has often been identified as a possible catalyst for positive change. Given this absence in the literature, and in consideration of the high rates and negative consequences of divorce, and the increased likelihood of a failed remarriage, inquiry into adaptive changes that may arise following a breakup can inform efforts to improve maladaptive interpersonal patterns and enhance our understanding of if and how growth occurs in this context. Further, this research contributes to the general literatures on relationship experiences and stress-related growth.

A sample of women and men who had ended a significant relationship at least one year ago provided data online, including information on demographics, personality

characteristics, past relationship experiences, coping with and the impact of the breakup (including changes to thoughts and behaviors), and, when applicable, details about a current relationship.

Findings revealed that respondents reported both growth and negative change, and that growth occurred in relationship-relevant domains as well as in broader areas of life. As predicted, growth was positively related to personality variables, sense of control, self-esteem, perceived agency in the breakup, seeking and receiving support, attachment security, a cognitive commitment to understand and process the dissolution and its implications, acceptance of the breakup, active coping, adaptation or moving forward, and forgiveness. Exploratory analyses revealed associations with sex (females reported more growth) and with a variety of relationship characteristics (e.g., satisfaction, relationship length, involvement in a new relationship, not feeling emotionally overwhelmed by the breakup). Many of the associations were stronger for older compared to younger adults, and for men compared to women. Findings provide documentation of the extent and type of growth following relationship dissolution. Additionally, this research informs our understanding of how naturalistic growth occurs following significant life disruptions, with implications for helping individuals foster positive change.

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List of Symbols

α: alpha; Cronbach's index of internal consistency
B: unstandardized regression coefficient
Beta: standardized regression coefficient
e: error
F: Fisher's *F* ratio
M: mean (arithmetic average)
N: total number in a sample (participants)
n: number in a subsample
p: probability
SD: standard deviation
t: computed value of a *t* test

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Introduction

Romantic relationships are often a principal source of happiness for many people (Berscheid & Reis, 1989). Consequently, the dissolution of a relationship can be a distressing and significant event in people's lives. Indeed, when asked to identify traumatic experiences, people frequently identify relationship dissolution, along with more common traumas like death and illness (Holmes & Rahe, 1967). Benton et al. (2003) have reported that 50% or more of college students present to college counseling psychotherapy centers with relationship problems. Relationship dissolution is not uncommon: in recent years, the divorce rate has ranged from 36%[1] to over 50% (National Center for Health Statistics) The frequency of divorce has significant implications for individuals and children. Relationship dissolution (and/or the discord that often proceeds it) is associated with negative consequences for individuals, such as increased risk for health problems and major psychiatric disorders (see Amato, 2000 for a review; Overbeek, Vollebergh, de Graaf, Scholte, de Kemp, & Engels, 2006 for further clarification). Similarly, the negative impact on children's psychological well-being, academic performance, and interpersonal relationships exists in both the short (Ham, 2004) and long term (Amato & Cheadle, 2005; Huurre, Junkkari, & Aro, 2006). Additionally, the trend for divorced individuals to engage in "serial marriages," where they repeatedly marry and divorce, suggests that many people may fail to learn critical skills from their prior relationship experiences or may continue to posses dysfunctional relational styles that maintain maladaptive behavioral, emotional, and cognitive patterns, which they carry from one relationship to the next (Brody, Neubaum, & Forehand, 1988).

However research documents that positive life changes can arise following a variety of traumatic life events. That is, people appear to grow as a result of enduring a stressful experience (see Bhushan & Kanpur, 2007 and Calhoun & Tedeschi, 2006 for reviews). Such stress-related growth is a phenomenon in which people surpass their previous level of psychological and/or behavioral functioning in response to a self-perceived highly stressful life event (Tedeschi, Park, & Calhoun, 1998). Generally, we know that (positive and negative) relationship experiences, like other significant life

[1] Figure excludes data from California, Georgia, Hawaii, Indiana, Louisiana, and Minnesota.

events, can result in adaptive personality change (Cramer, 2004; Hetherington & Kelly, 2002; Magai, 1999; Robins, Caspi, & Moffitt, 2002; though see Scharfe & Bartholomew, 1994), or stress-related growth. Although much of this research has not focused on positive changes arising from relationship dissolution, some recent efforts highlight that variation in individuals' response to relationship dissolution exists (Williams & Dunne-Bryant, 2006). For instance, in one recent study, approximately 30% of divorcees reported becoming more successful and resilient in many areas of their lives, including new romantic relationships (Hetherington & Kelly, 2002). Qualitative studies also point to the potential for benefits following divorce (Colburn, Lin, Moore, 1992; Reissman, 1990; Stewart, Copeland, Chester, Malley, & Barenbaum, 1997). However, although qualitative studies are helpful in capturing the "picture" of growth, quantitative investigations that explore growth following relationship dissolution (e.g., the prevalence, predictors, associations, domains) are needed to continue to advance our understanding of this topic.

This study was designed to quantitatively examine this phenomenon with regard to reports of growth following the end of a significant romantic relationship in both general (e.g., new possibilities, relating to others, personal strength, appreciation of life) and romantic relationship (e.g., confidence, expectations, communication, interaction, skills) domains. Given that nearly two-thirds of divorced women and three-fourths of men remarry (Glick, 1989), and that these remarriages are at elevated risk for divorce and separation (Cherlin, 1978, 1992; Spanier & Glick, 1980), the responses, especially positive changes, individuals may experience in the context of relationship dissolution, and the factors associated with such beneficial changes, may help researchers and practitioners better understand how disruption of poor functioning and development of better functioning, occurs. In order to capture the full range of experiences following relationship dissolution, I also assessed the negative changes or responses to the breakup.

General Literature on Response to Relationship Dissolution

Research documents a number of negative responses or outcomes among adults and children, following a divorce or relationship breakup. As referenced above, these include poorer mental health, distress, substance abuse, depression, reductions in school performance, and decreased social competence (see Amato, 2000 for a review; Maciejewski, Prigerson, & Mazure, 2001; Sprecher, Felmlee, Metts, Fehr, & Vanni, 1998). Of particular relevance to poorer post-dissolution outcome for adults may be cognitive appraisal of the dissolution, with those viewing marriage as a life-long commitment showing more distress (Booth & Amato, 1991; Simon & Marcussen, 1999) and those using avoidance coping strategies showing more distress (Chung et al, 2003). Those who do not initiate the dissolution and those who do not feel in control of the decision to breakup may also have poorer adjustment (Chung et al., 2003; Kitson, 1992; Sprecher, 1994; Wang & Amato, 2000; though see Sbarra, 2006). Similarly, a sense of self-efficacy or expectancies for managing negative mood is related to the use of active coping and depression following a breakup (Mearns, 1991), as is level of self-complexity (Smith & Cohen, 1993). Attachment insecurity, particularly anxiety about abandonment, has also been associated with negative reactions and dysfunctional coping following a breakup (Davis, Shaver, & Vernon, 2003). Others have noted that closeness with the partner and perceived difficulty in finding alternatives to the relationship may partially predict greater intensity and duration of distress (Frazier & Cook, 1993; Simpson, 1987). This is in keeping with Rusbult's (1980, 1983) Investment Model of relationship commitment, which suggests that people with greater satisfaction and investment plus fewer alternatives will be more committed and less likely to leave a relationship, suggesting that when they are left it may be more distressing to them.

As noted, for children and adolescents, divorce is associated with poorer psychological, academic, and social outcomes (see Amato, 2000 for a review and Størksen, Røysamb, Holmen, & Tambs, 2006); Strohschein, 2005 and Tashiro, Frazier, & Berman, 2006 for further clarification). Psychological adjustment following parental divorce may be increasingly compromised when the ongoing relationship between divorced parents is non-cooperative, when parents and children have conflicted

relationships, or when there is poor parenting (Ahrons, 2007; Amato, 2000 for a review; Goodman, 1993).

The negative effects of relationship dissolution on adults and children may be buffered when supportive others are present (Cotten, 1999; though see Kitson, 1992 and Miller, Smerglia, Gaudet, & Kitson, 1998 for qualifications), when people experience fewer subsequent hardships (DeGarmo & Kitson, 1996; Lorenz et al., 1997), and, for adults, when a supportive new partner or relationship develops (Thabes, 1997; Tschann, Johnston, & Wallerstein, 1989; Wang & Amato, 2000). Attachment security has also been associated with less distress for partners following a breakup (Birnbaum, Orr, Mikulincer, & Florian, 1997; Sbarra & Emery, 2005). Other factors such as perceived controllability, higher levels of self-esteem, and lower satisfaction with the past-partner also relate to less distress, greater current adjustment, and greater recovery following breakup for adults (Frazier & Cook, 1993). Among children, greater support and continued contact with both parents appears to reduce the probability and severity of post-divorce problems (Sirvanli-Ozen, 2005).

Thus, by and large, negative outcomes are often associated with the ending of important relationships. We also have some knowledge about the predictors or correlates that relate to less negative consequences. Research focused on the positive responses or outcomes is sparse, and we know little about the domains or characteristics of such change (except see Herbert & Popadiuk, 2008; Tashiro & Frazier, 2003). Even less is known about the factors associated with these positive changes. A reduction in negative consequences is not equivalent to growth, and it is important for researchers to begin to look at why, how, and in what form some people find benefits from relationship dissolution. The existing general research on individuals' responses to the ending of a significant relationship provides some idea as to which factors may be associated with growth following romantic relationship dissolution. Drawing on this literature, as well as the general stress-related growth literature (described below), several common findings are consistent in their relation to a more positive outcome. For instance, cognitive appraisal appears to be a shared important factor related to favorable functioning. Similarly, relationship quality, with regards to presence of support from a partner and/or

others, is a common feature of better outcome following personal challenges. As is described in more detail in subsequent sections, these factors informed the current inquiry and hypotheses.

Overview of Stress-related Growth

Traditions in philosophy, literature, and religion have long described a phenomenon of growth or personal gain from experience with difficulty (see Linley, 2003 for a review). Accumulating psychological research indicates that 30 to 90% of people who experience a traumatic event subsequently report some type of benefit and positive self-changes (Linley & Joseph, 2004; Tedeschi, Park, & Calhoun, 1998). Some have suggested that trauma is a necessary precursor to change and growth (Heatherton & Nichols, 1994), occurring as individuals seek to reestablish equilibrium in their life, through a process of reflection and reevaluation. The terms stress-related growth, thriving, and post-traumatic growth have been introduced to describe and study the circumstances by which struggle with adversity leads some individuals into a process by which they achieve a higher level of functioning (Calhoun & Tedeschi, 2006; Linley & Joseph, 2004). It is believed that such growth does not occur in the absence of struggle, but coexists with adverse responses and stress (e.g., Cadell, Regehr, & Hemsworth, 2003; Siegel & Schrimshaw, 2000; Tedeschi & Calhoun, 1996). Though knowledge is still limited, a variety of factors associated with growth have been identified in terms of personal characteristics, coping styles (Park, 1998), and features of the event (see Linley & Joseph, 2004 for a review; Schaefer & Moos, 1992). The correlates relevant to the current inquiry will be described in greater detail later in the goal 2 section of this dissertation.

Stress-related Growth Following Relationship Dissolution

Although extensive work exists documenting the presence of positive change following other traumas, growth following relationship dissolution has rarely been examined and within the stress-related growth literature, breakups have rarely been considered as a context in which stress-related growth may occur (see Baum, Rahav, & Sharon, 2005; Herbert & Popadiuk, 2008; Schneller & Arditti, 2004; Tashiro & Frazier, 2003 for exceptions). This is unfortunate because those who experience interpersonal stressors evidence symptoms of post-traumatic stress disorder (PTSD) at a level on par with those experiencing more traditional traumas (e.g., rape, death; Mol et al., 2005). Furthermore, meta-analysis has shown that the nature of the trauma (e.g., health stressors, personal trauma stressors), does not predict different outcomes (Helgeson, Reynolds, & Tomich, 2006). Additionally, in the few instances where romantic relationship stressors were examined, growth appears to co-occur along with the negative effects and changes subsequent to a romantic dissolution and these positive changes are selected as having the most impact on the individual's life (as compared to any negative changes; Herbert & Popadiuk, 2008). Indeed, when these interpersonal stressors are examined, growth appears to be similar to that following other traumatic events (Park, Cohen, & Murch, 1996), and may be especially relevant to close relationships. For instance, several studies document positive changes with regard to non-romantic relationships and with ex-spouses (Eldar-Avidan & Haj-Yahia, 2000; Kaslow & Hyatt, 1982; Molina, 1999). According to this research, a majority of divorced women report turning to family members for emotional support and describe these relationships as more intimate and more openly communicative. Furthermore, they describe themselves as better able to receive help than they were prior to the divorce. In qualitative analysis, researchers have demonstrated that learning something relevant for future romantic relationships was the most commonly cited area of positive change. Other work has described growth following dating breakup in areas the participants believed might influence future relationship functioning (see Tashiro & Frazier, 2003). These reported changes were found with regard to ways the individuals had improved their own characteristics, behaviors, and attitudes (e.g., "I learned to admit when I am wrong"), followed by

improvements in other areas of their life (e.g., familial relationships, schoolwork), and finally changes associated with relational behavior (e.g., better communication). This is a useful start, but further research is needed to replicate and to better understand the nature of growth following breakup.

One important area for further exploration is the correlates or predictors of growth following relationship dissolution. Few studies have investigated the factors related to positive change following breakup, and those that have, have only done so in a limited manner. The factors identified include who initiated the breakup, being female, attributions for the breakup, personality, and a sense of significant, far-reaching loss (e.g., loss in multiple domains of life; Herbert & Popadiuk, 2008; see Tashiro et al., 2006 for a review). Anecdotally, others have noted that "surveying the damage" or recognition and assessment of the implications of the breakup, realization of the finality of the breakup, grieving the loss and experiencing the emotional and symbolic separation (often accompanied by distress and anger), behavioral and cognitive coping strategies aimed at moving forward, separately, active processes of trying to make sense of the loss (understanding the "why" and "how" of the dissolution), maintaining (and in some cases, enhancing) social connections with others, prior experience with breakups, are associated with reports of growth (Herbert & Popadiuk, 2008). Yet, given the absence of empirical studies examining these factors systematically, the lack of research on growth following relationship dissolution, and no work thoroughly exploring relationship-specific growth, more research is needed in this area. Furthermore, because there appears to be variation in the existing findings of growth following a variety of difficulties, with some documenting a relationship between these (and other) factors and growth and others finding no significant association, more clarification is needed.

Thus, although much effort has been dedicated to understanding and preventing the negative effects of relationship dissolution, little focus has existed on the positive changes following relationship dissolution, and very few have investigated the factors associated with growth. As discussed earlier, the importance of understanding if and how individuals change in a positive manner following relationship dissolution rests in learning about the full range of reactions to such a stressor, identifying if individuals

change in ways relevant to their romantic relationships, in an effort to identify how maladaptive functioning may be improved. Such change would be of interest to numerous scholars, including developmental and lifespan psychologists interested in adult personality change, relationship researchers concerned with dysfunctional relational patterns, and therapists involved in helping individuals develop more functional ways of experiencing relationship dissolution and of relating to significant others.

Research Goals

This research had two goals: (a) explore the responses, particularly the positive changes, individuals experience following relationship dissolution, and (b) identify predictors or factors associated with such change. To reach these goals, first, reports of those who experienced a breakup were examined to document whether growth occurred following relationship dissolution, and second, the areas of this growth (e.g., changes to relationships in general, changes to the self, relationship-relevant changes to communication and interactions) were assessed. The second goal, to investigate the variables that may be associated with the process of change, was achieved by examining the correlates of growth following relationship dissolution.

The following sections describe the aims, hypotheses, and methods in greater detail.

Goal 1: Evaluate and Describe Responses Following Relationship Dissolution

The first goal was to obtain descriptive information on the presence of growth (positive change) subsequent to relationship dissolution. To contextualize growth, I also assessed negative responses to the breakup, including depressive symptoms, hostility, general levels of distress, deterioration of functioning personally or professionally, and post-traumatic stress symptoms. To investigate the prevalence of positive reactions or growth following the end of a significant romantic relationship, I used a common general measure of stress-related growth, the *Post Traumatic Growth Inventory* (PTGI; Tedeschi & Calhoun, 1996) described in the methods section, as well as questions about changes relevant to romantic relationship functioning. I hypothesized that many individuals would report negative consequences, whereas others would report growth, and still others would report both negative effects and growth.

Goal 2: Identify Variables Associated with Positive Change

Although the data on variables associated with stress-related growth following relationship dissolution are sparse, I drew on this literature and the broader trauma research on factors associated with growth, including appraisal and coping, personality variables, and social support (Joseph & Linley, 2006; Tashiro et al., 2006; Tedeschi & Calhoun, 1996), to examine possible variables associated with growth following

relationship dissolution. To organize the hypothesized variables related to positive change following relationship dissolution within a cohesive structure, I employed a conceptual framework of growth processes (described elsewhere; Miller & Davila, 2009). This framework details factors associated with hypothesized key processes of growth, including (a) positive expectations about change; (b) a strong supportive interpersonal alliance; (c) increased awareness; (d) engagement in corrective experiences; and (e) ongoing reality testing. This model is based on a model of principles of therapeutic change (Goldfried, 1980) and offers a framework for understanding stress-related growth by delineating general change factors in the growth process. Recent qualitative work identifying three phases of growth following a breakup (experiencing the loss, pulling apart, moving beyond) suggests that this proposed framework may be appropriate and can offer a detailed depiction of the processes of positive change following relationship dissolution (Herbert & Popadiuk, 2008). The individual variables proposed to relate to each of these processes are described below.

Positive Expectations

Despite experiencing a difficult life event, individuals who maintain positive expectations about themselves and their lives in the future may be more likely to grow from challenge. The broader growth literature has demonstrated an association between growth and a number of variables that could be construed as fostering positive expectations, including optimism (Lechner & Antoni, 2004; Park, 1998). Optimism likely influences expectations for the future and positively influences coping and well-being (Scheier & Carver, 1992). Other personality variables such as neuroticism, openness to experience, agreeableness, extraversion, and locus of control may similarly impact the expectations a person holds regarding their life following relationship dissolution and the meaning of difficulties for their life (Mearns, 1991; Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996). For instance, prior work on stress-related growth has documented an association between perceived controllability over a situation and its aftermath, and subsequent growth (Frazier & Cook, 1993; Linley & Joseph, 2004; Mearns, 1991; Park et al., 1996; Peterson, Rosenbaum, & Conn, 1985). And others have found agreeableness to be related to growth (Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996). The findings

on openness to experience are mixed, with some suggesting an association (Tedeschi & Calhoun, 1996), and others finding none (Tashiro & Frazier, 2003). Neuroticism has not been found to inhibit growth, though it is related to more distress (Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996) and thus may impact propensity for growth. And findings regarding extraversion are mixed (Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996). Each of these possible personality variables were tested in the current study, with the prediction that higher levels of agreeableness, more extraversion, a greater sense of control, and more openness to experience would be positively associated with growth. In addition, I tested the role of neuroticism with the assumption that, as in previous works, it would not be associated with lower levels of growth.

An individual's level of self-esteem or self-worth also may be important in influencing their outlook on a challenging event. The literature indicates that traumatic experiences can disrupt one's self view and yet, possessing a positive view of the self may be helpful in recovering from the disruption of trauma (Frazier & Cook, 1993; Janoff-Bulman, 1992). Individuals' level of self-esteem was measured to determine if higher self-esteem was associated with greater reported growth, as predicted.

In the existing literature, the attributions individuals make as to the cause of their breakup appears to relate to reports of growth, though findings are somewhat inconsistent. Based on this existing knowledge, I hypothesized that if individuals attribute the reason for the dissolution to something other than themselves (e.g., their partner, the relationship itself, factors outside of the relationship), they may be more likely to hold a positive outlook for their future prospects (e.g., for happier times, for an improved new relationship, for their own ability to manage painful emotions), and this would be evident in their reports of greater levels of growth (Amato & Previti, 2003; Tashiro & Frazier, 2003). Such a "positive expectation" may be easier to obtain when the factors for relationship deterioration are believed to be more easily changeable (e.g., partner selection, a geographic constraint). This is not to say that the process of growth avoids a focus on alterations of one's own behavior, but rather that an initial focus on less challenging aspects of change may be beneficial for the process of growth.

Although somewhat inconsistent, prior research suggests that whether or not a person is the initiator of the dissolution may influence their subsequent functioning insomuch as initiators have been found to report more adaptive functioning and growth, though again there are mixed findings (Buehler, Hogan, Robinson, & Levy, 1986; Helgeson, 1994; Pettit & Bloom, 1984; Spanier & Thompson, 1983; Wang & Amato, 2000 but see Herbert & Popadiuk, 2008; Sbarra, 2006; Tashiro & Frazier, 2003). According to the framework, this may occur because choosing to initiate a breakup may inherently speak to and affect expectations about the future, or may help the individual feel more in control, and felt control relates to less distress and greater adjustment (Frazier & Cook, 1993). Therefore I expected that initiators of the dissolution would report more growth than non-initiators because they may have a more positive perspective on the future than on the past (otherwise it is unlikely they would have chosen to end the relationship), as compared to non-initiators.

Strong Alliance (i.e., Felt Support)

As individuals confront thoughts and feelings related to a personal trauma, it appears to be important for them to experience support from others (e.g., Cotten, 1999; Herbert & Popadiuk, 2008; Lehman, Ellard, & Wortman, 1986). According to the process of change framework, such support may be akin to a strong therapeutic alliance during therapy-guided change in that each instance involves a stable, caring, positive relationship in which it is safe to present oneself as you are, even if in emotional pain, and to possibly contend with (or confront) the trauma and its effects with the support of another person. Prior research of those experiencing breakup has documented the facilitating role of support in reducing negative symptoms (Frazier & Cook, 2003) and as associated with growth (Herbert & Popadiuk, 2008; Tashiro & Frazier, 2003). Therefore I assessed support sought and received after the breakup. I predicted that individuals reporting greater levels of support sought and received would be more likely to report higher levels of growth (positive effects).

Similarly, the study measured each individual's typical pattern of self- and other-representations in order to determine if they were associated with growth via their effect on perceptions of close relationships. To the extent that people feel secure in their

relationships with others, they may be more likely to view others as a source of support, and to use relationships in a time of need (Collins & Feeney, 2004). Prior work has indeed demonstrated that secure attachment style is related to less distress (perhaps because it allows for easier support seeking and receiving) (Birnbaum et al., 1997; Sbarra & Emery, 2005). Therefore I anticipated that greater general attachment security would be associated with reports of more growth.

Increased Awareness

Increases in awareness may be one avenue through which positive change following relationship dissolution occurs. Indeed, qualitative work has demonstrated that individuals appear to enter into an initial phase of experiencing the loss, going through a process of realization and recognition of the implications of the ended relationship (Herbert & Popadiuk, 2008). Thus a preliminary component of awareness-raising may be the acceptance of a difficult situation. Growth scholars suggest that, for growth to occur, such an honest appraisal is necessary (Calhoun & Tedeschi, 2004; Park et al., 1996). Increased awareness of the failed relationship, one's partner, environmental constraints, and oneself may be achieved via coping strategies, such as cognitive commitment to understanding and working through the difficulty in the form of effortful rumination. Such increased awareness may encourage individuals to reflect on and learn from their difficult experiences (Calhoun & Tedeschi, 1998). This framework is supported by the literature that following an initial phase of experiencing, individuals begin to behaviorally and cognitively cope with the reality of their loss, engaging in a process of making sense of the breakup and loss (Herbert & Popadiuk, 2008). In the current study, I evaluated raised awareness through a number of questions regarding focus, effort, and intention to "look carefully at," "try and understand," and "make sense of" the experience of the breakup. Based on general growth theory regarding the role of such activities (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 1996; Wild & Paivio, 2003) and the limited qualitative research (Herbert & Popadiuk, 2008), I expected that engagement in efforts to understand and process the dissolution and its implications (increased awareness), would be related to the experience of more growth whereas efforts to avoid such cognitive commitment would relate to less growth. An additional component of awareness-raising

may be the acceptance of a difficult situation. Growth scholars suggest that, for growth to occur, such an honest appraisal is necessary (Calhoun & Tedeschi, 2004; Park et al., 1996). The degree to which individuals feel they accepted the breakup situation was assessed in order to test the prediction that greater acceptance would be associated with greater growth.

Corrective Experiences

Originally described in the context of psychotherapeutic change, corrective experiences occur when individuals engage in behavior to which they have been previously unexposed (either through avoidance or lack of opportunity), which leads to positive experiences that enable the individual to alter their thoughts, feelings, and behavior based on these new exposures (Goldfried & Davila, 2005). These corrective experiences may be critical in the relational growth process because they challenge the individual to revise their ways of thinking, feeling, and behaving in order to accommodate the information from new experiences occurring during the coping and change processes (Calhoun & Tedeschi, 2006). Evidence from qualitative work on non-marital breakup emphasizes the importance of risk taking, and engagement in new activities and experiences in growth (Herbert & Popadiuk, 2008). The current study assessed the engagement in corrective experiences by asking individuals to report on their efforts to change things in themselves, and to think and act differently. I proposed that there would be a positive association between engagement in these types of experiences and greater growth.

Ongoing Reality Testing

For change to take place, the framework outlines that corrective experiences must continue to occur, replacing old models and behavior patterns with new narratives about the self, others, and the environment (Goldfried & Davila, 2005). Such ongoing reality testing solidifies the experience with new behaviors, leading to change over time as a new conscious discourse or narrative is formed (Romanoff, 2001). In the present study, I looked for evidence of such changes in response to questions about adapting, "moving forward" or adjusting to the new reality, forgiving the past partner, gaining insight, and meaning-making from the breakup to test whether the proposed construct of ongoing

reality testing was associated with higher reports of growth following relationship dissolution, as predicted.

Other Variables

There are several variables that the organizing framework does not address but which may be associated with positive change following relationship dissolution. For instance, prior research has shown that being female (Colburn et al., 1992; Helgeson, 1994; Tashiro & Frazier, 2003) is more highly correlated with reports of growth following breakup, though others propose that this difference may be accounted for by women's greater propensity to attribute the cause of the relationship dissolution to their partner rather than themselves (Amato & Previti, 2003; Choo, Levine, Hatfield, 1996). I examined sex differences in attributions and reports of growth, as well as sex differences in the aforementioned analyses looking at factors associated with growth, though due to the inconsistent data on this topic, I made no specific predictions.

There may also be event-specific variables which influence growth, such as the level of disruption caused by the event (Tedeschi et al., 1998), the time since the event (though see Tashiro & Frazier, 2003), the experience of having one's emotional resources overwhelmed by the trauma (Tedeschi et al., 1998), and the length of the dissolved relationship. Growth may also be associated with an individual's belief about the reason of the breakup. To determine whether the cause of the separation (e.g., abuse, infidelity, irreconcilable differences, etc.) was an additional factor in the presence or absence of growth, I asked if any of the legal justifications for divorce[2] were the reason for the breakup. I made no specific predictions about this association since there is no precedent in the literature.

Being involved in a new relationship may also influence the presence of growth, as might the tendency to enter into serial relationships. Prior work suggests that being involved in a new relationship with a supportive partner lessens the negative effects of divorce (Thabes, 1997; Tschann et al., 1989; Wang & Amato, 2000) and perhaps this in turn influence reports of growth. This was explored in the current study.

[2] Based on laws in California, New York, and Texas.

Though exploratory, I predicted that events of greater disruption, for which there was a feeling of being overwhelmed, and which included a relationship that ended in the more distant past, would be associated with higher reports of growth. Additionally, I predicted that individuals now in a relationship may be more likely to report greater growth, as a new relationship may represent to them having moved on and may offer an opportunity to experience any positive changes that have occurred. I further predicted that greater satisfaction in a new relationship would likely to be associated with heightened reports of growth, as being satisfied may signify to individuals that they are in a better relationship than before. However, I hypothesized that those involved in repeated relationships and those who quickly became involved in a relationship after the breakup would be likely to report less growth, given their pattern of serial relationships, which may be evidence of their failure to grow from one relationship to the next. Prior work has shown that negative interpersonal behavior may be transferred from one relationship to the next in serial relationships and may account for the development of serial relationships (Brody et al., 1988). This would stand in contrast to growth, which may disrupt this maladaptive pattern. I made no prediction about the association between length of the past relationship and growth.

Summary of Hypotheses

For goal 1, the descriptive focus on response to the breakup with regards to growth and negative change, I predicted that some participants would report mostly growth (high growth, low negative change), some would report mostly negative change (low growth, high negative change), and a third group would report both positive and negative change. Goal 2 was to examine variables associated with reported growth. First, I made predictions about the key processes of the growth framework (positive expectations, strong alliance, increased awareness, corrective experiences, ongoing reality testing). Within these processes I specifically hypothesized that personality variables related to positive expectations would be positively associated with growth, including agreeableness, extraversion, control, openness to experience, and self-esteem. In contrast, I predicted that neuroticism would be negatively associated with reports of growth. I further hypothesized that attributing the breakup to something other than

oneself and being the initiator of the breakup would each be associated with higher reports of growth. Regarding the second process, the experience of a strong alliance, I predicted that participants experiencing emotional support and advice would report more growth, as would those with greater attachment security. Because I anticipated that increased awareness would facilitate growth, I predicted that engaging in efforts to understand and emotionally process the breakup and its implications, as well as accepting the changed reality of one's situation, would each be related to higher reported growth. In the behavioral domain, I hypothesized that engagement in corrective experiences, or efforts to think and act differently, would be positively correlated with growth. Given that this study assessed relationships that ended a year or more ago, I predicted that sustained growth (i.e., not just immediate increases in benefits from an ended relationship) would be related to ongoing reality testing, as reflected by reports of moving forward, gaining insight, and finding meaning in the breakup and its aftermath.

There were also a number of other factors that I hypothesized to be associated with higher reports of growth. These included experiencing greater disruption as a result of the breakup, feeling more emotionally overwhelmed, relationships that ended in the more distant past, those currently in a relationship, and those with greater satisfaction in their current relationship. In contrast I predicted that becoming quickly involved in a relationship after the breakup and engaging in many relationships, would be associated with lower levels of growth.

Research Design and Method

Overview

Data were collected using online (Internet) data collection procedures via a secure connection. Such methods of online sampling have become a highly cost-effective for collecting self-report data from an ever-increasing online community. By moving away from pen-and-paper packets to online studies, researchers can remove many of the barriers to participation that can lower response rates. Intelligent online forms can quickly screen potential respondents, consent forms detailing the risks and benefits of the study can be available with a single click, the survey itself can no longer be lost or misplaced and is available for completion instantaneously, and online surveys can even provide immediate normative feedback for each participant. Furthermore, with an online survey, a respondent is able to express interest in a study and complete their participation without delay, while their motivation and interest are still at their highest point. Moreover, given the explosion of focused online interest groups (forums, listservs), online sampling is advantageous for reaching and recruiting large samples of participants because it reaches a wider proportion of possible respondents. The current study was generated with these advantages in mind, using the Perseus program.

Research has established that Internet surveys possess psychometric properties similar to those of traditional format questionnaires (Fortson, Scotti, Del Ben, & Chen, 2006). And importantly, a large-scale Internet survey has shown that Internet samples can be relatively diverse in terms of gender, socioeconomic status, geographic region, and age (Gosling, Vazire, Srivastava, & John, 2004). Thus while Internet samples may not completely represent the general population insomuch as they are restricted to only Internet users, they are often more diverse than traditional samples. A second possible concern raised is that Internet samples may be maladjusted, socially, isolated, or depressed (Kraut et al., 1998) but this too has been refuted (Gosling et al., 2004).

For the current study, I recruited participants online via postings on listservs, Internet groups, and notices posted on popular websites such as www.craigslist.org, offering potential respondents the opportunity to complete a “relationship survey.” Recruitment lasted five months. All recruitment materials provided a link to the online

survey site, which presented the instructions, followed by an online consent form. If respondents agreed to participate and continue, they viewed the survey and answered the questions securely online. They had the option of skipping any questions or quitting at any time. In addition to the survey questions, the items of two validity indices were disbursed throughout the survey to assess general levels of attention and effort to screen for spurious and random responding. Additionally, to counter possible repeat submissions, although rare (see Funk & Rogge, 2007), participation was marked with an IP address and time stamp. At the completion of the survey, designed to take approximately 30 minutes, respondents had the option of receiving "feedback" about their responses (although the number of eligible participants who chose to receive feedback is unknown, 77% of the final sample rated the feedback, suggesting the level who chose to receive feedback could be even higher). Those who did not wish to receive feedback were informed of this option and were given the opportunity to exit the survey before any feedback is generated. By offering individual feedback, I was able to offer respondents a tangible reward for participating, while at the same time maintaining their anonymity. There was no financial compensation for participation.

Participants and Procedures

The initial sample of respondents included 351 English-speaking adults (225 women; 61 men; 65 unknown). However, participants were eliminated from analyses if they were not at least 18 years of age, had not experienced a breakup a year or more ago (from time of survey participation), if the relationship had lasted for less than 6 months, and finally if their responses on the questionnaire were judged to be invalid based on calculations using the validity index (described in the measures section). A cut-off was set to avoid including participants still within the normative grieving period, or those who were more likely to be reporting an initial benefit to the breakup that would not last. Although established guidelines for the normative grieving timeframe following divorce or breakup are not well established, research has found that by one year, many individuals have adjusted to the dissolution (Bursik, 1991; Wang & Amato, 2000, although Tashiro & Frazier, 2003 found no relation between growth and time since breakup). Application of these three criteria (age, breakups occurring at least a year ago,

and relationships — marriage or cohabitation — that had lasted at least 6 months) eliminated 75 participants. Participants were also eliminated if they scored above the cut-off on the inconsistency or infrequency subscales of the validity measure, which eliminated an additional 3 participants to yield 273 eligible participants (n = 216 women; n = 55 men; n = 2 unknown). Participants could either currently be in a new relationship (with a different partner), dating, or single at the time of the study. Of the eligible sample, 99 participants were single, 99 were involved in a relationship (married, engaged, or in a non-marital, committed relationship), 74 were dating seriously or casually, and 1 did not provide relationship status. Complete demographic information is presented in Table 1. Additional sample descriptors (mean level, range) are presented in Table 2.

Measures

The study included the following constructs with the measures listed below. The study contained established questionnaires as well as questions that were developed for this project. Questions were created for this project because (a) of concerns for participant burden which necessitated limitation of the total number of questions, and/or (b) there were no existing measures to assess many of the proposed constructs. Therefore, in addition to testing the proposed hypotheses, this study provided initial information about the measurement of relevant constructs, in an exploratory fashion. The complete survey questions are included in the Appendix.

Demographics

Characteristics of the respondent sample were determined in questions at the end of the survey including time spent online per day and per week, educational level, geographic region of residence, area of habitation (urban, rural, suburban), number of children, annual household income, race, occupation, age, sex, length of time since the breakup, length of the past relationship, number of relationships since the breakup, time elapsed between the breakup and first subsequent relationship (i.e., time single), current relationship status, and, if applicable, length of the current relationship, living status (with or not with the current partner), length of time known the current partner, and if the current partner was the same as the past partner.

Response to Relationship Dissolution

To capture the range of responses to relationship dissolution, I assessed both negative effects and positive outcomes (growth) of the breakup. I assessed negative reactions to the breakup using several established measures and several questions developed for this study. Post-dissolution depression and hostility were measured using the corresponding subscales of the *Brief Symptom Inventory* (BSI; Derogatis, 1993). Subjective distress and PTSD symptoms were queried using an adapted version of the *Impact of Events Scale — Revised* (IES-R; Weiss & Marmar, 1997). The IES-R is a 22-item self-report scale that extends the original IES (Horowitz, Wilner, & Alvarez, 1979) to parallel the DSM-IV criteria for PTSD. Respondents indicated their level of distress experienced following the breakup using a 5-point scale (0 = not at all to 4 = extremely).

In prior research, the IES-R showed high internal consistency: (α = .79 to .92) (Weiss & Marmar, 1997). Questions created for this study designed to assess the full range of negative reactions to the breakup included, "It was difficult for me to move forward," "I had a harder time functioning at work/school," "I had a harder time functioning socially," and "I became more distressed (upset) as time went on."

Growth (or positive change) following relationship dissolution was measured three ways: First, respondents completed the 21-item *Posttraumatic Growth Inventory* (PTGI; Tedeschi & Calhoun, 1996*)*, which assessed positive changes experienced following the breakup. The PTGI was developed to measure positive outcomes of trauma and is commonly used for this purpose. Items were rated on a 6-point Likert scale ranging from 1 ("I did not experience this change as a result of my crisis") to 6 ("I experienced this change to a very great degree as a result of my crisis"). On the PTGI, higher scores indicate a greater degree of growth experienced. The PTGI has five subscales: New Possibilities, Relating to Others, Personal Strength, Appreciation of Life, and Spiritual Change that can be collapsed to create a total growth score, as was done for most analyses in the current study. In prior research, the PTGI total score has shown good internal consistency (e.g., α = .92, Rabe, Zöllner, Maercher, & Karl, 2006; α = .90, Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006). Second, in a question created for this study, respondents were asked to rate the extent to which they felt that the relationship had a positive effect on them (1 = not at all to 5 = completely). Third, relationship-relevant changes were measured using 21 questions in the *Relationship Effects* scale developed for this study, based on similar work by Tashiro and Frazier (2003). The items in this scale addressed positive change involving (a) partner choice and expectations, (b) oneself (expectations, self-confidence, trust in self, maturity, self-efficacy or competence, coping), (c) communication (assertiveness, positive feelings, negative feelings), and (d) interaction (partnership, reliance, trust, closeness with a partner, overall relationship skills and manner of relating to a partner). Items were rated on 5-point scales where the anchor of 1 reflected poorer functioning or lack of change and 5 denoted better functioning or more relationship-relevant growth. All participants, regardless of whether they were currently involved in a relationship or not, were asked to complete the measure because it

was designed to assess thought and behaviors (actual or hypothetical) in relationship-relevant domains. Items were presented as statements in which participants chose a rating based on their level of change. For example, "I have a _____ sense of what type of partner I want" (1 = much worse, 3 = somewhat worse/better, 5 = much better), "I believe I could/can communicate _____ with a partner" (1 = much less, 3 = somewhat less/more, 5 = much more), "My expectations about myself (while in a relationship) have changed _____" and "I've learned new positive relationship skills" (both 1 = not at all, 3 = somewhat, 5 = very much), and "I believe I will/do find it _____ to get close to my partner"(1 = much harder, 3 = somewhat harder/easier, 5 = much easier).

Key Framework Processes Associated with Growth

Positive Expectations

A number of variables were included to examine whether components of the positive expectations construct were correlates of growth. First, the study measured personality variables including optimism, agreeableness, openness to experience, and neuroticism, and sense or locus of control. Second, I assessed sense of control over the breakup and the aftermath, self-esteem, attributions of responsibility for the breakup, and designation of who initiated the breakup.

Optimism was assessed with the *Life Orientation Test* (LOT-R; Scheier, Carver, & Bridges, 1994), a 10-item scale that measures dispositional optimism, defined in terms of generalized outcome expectancies. The LOT-R has six construct items consisting of three positively keyed items and three negatively keyed items. The remaining four items are filler intended to disguise the purpose of the questionnaire. In the current study, respondents were asked to rate questions such as, "In uncertain times, I usually expect the best" and "I hardly ever expect things to go my way" on a scale ranging from 1 (disagree strongly) to 6 (agree strongly). Internal consistency of the LOT-R has been shown to be sufficient (α = .78; Scheier et al., 1994).

A single item from the *Brief COPE* (Carver, 1997) (described in greater detail below) was also identified as an assessment of optimism. Participants rated "I looked for something good in what was happening" using a 4-point scale ranging from 1 (I didn't do this at all) to 4 (I did this a lot).

Neuroticism, openness to experience, extraversion, and agreeableness were measured by the *Ten-item Personality Inventory* (TIPI; Gosling, Rentfrow, & Swann, 2003), a 10-item scale containing two descriptors per item that are designed to measure each pole of the Big Five Personality model. Items were preceded by the statement, "I see myself as…" with neuroticism items "Anxious, easily upset" and "Calm, emotionally stable" (reverse coded), openness to experience items "Open to new experiences, complex" and "Conventional, uncreative" (reverse coded), extraversion items "Extraverted, enthusiastic" and "Reserved, quiet" (reverse coded), and agreeableness items "Critical, quarrelsome" (reverse coded) and "Sympathetic, warm". Each statement pair was scored on a Likert scale ranging from 1 (disagree strongly) to 7 (agree strongly). There is adequate test-retest reliability, ranging from $r = .62$ (for openness) to $r = .84$ (for neuroticism) ($M = .78$), and Cronbach alphas for each scale range from .33 to .68 and (Gosling et al., 2003; Herzberg & Brähler, 2006).

Second, based on survey questions used by others (Gray & Silver, 1990; Frazier & Cook, 1993), a sense of control over the breakup was measured in two items that assessed the extent to which the respondents believed they or their partners had control over the breakup process ("How much control did you feel you have over the occurrence of the breakup?" and "How much control did you feel your past partner had over the occurrence of the breakup?"). A question developed for this study also assessed felt control over the aftermath of the breakup: "I felt like I had no control over the situation, the outcome, or how I was feeling." All three questions were rated from 1 (not at all) to 5 (very much).

Attributions of the cause of the breakup were measured using four items developed for this study, which were based on attributions for breakups that have been identified in the literature (Tashiro & Frazier, 2003). The questions asked respondents to rate (1 = not at all to 5 = very much) the extent to which they believed, "It was due to my past partner and their problems (e.g., my past partner's insensitivity, my past partner's possessiveness, my past partner's difficulty being close or committing to the relationship, etc.)," "It was due to me and my problems (e.g., my insensitivity, my possessiveness, my difficulty being close or committing to the relationship, etc.)," "It was due to both of us

— we were just not right for each other (e.g., we had conflicting values, different interests, etc.)," and "It was due to something situational and beyond our control (e.g., distance, work stress, parental disapproval, etc.)."

Whether a participant was the initiator of the breakup was assessed in a single question asking, "Who initiated the breakup?" with response choices "I did," "My partner did," or "It was mutual," based on work by Tashiro and Frazier (2003).

Additionally, I assessed global self-esteem using the well-established 10-item *Rosenberg Scale* (RSE; Rosenberg, 1965). Respondents were asked to rate themselves using a 4-point scale (1 = strongly agree to 4 = strongly disagree) on questions such as, "On the whole, I am satisfied with myself."

Strong Alliance (i.e., Felt Support)

Variables hypothesized to be related to the strong alliance (felt support) construct were measured by general attachment security and support sought and received. General attachment style was assessed using the 18-item *Revised Adult Attachment Scale* (RAAS; Collins & Read, 1990). Respondents separately rated how well each of the 18 statements corresponded to their feelings about their relationships with others, in general, using a scale from 1 (not at all like me) to 5 (very much like me). This instrument included three subscales: Close, which measured the extent to which people feel comfortable being close to others; Depend, which measured the extent to which people are comfortable relying on others and believe that others are dependable; and Anxiety, which assessed fears of abandonment and of being unloved. The Close and Depend subscales tap aspects of avoidance of intimacy and therefore the mean of these scales was taken to provide an overall "avoidance of intimacy score." The RAAS has been shown to have adequate reliability and validity (e.g., Collins & Read, 1990).

Support sought and received after the breakup was assessed in five items from the *Brief COPE* measure (B-COPE; Carver, 1997). The *Brief COPE* is a 28-item inventory. Reliability and validity data have yielded Cronbach's alphas for individual scales ranging from .50 to .90 (Carver, 1997). The measure was adapted for the current study to assess past coping behavior. Included support items were, "I got emotional support from others," "I got help and advice from other people," "I got comfort and understanding

from someone," "I tried to find comfort in my religion or spiritual beliefs," and "I tried to get advice or help from other people about what to do," each rated on a 4-point scale (1 = I didn't do this at all to 4 = I did this a lot).

Increased Awareness

Individuals' activities hypothetically related to increases in awareness were measured in 11 questions, some drawn from the *Brief COPE* (Carver, 1997), others developed for this study. Individuals' efforts to focus on, understand, and carefully examine their experience were measured in 11 items from the *Brief COPE* that asked about the extent to which participants engaged in awareness-enhancing activities. Relevant items included, "I turned to work or other activities to take my mind off things" (reverse coded), "I concentrated my efforts on doing something about the situation I was in," "I used alcohol or other drugs to make myself feel better" (reverse coded), "I took action to try to make the situation better," "I used alcohol or other drugs to help me get through it" (reverse coded), "I made jokes about it" (reverse coded), "I did something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping" (reverse coded), and "I made fun of the situation" (reverse coded). Each was rated on the same *Brief COPE* scale described above. Three questions developed for this study also assessed activity reflective of efforts to increase awareness: "I got in a new relationship right away" (reverse coded), "It was important to me to try and make sense of and understand the breakup, what led up to it, and what to do afterward," and "I worked hard to develop coping skills to manage my emotions during this time," each coded on a 5-point scale (1 = not at all to 5 = very much).

Acceptance of the changes brought about by the breakup also was hypothesized to contribute to the increased awareness factor, and was determined through five items: four drawn from the *Brief COPE* (Carver, 1997) and one developed for this study. Questions included, respectively, "I said to myself 'this isn't real'" (reverse coded), "I refused to believe that it happened" (reverse coded), "I accepted the reality of the fact that it happened," "I learned to live with it," and "I contacted my past partner repeatedly to try and get back together" (reverse coded). Items were rated on the *Brief COPE* and 5-point scales described in the proceeding paragraphs.

Corrective Experiences

Engagement in corrective experiences was measured by eight questions drawn from the *Brief COPE* (Carver, 1997), which I hypothesized would assess thinking, feeling, and behaving differently: "I gave up trying to deal with it" (reverse coded), "I said things to let my unpleasant feelings escape," "I tried to see it in a different light, to make it seem more positive," "I tried to come up with a strategy about what to do," "I gave up the attempt to cope" (reverse coded), "I expressed my negative feelings," "I really focused on and tried to understand what had happened," and "I thought hard about what steps to take." Items were scored on the *Brief COPE* scale, previously described.

Ongoing Reality Testing

Efforts to engage in ongoing reality testing were assessed in five questions hypothesized to tap adaptation (or "moving forward"), learning, insight, and meaning-making, all developed for this study. One proposed area of ongoing reality testing is adaptation, which was measured in the following questions: "I adapted to the situation — I was able to move forward," "I tried to adjust to my 'new reality' (i.e., being single, the relationship having ended)," and "I forgave my past partner for the past/the breakup." Other instances of ongoing reality testing were captured by meaning-making: "To what extent do you feel you have learned specific lessons from the breakup that have affected (or will affect) your behavior in romantic relationships?" and "To what extent do you feel that you have gained insight from the experience of the breakup, and have used that in your broader life (i.e., other areas of your life beyond just your romantic relationship?" Each question was rated on a scale of 1 (not at all) to 5 (very much).

Other Variables Associated with Growth

A number of additional factors discussed in the general growth literature or the relationship dissolution literature also were assessed. First, I measured the extent to which the breakup represented a seismic disruption to the participant ("It was a radical loss (i.e., it turned my world upside down)," "I was fine — it was no big deal" (reverse coded), and "I felt like I didn't know who I was anymore," rated 1 (not at all) to 5 (very much)). Second, using the same rating scale, I assessed whether the participant felt their emotional resources were overwhelmed by the breakup: "My emotional 'resources' were

overwhelmed (i.e., I felt like I might not be able to handle it)" and "I didn't really know what would be next; it was an ambiguous and confusing time." Third, the length of time since the breakup ("How long ago (from today) did you and your past partner break up?"), the duration of the ended relationship ("For how long were you and your past partner involved?"), the number of serious romantic involvements since the breakup ("After you past relationship ended, how many other serious romantic involvements did you have after your breakup (if you are currently in a relationship, please count your current relationship)"), and the time elapsed after breakup before the next relationship (to address serial involvements) ("After the end of your past relationship, how long was it before your next relationship (or when you began dating)?") were assessed. Fourth, current relationship status, and if applicable, the length of the current relationship ("How long have you and your current partner been involved?") and current relationship satisfaction, measured with the 4-item *Couples Satisfaction Index — 4* (CSI-4; Funk & Rogge, 2007) were each assessed. The CSI-4 is a selection culled from a larger 32-item questionnaire, which provides the largest amount of information regarding relationship satisfaction. Respondents were asked to indicate "The degree of happiness, all things considered, of your current relationship" rated on an 8-point scale from "extremely unhappy" to "could not possible be any happier," the extent to which the statement "I have a warm and comfortable relationship with my current partner" (rated 1 = not at all true to 7 = absolutely and completely true"), and "How rewarding is your relationship with your current partner" and "In general, how satisfied are you with you relationship?" (rated 1 = not at all to 7 = absolutely and completely). Internal consistency is robust, with Cronbach's alpha of .94 (Funk & Rogge, 2007).

Another area of interest that may be a variable associated with growth is the individual's experience in the past relationship. Questions assessing domains of relationship functioning in the past relationship included past relationship satisfaction and investment or commitment in that relationship. First, again using the CSI-4 (Funk & Rogge, 2007), I measured evaluations of relationship quality using the four items described above, regarding how the participant felt at the end of the past relationship.

Second, investment was measured by a single item created for this study, "How invested in/committed to the relationship were you?" rated 1 (not at all) to 5 (very much).

In addition, I determined the specific reason individuals believed the dissolution occurred. Drawing on parameters of the legal grounds for divorce in the three most populous states (California, New York, Texas), individuals were asked to indicate the extent (1 = not at all to 5 = very much) to which the breakup occurred due to physical, emotional, and/or verbal abuse by either partner, abandonment by the respondent or the partner, infidelity, or "irreconcilable differences."

Validity of responding was measured in this study using the *Attention and Effort Scale* (Rogge, personal communication). This 21-item validity measure was developed across a series of online studies to identify respondents failing to provide sufficient attention and effort to their survey responses. It consists of two subscales: inconsistency and infrequency. The inconsistency subscale consists of seven pairs of highly similar items (e.g., "I am an active person," "I have an active lifestyle"). The items were distributed in the survey so that one item from each pair was near the beginning of the survey and the other item of each pair was near the end of the survey. The inconsistency scale was scored by summing the absolute differences in obtained responses to the paired items. The infrequency subscale consists of seven items with extremely skewed response distributions so that 95 to 99% of respondents will typically provide the same one or two answers on the 5-point Likert scale (e.g., "It can be annoying when people cut in line," "I enjoy receiving telemarketers' calls"). The infrequency scale was first recoded so that higher points represented more atypical responses, and then summed. If a participant scored greater than 14 on either the inconsistency scale or the infrequency scale, this participant was considered an invalid respondent due to a lack of attention or effort and was therefore excluded from remaining analyses.

Results

Data Reduction

Because multiple measures were included in this study, I conducted exploratory factor analysis (EFA) followed by confirmatory factor analysis (CFA) to aid in computing composite variables. The ultimate goal was to specify the a priori factors of the key framework processes (positive expectations, strong alliance, increased awareness, corrective experiences, ongoing reality testing). Prior to being able to do that with CFA, it was necessary to determine whether the items developed for this study and the measures proposed to relate to the indicators of the key framework processes could be consolidated.

EFA was used to explore the interrelationships among variables to determine if any could be grouped into a smaller set of underlying factors. Variables included in the analysis are listed in Tables 3 to 15. Constructs relevant to positive change included growth related changes in how the participant interacts with a partner (eight variables included), changes related to choice of partner/expectations/wants from a partner (three variables), self-growth relevant to relationship functioning (six variables), and growth-related to the participant's communication style and abilities (four variables). I also analyzed negative reaction or changes (four variables). Constructs relevant to correlates of growth included (a) positive expectations: a sense of control over the breakup and its aftermath (three variables); (b) strong alliance: support sought and received (five variables); (c) increased awareness: a cognitive commitment to understanding the breakup and find meaning in it (11 variables) and acceptance of the new reality brought about by the breakup (five variables); (d) corrective experiences: thinking and acting differently (eight variables); and (e) ongoing reality testing: moving forward or adjusting (two variables) and learning and meaning-making (two variables). Additional correlates under investigation in the EFA were seismic disruption or radical loss (three variables) and feeling one's emotional resources were overwhelmed by the breakup (two variables).

Determination of the number of appropriate factors in the solution was determined through the "scree test" which examined the break in the pattern of eigenvalues (the percent of explained variance that was due to each factor), with the

value before the "breaking point" indicating the most appropriate number of factors. The factor structure was determined using minimum loadings of absolute value ≥.40. When more than a single factor was identified, principal axis factor extraction with oblique rotation (which allowed for any possible relationships that may logically have occurred between the factors of a given group of variables) was used. Items that were not clearly loading on one factor (i.e., loading less than .40) were excluded from the factor(s). The total variance explained by each factor was noted and the factor(s) was given a name based on the relative loadings of the variables in that factor. Results for the constructs relevant to growth were single factors for how the participant interacts with a partner (interaction growth factor, comprising seven variables), changes related to choice of partner/expectations/wants from a partner (partner selection growth, three variables), self-growth relevant to relationship functioning (self-growth related to relationships, five variables), and growth related to the participant's communication style and abilities (improved communication, three variables). Negative reaction or changes also yielded a single factor composed of four variables. For the constructs relevant to the correlates of growth, results yielded (a) positive expectations: a single sense of control over the breakup and its aftermath factor (three variables); (b) strong alliance: one support sought and received factor (four variables); (c) increased awareness: four cognitive commitment or effort to increase one's awareness factors (action and meaning-making, four variables; substance use, two variables; joking, two variables; avoidance through activities, two variables), one acceptance of the new reality brought about by the breakup factor (four variables) (d) corrective experiences: two thinking and acting differently factors (active coping, five variables; not giving up, two variables); (e) ongoing reality testing: one learning and meaning-making factor (two variables); and several additional correlates: one seismic disruption or radical loss factor (three variables), and one feeling one's emotional resources were overwhelmed by the breakup factor (two variables). Factor loadings, eigenvalues, and percents of the variance explained by each factor are presented in Tables 3 to 15. One analysis (moving forward/adjusting) yielded no factor solution and therefore the two variables ("I adapted to the situation — I was able to move forward"

and “I forgave my past partner for the past/the breakup”) were retained for individual analysis.

The resulting 17 factors (described above) and two single items were used in the next level of data reduction analyses, CFA, which tested the proposed latent factors or constructs related to change (positive expectations, strong alliance, increased awareness, corrective experiences, and ongoing reality testing) and the composite factors for negative change and growth. The CFA was performed using the AMOS software package (Arbuckle, 2007). Model results were examined for regression weight significance levels and fit indices, and composite scores were calculated for models with good fit. Of the seven latent factors tested, three yielded good fit and are presented in Figures 1 to 3 with standardized regression weights and squared multiple correlations shown. Figure 1 shows the results for the construct of overall growth, which comprised self-growth related to relationships, partner selection growth, interaction growth, improved communication, the PTGI scale, and the single positive effects item. Figure 2 shows the results for the negative change construct, which comprised the BSI depression scale, the BSI hostility scale, the negative change factor calculated in the EFA, the IES-R scale, and the single negative effects item. Figure 3 shows the results for the construct of ongoing reality testing, which comprised the learning and insight factor, two adaptation to the new reality variables, and a forgiveness variable. For each construct, a composite variable was created to be used in the subsequent analyses. To do so, the scores on the indicator variables were standardized and their sum was taken (mean was taken for the overall growth and negative change composite variables).

The remaining proposed constructs (positive expectations, strong alliance, and increased awareness) did not yield a coherent factor and thus their components were analyzed separately in subsequent analyses. Therefore, for positive expectations, separate composite variables were included for optimism (calculated from the established LOT-R scale), initiator status of the breakup (calculated for this analysis as either partner-initiated, or self or mutually-initiated, and personality features related to positive expectations (neuroticism, sense of control over the breakup and its aftermath, and self-esteem). For strong alliance, separate composite variables were included for comfort with

intimacy, anxiety about abandonment, and seeking and receiving advice and emotional support from others). For increased awareness, separate composite variables were included for action and meaning-making, and acceptance of new reality. In the analysis of the increased awareness construct, several factors showed non-significant regression weights (avoidance through activities, joking, and substance use) and were therefore omitted from subsequent analyses due to these results and due to their peripheral role in the proposed hypotheses. Two corrective experience variables were already established in the EFA (active coping and not giving up) and thus were not reanalyzed in the CFA. Two scales of established measures (agreeableness and openness to experience) showed poor reliability levels (Cronbach's alpha of < .50) and thus were omitted from all subsequent analyses. The final latent factors/constructs, composite variables (when no construct solution was found), and indicator variables, along with their reliability, are listed in Table 16. In addition, the overall growth composite was decomposed into relationship-relevant and non-relationship relevant (i.e., general) growth to examine whether growth was specific or more general. As was done with the overall growth composite variable, these two growth variables were calculated by converting their items to *z* scores and then taking the mean of *z*-scored items to produce a relationship-relevant growth composite variable and a general growth composite variable.

Reliabilities of Factors/Variables Used in the Analyses

I calculated the Cronbach's alpha internal consistency statistic on the final measures and factors to be used in the subsequent analyses. Results are presented in Tables 16 and 17. Overall, the levels were adequate (i.e., above $\alpha = .60$). However, the ongoing reality testing construct and the comfort with intimacy measure should be interpreted with some caution given their internal consistency levels of .59 and.52, respectively.

Goal 1 Analyses: Evaluate the Presence of Positive Responses to Relationship Dissolution

The means and standard deviations of all of the growth variables (composite and individual) are presented in Table 18.

To determine the extent to which growth was present in the sample, I calculated the percentage of individuals reporting mainly positive effects, mainly negative effects, and both positive and negative effects. To do so I first created high and low growth and negative change groups. To create the high overall growth group I selected individuals who reported levels of growth at or above the sample mean for either the overall PTGI score, the single item positive effects measure, or the composite relationship-relevant growth variable (i.e., participants had to be at or above the sample mean for any one of these). The low overall growth group was calculated as individuals who scored below the sample mean on all three of the growth variables. Similarly, to create the high negative change group I selected individuals who were at or above the mean on any one of the negative change measures (the BSI depression and hostility subscales, the IES-R scale, and the single negative effects item). Low negative change was determined as those who reported levels of negative change below the mean on all of the negative change measures. With these high and low growth and negative groups calculated, I then identified the percent of individuals falling into each of four groups and examined the frequencies of these occurrences. Results (presented in Table 19) yielded 1.1% of individuals reporting both low overall growth and low negative change; 19.3% of individuals reporting low overall growth and high negative change; 21.9% of individuals reporting high overall growth and low negative change; and 57.6% of individuals scoring high on both overall growth and negative change. These data were examined in the same manner looking only at relationship-relevant growth (the composite variable) and negative effects and general growth (the PTGI overall score and the one-item positive effects measure) and negative effects. For relationship-relevant growth, 6.7% of individuals reported both low growth and low negative change; 43.5% reported low growth and high negative change; 16.0% reported high growth and low negative change; and 33.8% reported both high growth and high negative change. For general growth, 1.5% of individuals reported both low growth and low negative change; 21.9% reported low growth and high negative change; 21.6% reported high growth and low negative change; and 55.0% reported both high growth and high negative change.

Overall, participants most frequently reported growth at high levels and negative change at high levels (33.8% to 57.6%). The least frequently endorsed pattern was of low growth and low negative change. Both low growth and high negative change and high growth and low negative change occurred in approximately 20% of participants. However, low levels of relationship-relevant growth and high levels of negative change were reported by 44% of the sample (when only examining that type of growth).

Goal 2 Analyses: Identify Variables Associated With Positive Change

Associations Between Growth and Personality Variables

I initially tested whether the individual personality variables (extraversion, sense of control, neuroticism, and self-esteem) were related to growth. Findings are presented in Table 20. Higher levels of extraversion and lower levels of neuroticism were significantly, positively associated with overall, relationship-relevant, and general growth. A higher level of sense of control and higher self-esteem were also significantly, positively associated with overall, relationship-relevant, and general growth.

Associations Between and the Composite Variables

Correlations were then computed between (a) the overall growth score, (b) the relationship-relevant growth score, and (c) the general growth score, and each of the composite variables (optimism, personality, comfort with intimacy, anxiety about abandonment, advice and emotional support from others, action and meaning-making, acceptance of new reality, active coping, not giving up, learning and insight, adaptation, adjustment to new reality, and forgiveness). Results are presented in Table 21. Overall, relationship-relevant, and general growth were each significantly related to all of the variables, with one exception: general growth was not significantly associated with anxiety about abandonment. Applying Bonferroni's correction to these data (determined as .05/the number of analyses, 10, yielding a more stringent p of .005), for overall growth, all associations remained except the significant correlation with acceptance. For relationship-relevant growth, all correlations remained significant except the associations between relationship-relevant growth and acceptance and relationship-relevant growth and active coping. For general growth, all associations remained significant except the correlation with acceptance.

Associations Between Growth and Negative Change

Due to the coexistence of growth and negative change, and based on theory and past research that the two may not only coexist but also that negative effects (e.g., distress; see Cadell et al., 2003) may be a catalyst for growth processes, I examined the correlations between negative change (negative effects, distress/PTSD symptoms, hostility, and depression) and growth. Overall, relationship-relevant, and general growth were each significantly, negatively correlated with the composite negative change variable and the individual negative effects (depression, hostility, negative change) and distress variables. Results are show in Table 22.

Associations Between Growth and Relationship Variables

I also sought to determine if being the initiator of the breakup was associated with reports of growth. This analysis was done using analysis of variance (ANOVA) to compare the three different initiator groups (e.g., the breakup was initiated by the participant, by their partner, or both of them) on overall, relationship-relevant, and general growth. Results are shown in Table 23. There was a significant association for initiator status and overall growth, $F(2, 267) = 6.20$, $p = .00$. A post-hoc Scheffe test revealed that those who felt they had initiated the breakup reported significantly higher levels of overall growth compared to those who believed their partner initiated the breakup ($p = .01$). Similarly, those who reported that both they and their partner were responsible for the breakup reported significantly higher levels of overall growth than did those who reported that their partner was the initiator ($p = .03$). Relationship-relevant growth, was also significantly associated with initiator status, $F(2, 266) = 4.72$, $p = .01$. In post-hoc analyses participants who self-initiated ($p = .02$) breakups reported higher relationship-relevant growth than people whose partners initiated or who initiated the breakup along with their partner. When general growth was examined, it too was significantly associated with initiator status, $F(2, 267) = 5.54$, $p = .00$. In post-hoc analyses, the same pattern of results emerged as did overall growth. Both people with self-initiated ($p = .01$) and mutually-initiated ($p = .04$) breakups reported higher general growth than people whose partners initiated the breakup.

Differences in growth based on current relationship status were examined using an independent samples *t* test. Results showed that single people reported less overall growth compared to those in relationships, $t(268) = -4.01$, $p = .00$. Single people also reported less relationship-relevant growth, $t(267) = -3.94$, $p = .00$ and general growth, $t(268) = -3.05$, $p = .00$. Means and standard deviations are shown in Table 24.

Associations Between Growth and Demographic and Other Variables

Additional correlational analyses were conducted to examine the associations between growth (overall, relationship-relevant, and general) and each of the other variables: (a) the extent to which the breakup represented a seismic disruption, (b) the extent to which the breakup overwhelmed the individual's resources, (c) time since breakup, (d) length of past relationship, (e) level of commitment or investment in the past relationship, (f) satisfaction in past relationship, (g) number of relationships following breakup, (h) time single, and if appropriate, (i) reasons for the breakup (partner was physically, verbally, and/or emotionally abusive, participant was physically, verbally, and/or emotionally abusive, partner abandoned participant, participant abandoned partner, partner cheated, participant cheated, irreconcilable differences), (j) attributions for the breakup (due to partner and their problems, due to participant and participant's problems, due to both parties, due to situational circumstances, (k) participant age, (l) time spent online (per day, per week), (m) number of kids, and if applicable, (n) length of current relationship, (o) current relationship satisfaction, and (p) time known current partner. These data are presented in Table 25. Overall growth was positively associated with the length of time since the breakup, the number of subsequent relationships, the partner's physical, verbal, and/or emotional abuse or irreconcilable differences being the reasons for the breakup, attributing the breakup to the partner and their problems or to both the participant and the partner, and the level of satisfaction in a current relationship (for those in one), and negatively associated with the experience of a seismic disruption, feeling one's emotional resources were overwhelmed, and level of satisfaction in the past relationship. Relationship-relevant growth was similarly positively associated with the length of time since the breakup, the number of subsequent relationships, attributing the cause of the breakup mutually to the participant and the partner, and the level of

satisfaction in a current relationship (for those in one), as well as with the past partner's physical or emotional abuse being the reason for the breakup. Relationship-relevant growth was negatively associated with the experience of a seismic disruption, feeling one's emotional resources were overwhelmed, investment in the past relationship, and level of satisfaction in the past relationship. General growth was positively associated with time since the length of time since the breakup, the length of the past relationship, the number of subsequent relationships, the past partner's physical, verbal, and/or emotional abuse, a partner's infidelity, or irreconcilable differences being the reason for the breakup, the breakup being attributed to the past partner or mutually to both partner and participant, and the number of children a participant currently has, and level of satisfaction in a current relationship (for those in one). General growth was negatively associated with the extent to which the breakup represented a seismic disruption, the extent to which the participant felt that their emotional resources were overwhelmed by the breakup, level of satisfaction in the past relationship and the number of hours spent online each day and each week.

When I used the Bonferroni correction to control for family-wise error (i.e., .05/the number of analyses, 25, yielding $p = .002$), many of the results remained. For overall growth, six significant correlations remained significant (more subsequent relationships, greater time since the breakup, less satisfaction in the past relationship, not experiencing the breakup as a seismic disruption, the partner's physical, verbal, and/or emotional abuse being the reason for the breakup, and greater satisfaction in the current relationship) but the association between overall growth and the partner's infidelity or irreconcilable differences causing the breakup, and attributing the breakup to the partner or to mutual responsibility, were no longer significant. The association between relationship-relevant growth and the past partner's abuse being the reason for the breakup, less satisfaction in the past relationship, not experiencing the breakup as a seismic disruption, greater time since the breakup, and greater of satisfaction in the current relationship, remained significant but the significant correlations with more subsequent relationships, not feeling one's emotional resources were overwhelmed, attributing the breakup to the participant and the partner, and less investment in the past

relationship, were lost. For general growth, the associations between more subsequent relationships, less satisfaction in the past relationship, greater satisfaction in the current relationship, not experiencing the breakup as a seismic disruption, the past partner's abuse being the reason for the breakup, and the more children the participant has, remained significant, while a longer past relationship, greater time since the breakup, not feeling one's emotional resources were overwhelmed by the breakup, attributing the breakup to the past partner and their problems or mutually to the participant and partner, the partner's infidelity or irreconcilable differences as the reason for the breakup, and more time spent online per day and per week, were no longer significant.

Additional non-continuous variables were examined for their relation to growth using ANOVA. These variables included education level, geographic region of residence, location (urban, suburban, rural), income level, race, and line of work, and are presented in Table 26. No significant effects were found.

Sex Differences in Reports of Growth

To examine whether there were sex differences in reports of growth, I compared men and women using an independent samples *t* test, which showed significant differences between men and women on overall, $t(268) = -2.74$, $p = .01$, relationship-relevant, $t(267) = -2.04$, $p = .04$, and general, $t(268) = -3.32$, $p = .01$ growth. In all cases, women reported significantly more growth than men. Means and standard deviations for these analyses are shown in Table 27. *t* test analyses were also used to compare if, when individuals were in a current relationship, the current partner being the same as the past partner was associated with reports of growth, and if living status (with current partner nor not) was associated with reports of growth. No significant differences were found for whether the current partner being the same as the last partner for any of the growth variables (overall, relationship-relevant, general) (Table 28) or for current living status (living with current partner or not living with current partner) (Table 29).

Sex as a Moderator of These Associations

In the next set of analyses I examined whether the participant's sex moderated the association between growth and each of the variables examined in the proceeding analyses. For continuous variables, hierarchical regression analyses were conducted, in

which sex and the variable of interest were entered first, followed by their interaction next to predict growth. All variables were centered prior to analysis. For analyses that yielded significant interactions, they were decomposed according to procedures of Aiken and West (1991).

Examining overall growth, seven significant interactions emerged. The first was between sex and optimism (B = -.05, *Beta* = -.14, $t(1, 266) = -2.48$, $p = .01$). Simple slopes analyses indicated that for both men and women, optimism was significantly, positively associated with overall growth, however this association was stronger for men (B = .08, *Beta* = .54, $t(1, 53) = 4.63$, $p = .00$) than for women (B = .03, *Beta* = .22, $t(1, 213) = 3.22$, $p = .00$). The second interaction was between sex and comfort with intimacy and sex (B = -.11, *Beta* = -.23, $t(1, 266) = -4.24$, $p = .00$). In simple slopes tests, for both men and women, comfort with intimacy was significantly, positively associated with overall growth, however this association was stronger for men (B = .15, *Beta* = .71, $t(1, 53) = 7.34$, $p = .00$) than for women (B = .04, *Beta* = .24, $t(1, 213) = 3.61$, $p = .00$). The third interaction was between sex and anxiety about abandonment (B = .06, *Beta* = .18, $t(1, 265) = 3.09$, $p = .00$). Simple slopes analyses showed that for men only, anxiety about abandonment was significantly, negatively associated with overall growth (men: B = -.07, *Beta* = -.49, $t(1, 53) = -4.06$, $p = .00$; women: B = -.01, *Beta* = -.13, $t(1, 212) = -1.93$, $p = .06$.). The fourth interaction was between sex and personality variables that are related to positive expectations (B = -.28, *Beta* = -.11, $t(1, 266) = -1.94$, $p = .05$). Simple slopes analyses revealed that for both men and women, personality variables were significantly, positively associated with overall growth, however this association was stronger for men (B = .66, *Beta* = .57, $t(1, 53) = 5.02$, $p = .00$) than for women (B = .38, *Beta* = .36 $t(1. 213) = 5.55$, $p = .00$). The fifth interaction was between sex and the amount of time spent online per week (B = .02, *Beta* = .21, $t(1, 219) = 3.00$, $p = .00$). In simple slopes analyses, for men only, the amount of time spent online each week was significantly and negatively associated with overall growth (men: B = -.02, *Beta* = -.39, $t(1, 43) = -2.79$, $p = .01$; women: B = .00, *Beta* = .07, $t(1, 176) = .93$, $p = .36$). The sixth interaction was between sex and attributing the breakup to both the partner and the participant (B = -.18, *Beta* = -.13, $t(1, 265) = 2.17$, $p = .03$). In simple slopes analyses, for

men only, mutually attributing the breakup was significantly and negatively associated with overall growth (men: *B* = .23, *Beta* = .35, *t*(1, 53) = 2.72, *p* = .01; women: *B* = .05, *Beta* = .12, *t*(1, 212) = 1.75, *p* = .08). The seventh was between sex and attributing the breakup to outside causes (*B* = .17, *Beta* = .13, *t*(1, 261) = 2.04, *p* = .04). In simple slopes analyses, attributing the breakup to outside circumstances or forces was not significantly associated with overall growth for either sex, however the effect was stronger for women (men: *B* = -.14, *Beta* = -.20, *t*(1, 53) = -1.52, *p* = .14; women: *B* = .04, *Beta* = .08, *t*(1, 208) = 1.11, *p* = .27).

Examining relationship-relevant growth, six significant interactions emerged. The first was between sex and optimism (*B* = -.05, *Beta* = -.14, *t*(1, 265) = -2.44, *p* = .02). In simple slopes tests, for both men and women, optimism was significantly, positively associated with relationship-relevant growth, however this association was stronger for men (*B* =.08, *Beta* = .52, *t*(1, 53) = 4.45, *p* = .00) than for women (*B* = .03, *Beta* = .18, *t*(1, 212) = 2.59, *p* = .01). The second interaction was between sex and comfort with intimacy (*B* = -.10, *Beta* = -.19, *t*(1, 265) = -3.42, *p* = .00). Simple slopes analyses revealed that again, comfort with intimacy was significantly, positively associated with relationship-relevant growth for both sexes but was stronger for men (*B* =.14, *Beta* = .66, *t*(1, 53) = 6.47, *p* = .00) compared to women (*B* = .05, *Beta* = .26, *t*(1, 212) = 3.89, *p* = .00). The third significant interaction was between sex and anxiety about abandonment (*B* = .06, *Beta* = .18, *t*(1, 264) = 2.95, *p* = .00). Simple slopes analyses showed that anxiety about abandonment was significantly, negatively associated with relationship-relevant growth for both sexes, but this association was stronger for men (*B* = -.07, *Beta* = -.51, *t*(1, 53) = -4.26, *p* = .00) than for women (*B* = -.02, *Beta* = -.15, *t*(1, 211) = -2.12, *p* = .04). The fourth interaction was between sex and attributing the breakup to outside causes (*B* =.21, *Beta* = .14, *t*(1, 260) = 2.24, *p* = .03). In the simple slopes test, attributing the cause of the breakup to outside causes was not significant for either sex but was a stronger effect for women (men: *B* = -.15, *Beta* = -.22, *t*(1, 53) = -1.66, *p* = .10; women: *B* = .05, *Beta* = .10, *t*(1, 207) = 1.41, *p* = .16). The fifth interaction was between sex and the amount of time spent online per week (*B* = .02, *Beta* = .18, *t*(1, 218) = 2.59, *p* = .01). Simple slopes analyses showed that the amount of time spent online each week was

significantly and negatively associated with relationship-relevant growth for men (B = -.01, $Beta$ = -.32, t(1, 43) = -2.22, p = .03) but not women (B = .01, $Beta$ = .09, t(1, 175) = 1.15, p = .25). Finally, the sixth interaction was between sex and length of time known current partner (B = -.00, $Beta$ = -.16, t(1, 158) = -2.01, p = .05). Simple slopes analyses showed that although the length of time the participant has known their current partner was not significantly, positively associated with relationship-relevant growth either sex (men: B = .00, $Beta$ = .27, t(1, 24) = 1.94, p = .06; women: B = .00, $Beta$ = -.08, t(1, 134) = -.87, p = .39), association between the variables was stronger for men compared to women.

Finally, examining general growth, eight interactions were significant. The first was between sex and comfort with intimacy (B = -.13, $Beta$ = -.25, t(1, 266) = -4.48, p = .00). Simple slopes analysis revealed that the association between general growth and comfort with intimacy was significant and positive for both sexes, but stronger for men (B =.16, $Beta$ = .66, t(1, 53) = 6.45, p = .00) compared to women (B = .03 $Beta$ = .14, t(1, 213) = 2.10, p = .04). The second interaction was between sex and anxiety about abandonment (B = .05, $Beta$ = .15, t(1, 265) = 2.56, p = .01). In simple slopes analysis, anxiety about abandonment was significantly, negatively associated with general growth for men (B = -.06, $Beta$ = -.37, t(1, 53) = -2.88, p = .01) but not significant for women (B = -.01, $Beta$ = -.06 t(1, 212) = -.86, p = .39). The third interaction was between sex and seeking and receiving advice and emotional support (B = -.07, $Beta$ = -.13, t(1, 266) = -2.19, p = .03). In simple slopes analysis, seeking and receiving advice and emotional support was significantly, positively associated with general growth for both sexes, but stronger for men (B = .11, $Beta$ = .44, t(1, 53) = 3.59, p = .00) compared to women (B = .04, $Beta$ = .18, t(1, 213) = 2.740, p = .01). The fourth interaction was between sex and the amount of time the participant spends online each day (B = -.09, $Beta$ = .13, t(1, 255) = 2.09, p = .04). Simple slopes analysis revealed that the association between general growth and the amount of time spent online each day was significant and negative for men (B = -.11, $Beta$ = -.33, t(1, 53) = -2.55, p = .01), but not significant for women (B = -.02, $Beta$ = -.06, t(1, 202) = -.85, p = .39). The fifth interaction was between sex and the amount of time spent online per week (B = .02, $Beta$ = .21, t(1, 219) = 3.00, p = .00).

Simple slopes analysis revealed that the association between general growth and amount of time spent online per week was significant and negative for men (*B* = -.02, *Beta* = -.44, *t*(1, 43) = -3.21, *p* = .00), but not significant (and positive) for women (*B* = .00, *Beta* = .02, *t*(1, 176) = .26, *p* = .80)., The sixth interaction was between sex and satisfaction in the past relationship (*B* = -.05, *Beta* = -.13, *t*(1, 266) = -2.15, *p* = .03). Simple slopes analysis revealed that the association between general growth and satisfaction in the past relationship was significant and negative for women (*B* = -.05, *Beta* = -.32, *t*(1, 213) = -4.96, *p* = .00), but not significant (and positive) for men (*B* = .00, *Beta* = .02, *t*(1, 53) = -.14, *p* = .98). The seventh interaction was between sex and the partner's past abuse causing the breakup (*B* = .17, *Beta* = .13, *t*(1, 263) = 2.24, *p* = .03). In simple slopes analyses, for women only, the partner's abuse as reason for the breakup was significantly and negatively associated with general growth (men: *B* = -.03, *Beta* = -.04, *t*(1, 53) = -.26, *p* = .80; women: *B* = .12, *Beta* = .21, *t*(1, 212) = 3.12, *p* = .00). Finally, the eighth interaction was between sex and attributing the breakup to both partner and participant (*B* = -.19, *Beta* = -.12, *t*(1, 265) = 2.03, *p* = .04). In simple slopes analyses, for men only, mutual attributions for the breakup were significantly and positively associated with general growth (men: *B* = .25, *Beta* = .32, *t*(1, 53) = 2.45, *p* = .02; women: *B* = .05, *Beta* = .10, *t*(1, 212) = 1.51, *p* = .13).

Age as a Moderator of These Associations

Although age and growth did not show a significant association, because there was little age restriction in the study, and to identify any developmental variability in associations between age and the variables, I also examined whether a participant's age moderated the association between growth and each of the variables examined in the prior analyses. Again, as with the moderation analyses described above, for continuous variables, hierarchical regression analyses were conducted, in which age and the variable of interest were entered first, followed by their interaction to predict growth. For analyses that yielded significant interactions, they were decomposed according to procedures of Aiken and West (1991) for simple slopes tests. This involved first creating high (defined as one standard deviation above the mean) and low (defined as one standard deviation below the mean) variables (groups) for age. New interaction terms were created between

the variables of interest (those that had been part of the significant interactions) and the high and low age variables. Two regression analyses, one for each age group, were then completed to examine the association between the relevant predictor variables and growth at high and low age groups.

Examining overall growth, seven significant interactions emerged. The first was between age and active coping (B = .00, *Beta* = .13, $t(1, 265) = 2.11$, p = .04). Simple slopes analyses indicated that for older (B = .06, *Beta* = .33, $t(1, 265) = 3.22$, p = .00) but not younger participants (B = .01, *Beta* = .04, $t(1, 265) = .45$, p = .65), active coping was significantly, positively associated with overall growth. The second interaction was between age and experiencing the breakup as a seismic disruption (B = .00, *Beta* = .15, $t(1, 265) = 2.56$, p = .01). The simple slopes test revealed that for younger (B = -.08, *Beta* = -.39, $t(1, 265) = -4.75$, p = .00) but not older (B = -.02, *Beta* = -.08, $t(1, 265) = -.92$, p = .36) participants, seismic disruption was significantly (and negatively) associated with overall growth. The third interaction was between age and feeling one's emotional resources were overwhelmed by the breakup (B = .00, *Beta* = .15, $t(1, 265) = 2.48$, p = .01). Simple slopes analysis indicated that feeling one's emotional resources were overwhelmed by the breakup was significantly (and negatively) associated with overall growth for younger (B = -.09, *Beta* = -.32, $t(1, 265) = -3.91$, p = .00) but not older (B = -.01, *Beta* = -.03, $t(1, 265) = -.33$, p = .74) participants. The fourth interaction was between age and the amount of time spent online each week (B = .00, *Beta* = .13, $t(1, 219) = 1.95$, p = .05). Simple slopes analysis showed that the amount of time online each week was significantly (and negatively) associated with overall growth for younger (B = -.01, *Beta* = -.26, $t(1, 219) = -2.55$, p = .01) but not older (B = .00, *Beta* = -.00, $t(1, 219) = -.05$, p = .96) participants. The fifth interaction was between age and the participant's physical, emotional, or verbal abuse being the reason for the breakup (B = .01, *Beta* = .13, $t(1, 261) = 2.12$, p = .04). Simple slopes analysis indicated that the participant's abuse being the reason for the breakup was significantly (and positively) associated with overall growth for older (B = .16, *Beta* = .19, $t(1, 261) = 2.00$, p = .05) but not younger (B = -.06, *Beta* = -.07, $t(1, 261) = -.85$, p = .39) participants. The sixth interaction was between age and the participant's abandonment (of the partner or the relationship) as the

reason for the breakup (*B* = -.01, *Beta* = -.17, *t*(1, 267) = 2.77, *p* = .01). Simple slopes analysis showed that the participant's abandonment as the reason for the breakup was significantly and positively associated with overall growth for younger (*B* = .14, *Beta* = .25, *t*(1, 265) = 2.76, *p* = .01) but not significant (and negative) for older participants (*B* = -.05, *Beta* = -.08, *t*(1, 265) = -1.05, *p* = .29). Finally, the seventh interaction was between age and current relationship satisfaction (*B* = .00, *Beta* = .14, *t*(1, 166) = 2.03, *p* = .04). The simple slopes test revealed that current relationship satisfaction was significantly, positively associated with overall growth for both age groups but was stronger for older (*B* = .07, *Beta* = .56, *t*(1, 166) = 5.88, *p* = .00), compared to younger (*B* = .04, *Beta* = .29, *t*(1, 166) = 3.05, *p* = .00), participants.

Examining relationship-relevant growth, four significant interactions emerged. The first was between age and experiencing the breakup as a seismic disruption (*B* = .00, *Beta* = .17, *t*(1, 264) = 2.85, *p* = .01). The simple slopes analysis revealed that seismic disruption and relationship-relevant growth were significantly, negatively associated for younger (*B* = -.08, *Beta* = -.38, *t*(1, 264) = -4.60, *p* = .00) but not significant for older (*B* = -.01, *Beta* = -.03, *t*(1, 264) = -.39, *p* = .70) participants. The second interaction was between age and the participant feeling their emotional resources had been overwhelmed by the breakup (*B* = .00, *Beta* = .15, *t*(1, 264) = 2.48, *p* = .01). Simple slopes analysis showed that feeling one's emotional resources were overwhelmed by the breakup was significantly, negatively associated with relationship-relevant growth for younger (*B* = -.09, *Beta* = -.30, *t*(1, 264) = -3.68, *p* = .00) but not significant for older (*B* = -.00, *Beta* = -.01, *t*(1, 264) = -.12, *p* = .91) participants. The third interaction was between age and the amount of time the participant spends online each week (*B* = .00, *Beta* = .16, *t*(1, 218) = 2.33, *p* = .02). In the simple slopes test, the amount of time online each week was significantly, negatively associated with relationship-relevant growth for younger (*B* = -.01, *Beta* = -.25, *t*(1, 218) = -2.41, *p* = .02) but not older (*B* = .00, *Beta* = .06, *t*(1, 218) = .71, *p* = .48) participants. Finally, the fourth interaction was between age and the participant abandoning the partner (i.e., moved out of our home, locked me out of our home, or withdrew sexually for one year or more) as the reason for the breakup (*B* = -.01, *Beta* = -.14, *t*(1, 264) = 2.27, *p* = .02). In the simple slopes test, the participant's

abandonment was significantly, positively associated with relationship-relevant growth for younger (*B* = .12, *Beta* = .20, *t*(1, 264) = 2.23, *p* = .03) but not older (*B* = -.04, *Beta* = -.07, *t*(1, 264) = -.88, *p* = .38) participants.

Examining general growth, four significant interactions emerged. The first was between age and engagement in active coping strategies following the breakup (*B* = .00, *Beta* = .13, *t*(1, 265) = 2.16, *p* = .03). In simple slopes analysis, active coping was significantly, positively associated with general growth for older (*B* = .08, *Beta* = .34, *t*(1, 265) = 3.33, *p* = .00) but not significant for younger (*B* = .01, *Beta* = .04, *t*(1, 265) =.50, *p* = .62) participants. The second was between age and the participant's abuse being the reason for the breakup (*B* = .01, *Beta* = .14, *t*(1, 261) = 2.28, *p* = .02). In simple slopes analysis, the participant's emotional, physical, and/or verbal abuse being the reason for the breakup was significantly, positively associated with general growth for older (*B* =.23, *Beta* = .23, *t*(1, 261) = 2.50, *p* = .01) but not significant (and negative) for younger participants (*B* = -.04, *Beta* = -.04, *t*(1, 261) = -.50, *p* = .62). The third was between age and the participant's abandonment of the partner as the reason for the breakup (*B* = -.01, *Beta* = -.18, *t*(1, 265) = 2.91, *p* = .00). Simple slopes testing showed that the participant's abandonment of the partner was significantly, positively associated with general growth for younger (*B* =.16, *Beta* = .26, *t*(1, 265) = 2.87, *p* = .00) but not older (*B* = -.06, *Beta* = -.09, *t*(1, 265) = -1.13, *p* = .26) participants. Finally, the fourth interaction was between age and satisfaction in the current relationship (when applicable) (*B* = .00, *Beta* = .16, *t*(1, 166) = 2.13, *p* = .04). In simple slopes analysis, satisfaction in the current relationship was significantly, positively associated with general growth for older (*B* = .06, *Beta* = .43, *t*(1, 166) = 4.27, *p* = .00) but not significant for younger (*B* = .02, *Beta* = .13, *t*(1, 166) = 1.31, *p* = .19) participants.

When I used Bonferroni correction to control for family-wise error in the age and sex analyses (i.e., .05/the number of analyses, 37, yielding *p* = .001), only the interaction between sex and comfort with intimacy remained significant in predicting overall, relationship-relevant, and general growth. In the age interaction analyses, all interactions predicting overall growth were no longer significant except the association between overall growth and experiencing the breakup as a seismic disruption. The only remaining

significant interaction was between relationship-relevant growth and the participant's abandonment of the partner as the reason for the breakup. All general growth interactions with age were no longer significant.

Discussion

The present study examined the existence and correlates of growth (relationship-relevant, general growth, and overall growth [the combination of the two]) following the ending of a significant romantic relationship. Results indicated that growth in relationship-specific and non-relationship specific domains occurred following this relational trauma, and that a number of individual-based and other factors were associated with growth experiences. Therefore, this study expands the existing literature on stress-related growth by adding to our understanding of the variables associated with growth, and it specifically expands the literature in the area of relationship traumas by documenting the presence of stress-related growth following relationship dissolution. The results replicate many of the findings in the general growth literature and the preliminary findings in the literature examining growth following relationship disruption, and well as offering some new directions for theory, future empirical exploration, and applied practice.

Evaluation and Description of Responses Following Relationship Dissolution

In goal 1, I sought to evaluate and describe responses to a relationship breakup, and the data from this study clearly show that growth occurred. This is consistent with other work demonstrating the existence of growth following relationship disruption (Colburn et al., 1992; Herbert & Popadiuk, 2008; Hetherington & Kelly, 2002; Reissman, 1990; Stewart et al., 1997; Tashiro & Frazier, 2003). Additionally, I predicted that growth and negative change would each occur following relationship dissolution, and this was supported by the data. Growth was observed in conjunction with reports of negative change. Specifically, a third to over one half of participants reported high levels of growth and high levels of negative change. Low levels of each type of change were reported by a small percentage of participants (range from 1.1% to 6.7% across the growth composited). Additionally, the relatively high levels of people reporting high negative change and low relationship-relevant growth highlights that relationship breakups can be extremely difficult and upsetting events for people, and is consistent with the large literature on the negative effects of breakups and divorce (see Amato, 2000 for a review). However, importantly, the findings replicate existing data and support

existing theory that individuals can experience gains while also experiencing negative effects following trauma (e.g., Cadell et al., 2003; Calhoun & Tedeschi, 1998; Cordova, Cunningham, Carlson, & Andrykowski, 2001; Helgeson et al., 2006; Lehman et al., 1993; Wild & Paivio, 2003).

Since prior work has primarily characterized negative responses as distress (depression, hostility, post-traumatic growth symptoms), I also looked at the nature of the observed association in this sample. In correlation analyses, significant, negative relationships emerged between distress (IES-R post-traumatic growth symptoms, and BSI depression and hostility symptoms) and each of the growth variables (see Table 21). This finding is in contrast to Cadell and colleagues' (2003) observation that depressive symptoms, avoidance, and intrusive thoughts had a positive effect on post-traumatic growth among bereaved caregivers, and to Grubaugh and Resick's (2007) finding that depression and distress among treatment-seeking physical and sexual assault victims was unrelated to growth scores. Given these contradictory findings, further research is needed to explain the relationship between distress and growth. Although the experience of distress may be necessary and facilitative of growth, as theory suggests (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 1996, 2004), the contradictory findings imply that different levels of distress may differentially affect growth. Indeed, the current findings suggest that too much distress does not facilitate growth. Furthermore, the discrepant findings may indicate that the type of trauma (and its associated distress) matter, in terms of the association with growth. That is, distress from relationship breakups may impact individuals differently than does distress from sexual or physical assault and from distress arising from bereavement. Regardless of the need to further understand the specific impact of distress on growth, research that focuses exclusively on distress and its correlates, and excludes growth as an outcome of difficulty, may capture an incomplete and even misleading picture of response to trauma.

Identification of Variables Associated with Positive Change

For goal 2, I examined the correlates of growth in an effort to elucidate how growth may occur, and specifically to understand how relationship-relevant growth may occur. I found that both individual-based and other variables (e.g., related to the trauma,

related to coping, related to subsequent relationships) correlated with non-relationship-relevant and relationship-relevant growth. Data also provided more detailed information about the variables that relate to growth than has previously been done. Each of the findings and their implications are detailed below.

Individual-based Variables

Aspects of the individual showed a strong association with reports of growth, as detailed below.

Individual-based *personality variables* related to levels of reported growth. Specifically, higher levels of extraversion and lower levels of neuroticism were associated with higher reports of growth (overall, relationship-relevant, and general). Although prior work has yielded mixed results on the association between growth and extraversion (Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996), the current finding suggests that those higher in extraversion are better able to cope with and seek the resources from their environments that they need to grow from a relational-trauma. Especially following a breakup, extraverts may experience more growth because they are more social, solicit more support from others, and are more easily able to meet new people. Extraverts may therefore be better equipped to experience positive change following relationship dissolution by virtue of their behavior. However, given the inconsistency of prior work, more inquiry is needed into the association between extraversion and growth.

Theory on neuroticism and growth has raised the concern that neuroticism at high levels may either inhibit growth or, conversely, that those higher in neuroticism may be more likely to report growth. In a meta-analysis, Helgeson and colleagues (2006) found the effect of neuroticism, although unrelated to benefit finding, was in the same direction as that observed in the current study. That is, in partial consistency with the meta-analysis, my results refute the claim that those who are more chronically distressed and worried (i.e., high levels of neuroticism) are more likely to find benefits from trauma. Instead, this personality characteristic appears to qualify the level of growth experienced following relationship dissolution. This hypothesis is consistent with the speculation that extraversion is interpersonally adaptive, and facilitates growth, whereas neuroticism,

which is associated with shyness and negative emotions, may result in less adaptive interpersonal behaviors. Again, future work to replicate these findings, especially as they exist following relational trauma, would be helpful.

The degree to which an individual feels they have *control* in a difficult situation (and over the effects of that event) is also correlated with growth in existing work. Specifically, consistent with the current findings, prior research has demonstrated a positive association between growth and perceived controllability (Frazier & Cook, 1993; Linley & Joseph, 2004; Mearns, 1991; Park et al., 1996; Peterson et al., 1985). In the current study, I assessed whether participants felt they had control over the breakup and its aftermath, and it appears that feeling that the negative event was not simply "happening to them," as passive recipients of difficulty, may have helped individuals in the sample grow from their breakup. This also is consistent with theory on the central role of perceived control (Foa, Zinbarg, & Rothbaum, 1992) in the development of distress. The present findings are both similar and dissimilar to other work examining trauma and control, which has shown that control over the recovery process from trauma relates to better adjustment, but that control over the trauma itself is unrelated to growth (Frazier, Steward, & Mortensen, 2004). Perhaps the discrepancy with the current findings is related to the sample used in this past research, which involved women experiencing a sexual assault. The role of perceived control over a sexual assault trauma may be qualitatively different from a sense of control over a relationship breakup. Future research should explore the specific role of sense of control, both over the breakup and its aftermath.

As hypothesized, individuals reporting higher levels of *self-esteem* also reported higher levels of growth (overall, relationship-relevant, and general). This is consistent with theory that greater self-esteem may help individuals recover from the disruption caused by a trauma (Frazier & Cook, 1993; Janoff-Bulman, 1992).

One's outlook on a situation, has, not surprisingly, associations with experiencing growth following a difficult event. In the past, greater *optimism* has been shown to be related to reports of growth across a number of studies (Helgeson et al., 2006). Consistent with this prior work, after a relationship breakup, optimism was related to relationship-

relevant and general growth. This suggests a mechanism whereby individuals with greater levels of optimism are more easily able to develop a positive outlook in a difficult situation, which then aids them in achieving growth outcomes.

Individuals who reported greater *attachment security* also showed more growth following relationship dissolution. Because a breakup may threaten temporary sense of trust and safety with others, underlying attachment security may be of particular importance for individuals after a relational trauma. Consistent with previous work showing that higher attachment security is related to less distress (Birnbaum et al., 1997; Sbarra & Emery, 2005), the current results go further to demonstrate that attachment security is related to growth. Greater levels of security may allow individuals to seek support as needed during a difficult time (Collins & Feeney, 2004), or to face the difficult reality of the breakup situation. As predicted, comfort with intimacy was positively, significantly related to overall, relationship-relevant, and general growth whereas anxiety about abandonment was negatively associated with overall and relationship-relevant growth. The significant association between relationship-relevant growth and comfort with intimacy and anxiety about abandonment suggests that being able to engage in emotionally intimate interactions with others, without fear of being abandoned, may be especially important in enabling growth to occur in this domain.

In interaction analyses, many of these individual variables (neuroticism, sense of control over the breakup and its aftermath, self-esteem, optimism, comfort with intimacy, and anxiety about abandonment) were more strongly associated with growth among men than women. Although it is not clear why this was the case, this pattern may indicate that the sample of men in this study had unique characteristics. This study did not offer financial compensation and instead offered free, personalized feedback about the self and relationships. Perhaps the men who were motivated to participate based on this incentive represented a unique group who were particularly interested in and affected by relationships and associated variables. Future replication can address this possibility.

Although these individual variables are often thought of as dispositional attributes, it may be possible for clinicians and others to help foster more adaptive functioning (e.g., lowered neuroticism; greater optimism, self-esteem, sense of control,

and attachment security) following a relationship breakup, and, based on the interaction findings, this might be particularly helpful for men. Helping individuals to see positive possibilities rather than focus on negative emotional states, strengthen their general trust in others (despite the breakup), recognize elements of the experience and of its aftermath that they have control over, and engage in activities that build and support a strong self-esteem may help them see that new possibilities may exist for them, and that, although challenging, the change may offer them improved options in the future.

Demographic Variables

Of the demographic variables measured in this study that have been examined in prior work (sex, age, income, race), only the participant's sex was associated with growth in this study. Consistent with prior research (Colburn et al., 1992; Helgeson, 1994; Helgeson et al., 2006; Tashiro & Frazier, 2003), women reported more overall, relationship-relevant, and general growth than men. Neither age, nor income, nor race was associated with growth. Regarding age, unlike previous research (Grubaugh & Resick, 2007; Helgeson et al., 2006) no association emerged, despite the age variability that existed. However, as is described later, age did moderate a number of associations. Regarding income, the lack of association is consistent with a recent meta-analysis (Helgeson et al., 2006). However, in future research it may be worth exploring whether the role of income is different depending on the trauma. For instance, health traumas or natural disaster traumas may require a certain level of income to cope with the effects of the trauma whereas a relationship breakup may not pose the same level of economic challenges. Regarding race, although unrelated to reports of growth in the current study, prior research has shown that race moderated the relation of benefit finding and better mental health, less depression, reduced distress, and positive affect, with minority respondents showing more growth (Helgeson et al., 2006). Some have theorized that minority participants may have experienced more adversity, affording them more familiarity or skills at finding growth from difficulties. The current findings do not support this claim, although rates of minority participation in this study were modest.

A number of demographic factors not studied in prior research were included in this study (education level, geographic region of residence, location of residence [urban,

suburban, rural], line of work, number of children, and amount of time spent online), but only two were related to growth, and these associations were with general growth, not relationship-relevant or overall growth. First, more general growth was associated with having more children (at the time of the survey). Perhaps participants with more children had an additional motivation to grow from their difficult experience (i.e., care of their children). Second, more general growth was associated with fewer hours spent online (each day and each week), and this association was stronger for men and for younger participants. Perhaps less time spent online each day facilitated the processes of change (e.g., support, active coping, new experiences) that resulted in growth whereas large amounts of time online stalled or blocked such processes. Why this is particularly true for men and younger participants is unclear.

Variables Related to the Breakup

Specific aspects of the relationship and its dissolution also were predicted to relate to reports of growth. Consistent with prior work, some features of the trauma did show significant associations with growth. However, several did not.

Initiator status. As described earlier, being the person who initiated the breakup has been associated with the level of reported growth (see Tashiro et al., 2006 for a review), and the same finding emerged in this study. For both overall and general growth, participants who were self-initiators or who mutually-initiated the breakup showed more growth than those participants who reported that their partner initiated the breakup. Moreover, self-initiators were unique in their higher reports of relationship-relevant growth, as compared to partner-initiated and mutually-initiated breakups. This finding suggests that being the sole initiator may hold specific implications for relationship-relevant growth. Perhaps sole-initiators are more resolved about the relationship's ending since they see themselves as having make this decision, and this perspective enables them to more readily experience post-dissolution growth.

Attributions for the breakup. The literature has shown that those who attribute the cause of the breakup to themselves report poor outcomes, whereas those who attribute the dissolution to the relationship itself (Amato & Previti, 2003) or to environmental factors (Tashiro & Frazier, 2003), experience more positive outcomes. In this study, I found that

attributing the breakup to the past partner (for overall and general growth) and to both the participant and the partner (for all growth composites) were related to higher levels of reported growth. Although inconsistent with prior literature, in the context of a relationship breakup, perhaps attributing the breakup to the past partner relieves the individual of self-blame, thus maintaining self-esteem and optimism. Additionally, attributing the breakup to the self (in conjunction with the partner) may foster a sense of control and resolution (as suggested above), and thus allow for change.

Interaction analyses yielded additional information, although interpretation of these findings is not clear. Specifically, there was a stronger association between growth and attributing the responsibility for the breakup to mutual causes (both partner and participant) among men. Additionally, there was a stronger association between growth and attributing the breakup to outside causes among women.

Time since the breakup. The literature on how the length of time since the event relates to growth is varied, with some reporting an association with more recent events (Wild & Paivio, 2003), others not finding a significant association (Tashiro & Frazier, 2003; Tedeschi & Calhoun, 1996), and others observing that greater time since the event relates to more growth (Helgeson et al., 2006). In this study, time since the breakup was positively related to growth. Consistent with a recent meta-analysis (Helgeson et al., 2006), this suggests that researchers should consider the influence of this variable on reports of growth. Many past studies were either completed in a relatively short timeframe post-trauma, or did not adequately assess this variable. However, initial reports may represent illusionary growth (an area of debate in the literature) or an initial benefit finding or coping process rather than a sustained growth outcome.

Reasons for the breakup. Experience in verbally, physically, and/or emotionally abusive relationship, a partner cheating in the relationship, and experiencing "irreconcilable differences," were related to growth, with the association between abuse and growth stronger for women than men. In interaction analyses, the participant's abusive behavior was more strongly associated with growth for older participants whereas the partner's abandonment of the relationship (i.e., moving out of the home, locking the partner out of the home, or withdrew sexually for one year or more) was more

strongly associated for younger participants. Although the mechanisms underlying these associations are unclear, experiencing significant relationship dysfunction (infidelity, abuse) may promote greater motivation and reflection to change, especially for women and older participants. Similarly, experiencing substantial differences with a partner (irreconcilable differences) may prompt individuals to reflect on these differences and make changes to avoid similar future situations. Although it is unclear why younger participants experienced more growth when they had abandoned their partner, perhaps abandoning the relationship allowed them to distance themselves from the experience, or to feel more control. Older participants may have been better able to reflect on and admit their own abusive behavior, and translate this into growth to prevent future repetition of this maladaptive interpersonal pattern.

Alternatively, the association between reported verbal, physical, and/or emotional abuse may reflect individuals' efforts to come to terms with negative aspects of their past relationship and attempts to see themselves as better off because of this struggle rather than a growth-promoting process. No other studies related to growth and relationship dissolution have examined the association between abuse and growth. Existing research indicates that lifetime reports of emotional abuse and physical abuse toward women range from 10% to 69% (physical assault) (World Report on Violence and Health) and approximately 75% of men and women report engaging in an average of 10 acts of verbal aggression in a year (Straus & Sweet, 1992). These rates are not inconsistent with the rates of abuse reported in this study, and are not surprising when considering that this survey asked about an ended relationship (which may have been unhealthy). In the current study, which was not focused on abuse per se, I assessed these experiences in both sexes, and I did not provide definitions of verbal, physical, and emotional abuse, nor were any of the types of abuse examined separately. Therefore the rates of reported abuse must be interpreted within this context. Future work should continue to examine the different types of abuse, clearly define what the terms mean, and assess the role of these experiences in reports of growth.

Length of the past relationship. Although not assessed in prior work and not discussed in the limited theory on growth following relationship dissolution, in this study,

the length of the past relationship was positively associated with growth. Although the reason for this association is not clear, perhaps longer relationships have had more of an impact on the individual (by virtue of the timeframe), which translates into a greater need for change when that relationship ends (e.g., more is lost or disrupted by the breakup). Alternatively, when individuals are with a partner for a longer time, they may seek to make changes to distance themselves from their lengthy past relationship whereas those in shorter relationships do not feel equally motivated to distance themselves because there were fewer experiences in a shorter relationship. Additional aspects of longer past relationships may also promote growth (e.g., level of closeness or intimacy, variables related to communication, degree to which the participant feels their life was intertwined with the past partner's, etc.) to a greater extent than do shorter relationships, which could be investigated in future studies.

Investment in the past relationship. Participants who were less invested in or committed to the relationship reported more relationship-relevant growth. It is unclear why this was so, and this finding seems to contrast the observation that those in longer relationships (who may have been more invested than their short relationship counterparts) reported more growth. One possible explanation for the finding is that less investment in a relationship allowed participants to distance themselves from their past experience and enabled them to gain additional perspective on the relationship, which helped them grow. Alternatively, the finding may reflect a bias to see the past relationship more negatively (e.g., less investment in the relationship), which might explain the contradictory findings with length of relationship.

Past relationship satisfaction. Lower levels of satisfaction in the past relationship were associated with greater overall growth and general growth (for women only). As suggested above, this finding may represent a recollection bias whereby people who reported growth were more likely to see their past relationship in a negative light and this corresponded to experiencing or seeing more growth in themselves. However, the lack of association with relationship-relevant growth suggests that this hypothesis may not be supported, as we might expect higher reports of relationship-relevant growth if a recollection bias related to the relationship were occurring. The stronger positive

association between general growth and past satisfaction may have occurred because women's growth experiences may be especially sensitive to the features of the past relationship (e.g., satisfaction).

Level of disruption caused by the breakup and *feeling one's emotional resources were overwhelmed by the breakup.* The shattering of previously held assumptions, resulting from a substantial disruption, is a proposed catalyst for the rebuilding and reconstruction proceeding growth (Janoff-Bulman, 1992; Tedeschi et al., 1998). Past research has documented an association between benefit finding and perceived threat-stress and severity of the event (Helgeson et al., 2006). Similarly, the experience of having one's emotional resources overwhelmed by the trauma (Tedeschi et al., 1998) has been implicated as a key contributor to the growth experience. However, contrary to predictions, experiencing the breakup as a seismic disruption and feeling one's emotional resources were overwhelmed were negatively associated with growth, with stronger association for younger participants. It is unclear why this pattern emerged but perhaps the negative association suggests that elevated levels of disruption actually impede growth. It may be that a certain level of distress or disruption is required (as theory suggests) but beyond that level, individuals become impaired, especially younger people. Future research should explore these variables using a broader spectrum of descriptors to capture the level of disruption caused by an event to address the role of various levels of disruption on growth.

Variables Related to Coping

Literature on growth emphasizes that the manner in which an individual copes with the disruptive event and its associated thoughts, emotions, and other changes, can facilitate the experience of growth following trauma. Consistent with this theory, I found coping behaviors to significantly relate to reported growth.

Active coping and *not giving up* were positively associated with growth, with a stronger association for older participants. Active coping involved thinking actively about ways of managing and coping with the breakup, efforts to understand the event, and taking steps to move forward. Consistent with the data, growth theory (Calhoun & Tedeschi, 2006) and prior qualitative work (Herbert & Popadiuk, 2008) has emphasized

the importance of risk taking and engagement in new activities for growth experiences. In particular, older participants may have been especially able to employ these coping techniques because they may have acquired more active coping strategies, or perhaps they are more effective at using these strategies. A greater understanding of the specific behaviors associated with active coping that aids growth should be explored in future work.

Consistent with prior work (Cadell et al., 2003; Frazier & Cook, 2003; Herbert & Popadiuk, 2008; Tashiro & Frazier, 2003), current results showed that *seeking and receiving more advice and emotional support* was related to more growth. Additionally, this association was stronger for men. Generally, support may be associated with growth because greater availability and use of support facilitates self-disclosure that, in turn, promotes cognitive processing of the traumatic experience, validates the expression of painful emotions, and enhances positive aspects of well-being (Orenstein, 1999). Men in particular may have benefited from support as they generally have more limited support networks, are less responsive to support experiences, or derive their primary support from their past partner (vab Daalen, Sanders, & Willemsen, 2005). Related research has shown varied results with regard to the impact of support on the development of PTSD symptoms after trauma among men compared to women (Ahern et al., 2004; Andrews, Brewin, & Rose, 2003; Farhood et al., 1993). Clearly, more inquiry into these sex differences would be helpful. Experiences with supportive others also may be especially important for individuals suffering a relationship breakup. For these individuals, the difficulty of experiencing an interpersonal trauma may be balanced or corrected in some way if they feel they are supported in other relationships. This effect may be especially relevant to growth in relationship-relevant domains. Future research could assess the extent to which individuals feel that support facilitated their relationship-relevant growth, and the extent to which support helped them "counter" the negative relational effects of their breakup.

Cognitive commitment or active meaning-making. Theorists have postulated that a process of meaning-making following the traumatic event encourages individuals to reflect on and learn from their difficult experience (Calhoun & Tedeschi, 1998; Tedeschi

& Calhoun, 1996; Wild & Paivio, 2003). Consistent with this theory and with a qulaitative study examining these processes after relationship dissolution (Herbert & Popadiuk, 2008), growth was associated, in this study, with greater understanding and processing of the dissolution and its implications. Critics have speculated that such focus reflects a process of rumination that leads to worsening negative symptoms, rather than growth. However the current data suggest that such activity represents a cognitive commitment toward active meaning-making rather than a self-defeating process of ruminative reflection. These intentional efforts to look carefully at, understand, and make sense of the breakup may be similar to the post-event rumination (e.g., cognitive processing, deliberately thinking about the event to try to make sense out of it, deliberately trying to make something good come out of the struggle with the event, and deliberately trying to see benefits in the event), that has been associated with growth experiences following other types of trauma (Calhoun, Cann, Tedeschi, & McMillan, 2000). Similarly, Helgeson et al.'s (2006) meta-analysis showed that benefit finding uniquely related to positive reappraisal, among other possible coping constructs, and suggests that positive reappraisal involved trying to look on the bright side of things, which in turn, lead to benefits.

Theorists have proposed that honest appraisal of the traumatic event and its impact is necessary for growth to occur (Calhoun & Tedeschi, 2004; Park et al., 1996). Consistent with this, higher levels of *acceptance* of the new reality brought about by the breakup were associated with greater growth. Similarly, *forgiving* the former partner for the past or the breakup was associated with growth. Although forgiveness had not been studied in empirical research on growth or well described in growth theory, distress and PTSD symptoms have been related to less forgiveness (Orcutt, Pickett, & Pope, 2005). However, while an association between growth and forgiveness was found after relationship breakup, it is unclear whether forgiveness of an individual, an illness, a crime, a disaster, etc. would similarly relate to growth. *Adapting to the situation* and being able to move forward, and *adjusting to the new reality brought about by the breakup* were also related to growth. These variables have not been assessed, but growth

theory postulates that rebuilding of new beliefs and assumptions that takes into account the new reality, is a central feature of the process that leads to growth.

Finally, although not found in prior research, theory suggests that individuals who grow following trauma gain knowledge and insight from their experiences, which may assist them in achieving growth. In the current investigation, I observed that participants who reported gaining more *insight* that had informed their life (not just their relationships) and acquired *learning* that related to their thoughts about or behavior in romantic relationships, reported more growth. This finding provides greater information regarding the broader growth construct by documenting the association with learning and insight that has been assumed in theory. Furthermore, it highlights that relationship-relevant learning may be a specific area of growth following relationship breakup.

The robust association between the coping variables and growth offer a number of clinical implications for those working with individuals after a significant breakup. First, clinicians could facilitate active coping including encouraging clients to seek out emotional support and advice from others. Findings suggest that, consistent with many models of therapy, the therapist too has a role in providing a supportive environment for these individuals. Second, while much of the work in therapy already centers on efforts to understand and give meaning to experiences and emotions, the current findings suggest that these efforts, geared at understanding and meaning-making of the breakup and its emotional consequences, may be especially important for individuals coping with relationship dissolution. Third, therapists may help their clients by encouraging them to tolerate and accept their difficult emotions and circumstances, and helping them to explore the notion of forgiving their past partner for their behavior or for the breakup. Finally, helping clients adapt to and adjust to their new experiences and the challenges they may be confronting, appears to be one manner of helping them cope with and grow from the dissolution of a significant relationship. Indeed, many of the aforementioned approaches may be thought of as aimed at promoting such adaptation and adjustment.

Subsequent Relationship Variables

The examination of how subsequent relationship variables relate to reports of growth following a significant breakup was largely exploratory. Overall, experiences in

subsequent relationships positively related to growth reports, with those having more relationships, currently involved, and those who were more satisfied in the current relationship, reporting greater growth. Details and implications are provided below.

Higher levels of growth were reported by participants experiencing more *relationships subsequent to the breakup*, and by those *currently in a relationship* and who were *more satisfied in that current relationship*. Additionally, the association between current satisfaction and growth was stronger for older participants. Prior work has shown inconsistent patterns between current involvement and both coping with and benefit finding from a difficult event (Helgeson et al., 2006; Thabes, 1997; Tschann et al., 1989; Wang & Amato, 2000). The current findings suggest that in relationships, individuals may have a greater opportunity to undergo a process of change. This may occur because they have more access to support, opportunities for corrective experiences, etc. within a relationship. The experience of being in a variety of relationships may also expand and solidify learning and growth because it offers more of these unique opportunities that single individuals or individuals experiencing a single subsequent relationship do not have. The observation that these variables were associated with more relationship-relevant growth, specifically, suggests that this "testing out" hypothesis might be especially relevant to relationship-relevant areas of growth. Alternatively, perhaps involvement in relationships serves as a catalyst to growth. Or there may be a causal process, which could not be tested in this study, whereby individuals who have grown more are more likely to find themselves in relationships, and to be happier in those relationships, whereas those experiencing less growth are more likely to remain single and/or to experience less relationship satisfaction because they have not acquired improved relationship-relevant skills. That the association between growth and current satisfaction was stronger for older participants may reflect an age-specific opportunity to compare current satisfaction to a greater number of past relationships and experiences.

Several additional variables (the *current partner being the same person as the past partner*, the *length of time known the current partner*, the *length of the current relationship*, *current living status* (with current partner or not with current partner), and *time spent single*) were unrelated to growth. However, in interaction analyses an

association emerged between the amount of time the participant had known the current romantic partner and relationship-relevant growth, which was stronger for men. Perhaps men in this sample felt more comfortable and could engage in experiences that allowed them to grow in relationship-relevant areas if they had known their partner for a longer period. Or, again, this finding may indicate that the male sample had unique characteristics related to the impact of relationship variables on growth.

Utility of the Growth Framework

The results from this study suggest that a principle-guided approach to understanding and studying growth may be valid and useful. Exploratory and confirmatory factor analysis showed that the variables could be organized into larger constructs (positive expectations, strong alliance, increased awareness), and one yielded a coherent factor (ongoing reality testing). Use of these constructs offers a new way to think theoretically about growth, and suggests possible future methods for research. I briefly review the framework and findings below.

Positive Expectations

Personality variables, self-esteem, optimism, and initiator status, were all related to growth reports in a manner consistent with prior work. Attributions for the breakup were consistent with prior work in showing that attributions outside of the participant (even if they also included the participant, as was observed with attributions of mutual responsibility for the breakup) related to greater growth. Thus, findings showed that holding positive expectations about oneself and one's future, even in the face of adversity, might enable individuals to experience growth. These expectations were based on internal (personality, self-esteem, optimism) characteristics as well as outside factors that may influence self-perceptions (initiator status, attributions). The positive expectations construct therefore appears to provide a useful structure for growth theory and research.

Strong Alliance (i.e., Felt Support)

The strong alliance construct included support experiences and attachment security, both of which were positively related to growth. In prior work, recovering from difficult experiences has been related to an individual's sense of support and comfort

with others. The present findings extend this association beyond recovery (i.e., to growth). As individuals confront the thoughts and feelings associated with the trauma, experiencing stable, caring, safe, and positive relationships may allow and facilitate the reflection and exploration needed for growth to occur. In addition, it may be equally important for individuals to possess a broader confidence and comfort with such intimate support (attachment security). Establishing the strong alliance as a core component of growth may be useful in understanding past research and in designing future work in that the strong alliance construct can serve as a guide to identify variables already documented to be associated with growth and for additional variables not yet studied.

Increased Awareness

The framework proposes that engagement in efforts to understand and process the difficult experience and its implications through increased awareness is one avenue by which individuals make changes. This is consistent with post-traumatic growth theory, which positions meaning-making as a central process in growth. The current data support these claims. From this viewpoint, growth is an active process that involves cognitive commitment rather than passive unfolding, and one that involves acceptance or honest appraisal of the difficult situation. The current study is an initial attempt to operationalize activities aimed at reflecting on and learning from a relationship dissolution, but future research, guided by the framework, might extend these findings to more specifically detail the components of meaning-making. For instance, in response to relationship dissolution, individuals may focus on specific aspects of their past experience and draw unique conclusions (meanings).

Corrective Experiences

Corrective experiences can be conceptualized as increased awareness in action. That is, the construct encompasses efforts to change things in oneself, and efforts to think and act differently in response to the breakup through engagement in new behaviors (thoughts, actions). This is an aspect of post-traumatic growth that has not been previously explored, but the current findings suggest that it merits further investigation and consideration in growth theory. Research should investigate the extent to which engagement in new ways of thinking, feeling, and behaving, to accommodate the new

reality and implications of the breakup, occurs in those reporting growth. This study investigated efforts to change things in oneself, and to think and act differently, but further exploration is needed to identify the specific mechanisms involved in such efforts. The concept of corrective experiences can be a useful guide in this future exploration.

Ongoing Reality Testing

Finally, the ongoing reality testing component of the framework conceptually extends corrective experiences, over time, as individuals replace old models and behavior with new patterns and narratives of the self, others, and the environment. Theorists have proposed that development of such narratives leads to change over time, as new models replace the old (Romanoff, 2001), but research on growth has not assessed for the presence of such changes. However, the current data seem to support the theory: evidence of change was found in learning from the breakup in ways that impacted relationships or relationship-thinking, insight was gained that applies to the participant's life more broadly, a sense of adapting to the situation was achieved, and adjustment to the new reality brought about by the breakup occurred. Continuing to explore the presence and nature of these new patterns of behavior and thinking could lead to a better understanding of how growth occurs. The ongoing reality testing conceptualization provides a way of developing questions and assessments that capture this component of growth, which has been central to theory but rarely empirically explored.

Limitations

Although the proposed study had strengths in its exploration of responses to a significant relationship ending and the factors associated with any positive changes, there also were several limitations inherent to the design and the exploratory nature of this research. First, the study was cross-sectional in design and thus was affected by the limitations inherent in that design: I could not predict or demonstrate causality and all portions of the data were retrospective report (and thus subject to error in recall, positive bias, etc.). Thus I was only able to study associations among the different factors and reports of growth. Second, all study data were obtained through self-report which poses two potential risks: (a) participants may have been biased in their reports of themselves, their past and (if applicable) their current relationships, and (b) obtaining all data from a single individual also means that their specific response style (which may be biased) could carry over into all questionnaires. However, this concern is somewhat assuaged by the findings that, in goal 1, participants did not minimize their distress in favor of positive effects but rather reported the occurrence of both. This finding argues against the presence of positive illusionary bias. Third, because a number of questions were created for this study, they could not be previously subjected to tests of validity and reliability. Therefore, for those hypotheses that were not supported (e.g., the positive association between seismic disruption and emotional resources being overwhelmed and growth), it is unclear whether this reflects the state of the data (i.e., a true reflection that the hypotheses were not supported and conceptual revision is needed) or whether it signifies a shortcoming in the measures themselves (as suggested in the discussion). However, the internal consistency of the variables created for this study did appear to be high.

Fourth, the question about which factors were associated with growth may suggest a mediational model of design and analysis. Indeed, I proposed a theoretical model which specified that in the face of relationship dissolution, some individuals may experience grow, which would be associated with specific factors hypothesized to be related to the process of change. However, because the data were correlational, it was not possible to test the directionality and causality inherent in mediation analyses, as noted throughout the paper. Furthermore, because much of this work was novel and

exploratory, and the field has yet to establish a clear picture of the factors associated with growth and whether specific relationship-relevant growth exists, this study was intended as a first step in securing this necessary foundation before engaging in mediation analyses.

Fifth, while there are numerous strengths to recruiting participants online, there are also limitations to this recruitment strategy, which may have impacted this study. For instance, online recruitment excludes individuals who either do not have or do not use a computer and this may bias the sample to younger or more affluent participants (although the demographic data does not support this entirely). Certainly, this sample was not representative of the population, nor was it was not designed to be, but it did produce sufficient diversity in terms of income, race, and age.

Sixth, the study had a small male sample due to difficulties recruiting men. This has implications for interpreting the sex-differences data and may also suggest that the sample of men obtained differs from the general male population in some important, unknown ways. As previously mentioned, participants' only incentive for completing the survey was to receive individualized feedback on themselves and their behavior in relationships (based on their responses). As already noted, it may be that the men who did decided to participate were unique from the general male population in some way related to the study's topic and/or the feedback incentive. Given that it was generally difficult to obtain male participants, those who did participate may have been more interested in or more sensitive to relationship variables than is the general population. Additionally, it is possible that the limited number of men in the sample is a reflection of online behavior in those listservs, forums, and postings where the study was advertised. Perhaps more women frequented these sites and thus the participation numbers reflect that difference. Although extensive efforts were made to recruit men from forums geared toward them, response was still low. Future online research on relationship dissolution could explore differential rates of responding among male and female participants and could assess why respondents choose to participate in the study.

Finally, several established measures showed poor levels of internal consistency (openness to experience, agreeableness, comfort with intimacy in relationships), and one

construct (ongoing reality testing) showed borderline consistency. It is unclear why the established measures of agreeableness and openness to experience had such low internal consistency, but the result was that these measures were dropped from the analyses. The lower internal consistency levels for comfort with intimacy and ongoing reality testing indicate that analyses with these variables should be interpreted with some caution. Future work could explain if this problem was with the measures themselves or whether it reflected something unique to this sample. Additionally, a number of the items that assessed comfort with intimacy had some content overlap with several items measuring relationship-relevant growth. Future work might further examine the role of attachment-related beliefs and their association to growth.

Conclusions

Results from this study provided support for the occurrence of growth (in conjunction with negative change) following relationship dissolution. Furthermore, growth occurred both in general domains and in relationship-relevant domains. Additionally, I documented a number of variables that were associated with growth, some which substantiated previous findings, some which highlighted discrepancies with prior work, and some which were new to the research literature on growth. Associated variables included those related to the individual factors, those related to coping with the breakup, those related to subsequent romantic relationship experiences, and to a lesser extent, those related to the breakup. Additionally, the use of the psychotherapy change framework as a conceptual and organizing guideline demonstrated utility. These findings have implications for general growth theory, theory specific to growth after relationship dissolution, future research on growth, and clinical interventions. In particular, future research should continue to examine the presence of growth following relationship dissolution and the factors that may relate to such growth. Of special interest would be longitudinal work examining the predictors of growth, in addition to the associated factors, and an exploration of the mechanisms underlying observed associations.

Figure 1: *Regression Weights for the Overall Growth Construct*

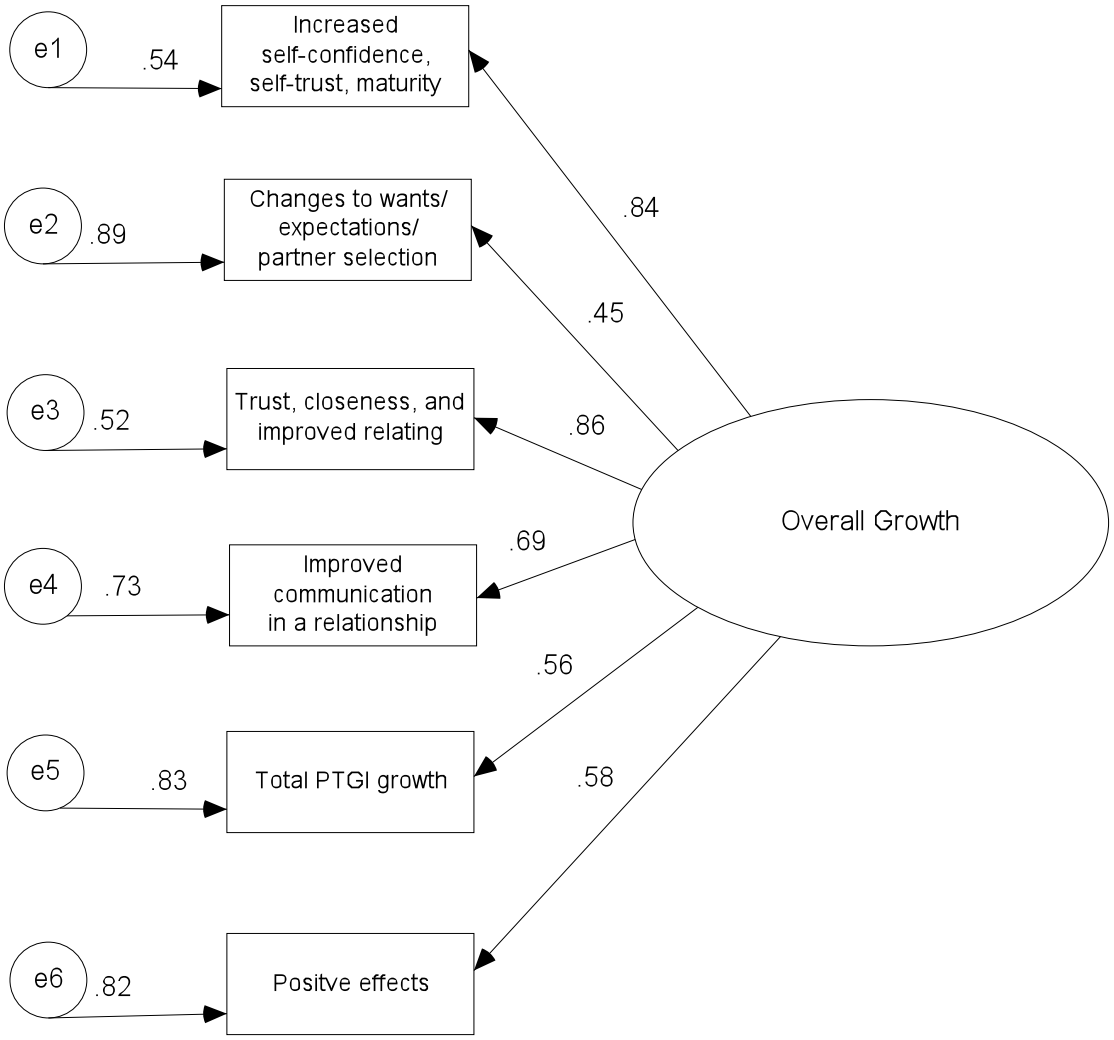

Figure 2: *Regression Weights for the Negative Change Construct*

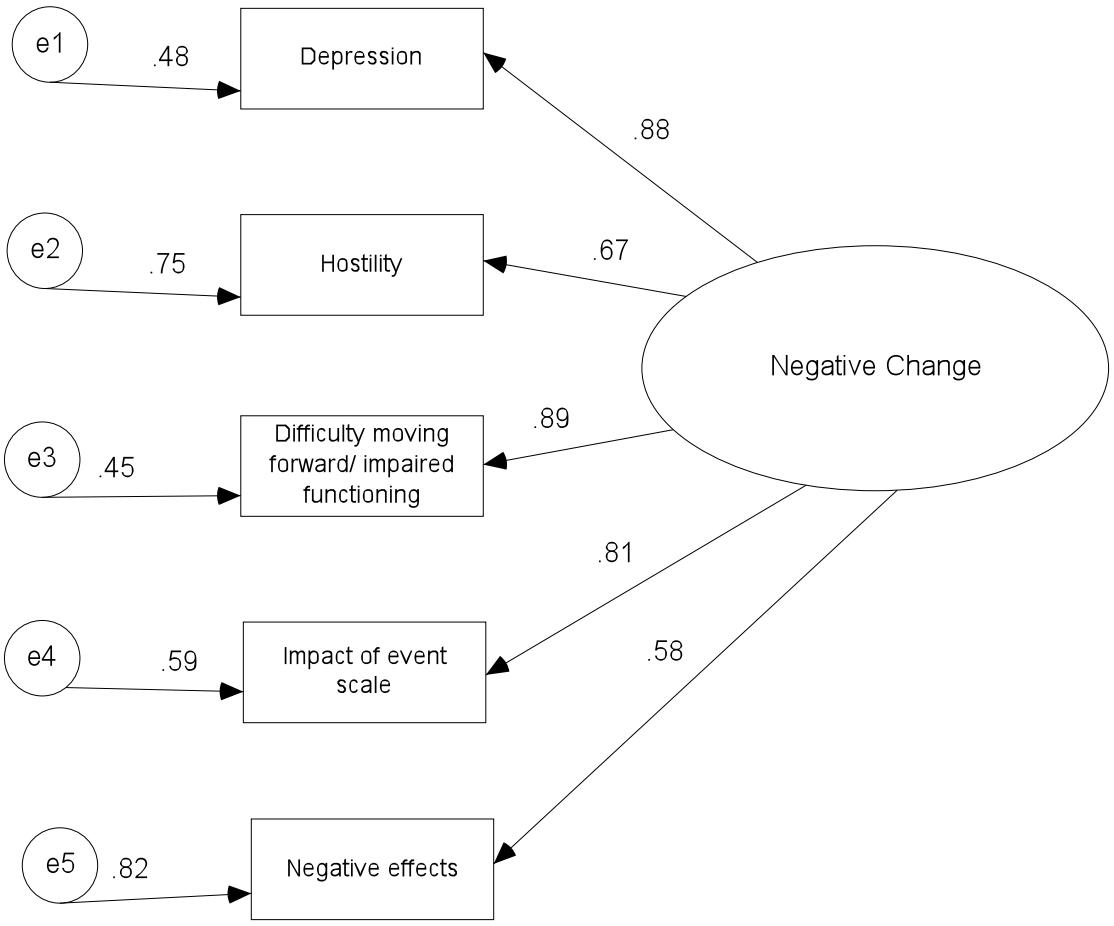

Figure 3: *Regression Weights for the Ongoing Reality Testing Construct*

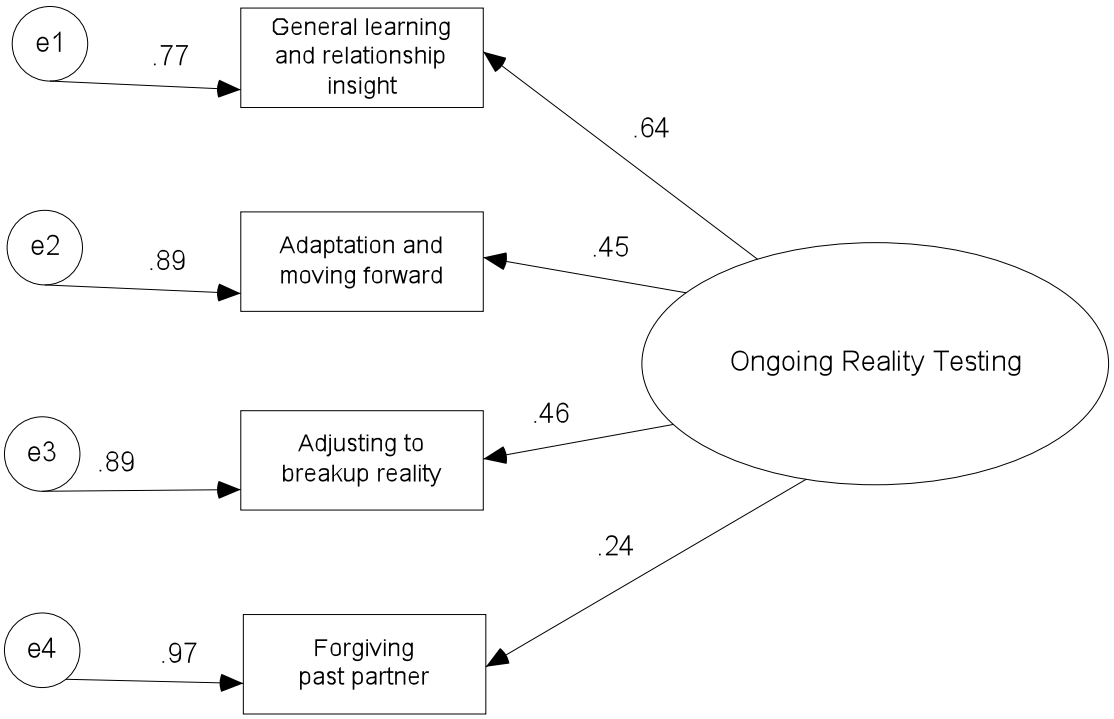

Table 1

Sample Demographics

Item	Response	*N* (%)
Sex		
	Men	55 (20.3)
	Women	216 (79.7)
Relationship status		
	Single	99 (36.4)
	In a romantic relationship	99 (36.4)
	Dating	74 (27.2)
Whether current partner is the same as the past		
	Current and past partner are the same person	3 (1.8)
	Not the same	163 (98.2)
Living with current partner or not with current partner		
	Living together	79 (28.9)
	Not living together	87 (31.9)
Initiator of breakup		
	Participant	138 (50.5)
	Partner	88 (32.2)
	Both participant and partner	46 (16.8)
Cause of the breakup*[1]		
	Partner was physically, verbally, and/or emotionally abusive	164 (60.0)
	Participant was physically, verbally, and/or emotionally abusive	83 (30.4)
	Partner abandoned participant	105 (38.5)
	Participant abandoned partner	78 (28.5)
	Partner cheated	148 (54.2)
	Participant cheated	71 (26.0)
	Irreconcilable differences	208 (76.2)

Continued on next page

Table 1 continued

Sample Demographics

Item	Response	*N* (%)
Attribution for the breakup*[1]		
	Due to the partner and their problems	238 (87.2)
	Due to the participant and their problems	203 (74.4)
	Due to both partners	186 (68.2)
	Due to something situational and beyond control	119 (43.6)
Education		
	Less than 10th grade	0 (0)
	10th grade	2 (.7)
	11th grade	2 (.7)
	High school diploma (12th grade)	25 (9.3)
	Some college or trade school	89 (33.1)
	AA degree or trade school certificate	15 (5.6)
	BA or BS degree	68 (25.3)
	MA or MS degree	44 (16.4)
	Law degree	5 (1.9)
	PhD or PsyD	19 (7.1)
	DDS	0 (0)
	MD	0 (0)
Region		
	Northeast U.S.	69 (25.7)
	Midwest U.S.	48 (17.8)
	South U.S.	52 (19.3)
	West U.S.	57 (21.2)
	Other	43 (16.0)
Location		
	Urban	101 (37.7)
	Suburban	113 (42.2)
	Rural	54 (20.1)
Income		
	Less than $10,000	41 (15.6)
	$10,000 - $15,000	24 (9.2)
	$15,000 - $25,000	22 (8.4)
	$25,000 - $50,000	70 (26.7)

Continued on next page

Table 1 continued

Sample Demographics

Item	Response	*N* (%)
Income continued	$50,000 - $75,000	45 (17.2)
	$75,000 - $100,000	25 (9.5)
	$100,000 - $150,000	17 (6.5)
	$150,000 - $200,000	10 (3.8)
	> $200,000	8 (3.1)
Race*		
	African American/Black/African	19 (7.0)
	American Indian/Alaskan Native/Aboriginal Canadian	5 (1.8)
	Asian-American/Asian origin/Pacific Islander	13 (4.8)
	European origin/White	209 (76.6)
	Latino/Latina/Hispanic	18 (6.6)
	Middle Eastern	1 (0.4)
	Other	0 (0.0)
Work		
	Management	18 (6.7)
	Business or financial operations	14 (5.2)
	Computer or mathematical	8 (3.0)
	Architecture or engineering	5 (1.9)
	Life, physical, or social science	17 (6.3)
	Community or social services	13 (4.9)
	Legal	7 (2.6)
	Education, training, or library	32 (11.9)
	Arts, design, entertainment, sports, and media	10 (3.7)
	Healthcare practitioner or technical	19 (7.1)
	Healthcare support	7 (2.6)
	Protective service	1 (0.4)
	Food preparation and serving related	5 (1.9)
	Building and grounds cleaning or maintenance	0 (0.0)
	Personal care or service	4 (1.5)
	Sales and related	15 (5.6)
	Office or administrative support	16 (6.0)
	Farming, fishing, or forestry	0 (0.0)
	Construction or extraction	1 (0.4)

Continued on next page

Table 1 continued

Sample Demographics

Item	Response	*N* (%)
Work continued	Installation, maintenance, or repair	2 (0.7)
	Production	3 (1.1)
	Transportation or material moving	1 (0.4)
	Military specific	3 (1.1)
	Unemployed	20 (7.5)
	Other	47 (17.5)
Number of children		
	No children	165 (61.3)
	One child	36 (13.4)
	Two children	35 (13.0)
	Three children	23 (8.6)
	Four children	3 (1.1)
	Five children	3 (1.1)
	Six children	3 (1.1)
	More than six children	1 (0.4)

Note: * indicates that participants could indicate more than one response option; [1] indicates that the *N* represents an endorsement of the response above the level "not at all", and that participants could indicate more than one response for the item.

Table 2

Additional Sample Descriptors

Item	*M*	Range
Age	32.50	18 – 64
Length of past relationship length (*days*)	222.64	184 – 1168
Time since breakup (*months*)	46.63	3 – 432
Level of investment/ commitment in past relationship	4.46	1 — 5
Satisfaction in past relationship	16.89	4 – 29
Time spent single after the breakup (*days*)	209.40	0 – 2880
Number of relationships after the breakup	1.32	0 – 10
Time known current partner (*months*)	57.73	0 – 420
Length of current relationship (*months*)	30.03	0 – 264
Satisfaction in current relationship	21.80	4 – 29
Time spent online each day (*hours*)	3.49	0 – 105
Time spent online each week (*hours*)	20.08	0 – 105

Table 3

Factor Loadings of Exploratory Factor Analysis Results for Interaction Growth Using Direct Oblimin (N = 246)

Item	Interaction Growth
I will/do try to make sure my relationship is a true partnership	**.43**
I believe I will/do turn to a partner (*much less to much more*) now in times of need	**.59**
I believe it will be/is (*much harder to much easier*) to trust my partner	**.70**
I believe I will/do find it (*much harder to much easier*) to get close to my partner	**.74**
I believe I will admit that I am wrong sometimes (*much less to much more*)	.37
I believe I will/do trust a partner and their thoughts, feelings, and actions (*much less to much more*)	**.76**
I've learned new positive relationship skills	**.67**
I think I will/do relate to a partner in a better way	**.69**
Eigenvalues	3.77
% of variance	47.10

Note: Factor loadings over .40 appear in bold.

Table 4

Factor Loadings of Exploratory Factor Analysis Results for Negative Change (N = 252)

Item	Negative Change
It was very difficult for me to move forward	**.82**
I had a harder time functioning at work/school	**.79**
I had a harder time functioning socially	**.75**
I became more distressed (upset) as time went on.	**.65**
Eigenvalues	2.71
% of variance	67.64

Note: Factor loadings over .40 appear in bold.

Table 5

Factor Loadings of Exploratory Factor Analysis Results for Partner Selection Growth (N = 249)

Item	Partner Selection Growth
I have a *(much worse to much better)* sense of what type of partner I want	**.54**
What I expect from a partner in a relationship has changed	**.60**
I revised what I want from a partner in a relationship	**.77**
Eigenvalues	1.80
% of variance	59.94

Note: Factor loadings over .40 appear in bold.

Table 6

Factor Loadings of Exploratory Factor Analysis Results for Self-growth Related to Relationships Using Direct Oblimin (N = 252)

Item	Self-growth Related to Relationships
My expectations about myself (while in a relationship) have changed	.36
I believe I will be/am (*much less to much more)* self-confident in my relationship	**.68**
I believe I will/do trust myself, my thoughts and feelings (*much less to much more)* in a relationship.	**.71**
I believe I will be/am (*much less to much more*) mature in a relationship now	**.67**
I believe I will be/am (*much less to much more*) skeptical or pessimistic about the relationships (*reverse coded*)	**.44**
Through breaking up, I believe I could/can handle things that may come up in a relationship.	**.72**
Eigenvalues	2.82
% of variance	47.00

Note: Factor loadings over .40 appear in bold.

Table 7

Factor Loadings of Exploratory Factor Analysis Results for Improved Communication Using Direct Oblimin (N = 248)

Item	Improved Communication
I believe I could/can communicate (*much less to much more*) with a partner	**.61**
I believe I won't/don't speak up because I will be/am afraid of what might (*for sure won't to for sure will*) happen	< .30
I now will/do communicate my positive feelings (*much less to much more*)	**.60**
I believe I will/do a (*much worse to much better*) job of communicating my negative (e.g., anger, sadness) feelings	**.78**
Eigenvalues	1.87
% of variance	46.84

Note: Factor loadings over .40 appear in bold.

Table 8

Factor Loadings of Exploratory Factor Analysis Results for Sense of Control (N = 260)

Item	Sense of Control
How much control did you feel YOU had over the occurrence of the breakup?	**.85**
How much control did you feel YOUR PAST PARTNER had over the occurrence of the breakup? (*reverse coded*)	**.65**
I felt like I had no control over the situation, the outcome, or how I was feeling (*reverse coded*)	**.60**
Eigenvalues	1.97
% of variance	65.80

Note: Factor loadings over .40 appear in bold.

Table 9

Factor Loadings of Exploratory Factor Analysis Results for Coping Using Direct Oblimin (N = 252)

Item	Action and Meaning Making	Substance Use	Joking	Avoidance Through Activities
I got in a new relationship right away (*reverse coded*)	< .30	< .30	< .30	< .30
It was important to me to try and make sense of and understand the breakup, what led up to it, and what to do afterwards	**-.60**	< .30	< .30	< .30
I worked hard to develop coping skills to manage my emotions during this time	**-.81**	< .30	< .30	< .30
I turned to work or other activities to take my mind off things (*reverse coded*)	.33	< .30	< .30	**.85**
I concentrated my efforts on doing something about the situation I was in	**-.56**	-.39	< .30	< .30
I used alcohol or other drugs to make myself feel better (*reverse coded*)	< .30	**.94**	< .30	< .30
I took action to try to make the situation better	**-.58**	< .30	< .30	< .30
I used alcohol or other drugs to help me get through it (*reverse coded*)	< .30	**.99**	< .30	< .30
I made jokes about it (*reverse coded*)	< .30	< .30	**.97**	< .30
I did something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping (*reverse coded*)	< .30	< .30	.31	**.50**
I made fun of the situation (*reverse coded*)	< .30	< .30	**.77**	< .30
Eigenvalues	2.84	1.99	1.69	1.02
% of variance	25.78	18.12	15.36	9.31

Note: Factor loadings over .40 appear in bold.

Table 10

Factor Loadings of Exploratory Factor Analysis Results for Acceptance of New Reality Using Direct Oblimin (N = 252)

Item	Acceptance of New Reality
I said to myself "this isn't real" (*reverse coded*)	**.79**
I refused to believe that it had happened (*reverse coded*)	**.72**
I accepted the reality of the fact that it happened.	**.47**
I learned to live with it	.38
I contacted my past partner repeatedly to try and get back together (*reverse coded*)	**.56**
Eigenvalues	2.39
% of variance	47.77

Note: Factor loadings over .40 appear in bold.

Table 11

Factor Loadings of Exploratory Factor Analysis Results for Changed Behavior Using Direct Oblimin (N = 244)

Item	Active Coping	Not Giving Up
I really focused on and tried to understand what had happened	**.65**	< .30
I gave up trying to deal with it (*reverse coded*)	< .30	**.86**
I said things to let my unpleasant feelings escape	**.56**	< .30
I tried to see it in a different light, to make it seem more positive	.39	< .30
I tried to come up with a strategy about what to do	**.69**	< .30
I gave up the attempt to cope (*reverse coded*)	< .30	**.73**
I expressed my negative feelings	**.56**	< .30
I thought hard about what steps to take	**.60**	< .30
Eigenvalues	2.66	1.70
% of variance	33.28	21.20

Note: Factor loadings over .40 appear in bold.

Table 12

Factor Loadings of Exploratory Factor Analysis Results for Advice and Emotional Support (N = 254)

Item	Advice and Emotional Support
I got emotional support from others	**.81**
I got help and advice from other people	**.92**
I got comfort and understanding from someone	**.80**
I tried to find comfort in my religion or spiritual beliefs	< .30
I tried to get advice or help from other people about what to do	**.84**
Eigenvalues	3.19
% of variance	63.71

Note: Factor loadings over .40 appear in bold.

Table 13

Factor Loadings of Exploratory Factor Analysis Results for Learning and Insight (N = 257)

Item	Learning and Insight
To what extent do you feel you have learned specific lessons from your breakup that will affect or have affected your behavior in romantic relationships?	**.81**
To what extent do you feel that you have gained insight from the experience of the breakup, and used that in your broader life (i.e., other areas of your life beyond just your romantic relationships)?	**.81**
Eigenvalues	1.65
% of variance	82.55

Note: Factor loadings over .40 appear in bold.

Table 14

Factor Loadings of Exploratory Factor Analysis Results for Seismic Disruption (N = 253)

Item	Seismic Disruption
It was a radical loss (i.e., it turned my world upside down)	**.93**
I was fine — it was no big deal (*reverse coded*)	**.71**
I felt like I didn't know who I was anymore	**.67**
Eigenvalues	2.17
% of variance	72.39

Note: Factor loadings over .40 appear in bold.

Table 15

Factor Loadings of Exploratory Factor Analysis Results for Emotional Resources Overwhelmed (N = 258)

Item	Emotional Resources Overwhelmed
My emotional "resources" were overwhelmed (i.e., I felt like I might not be able to handle it)	**.88**
I didn't really know what would be next; it was an ambiguous and confusing time	**.88**
Eigenvalues	1.77
% of variance	88.67

Note: Factor loadings over .40 appear in bold.

Table 16

Final Constructs and Indicator Variables with Reliabilities

Latent Factor/Construct	Composite Variables*	Indicator Variables	α and Number of Items
Overall Growth			.96 (*n* = 40)
		Post-traumatic growth (PTGI)	.95 (*n* = 21)
		Relationship specific changes to wants/expectations/partner selection	.66 (*n* = 3)
		Self-growth changes related to relationship functioning	.78 (*n* = 5)
		Communication growth	.70 (*n* = 3)
		Interaction growth	.84 (*n* = 7)
		Positive effects	.
Relationship-relevant Growth			.91 (*n* = 18)
		Relationship specific changes to wants/expectations/partner selection	.66 (*n* = 3)
		Self-growth changes related to relationship functioning	.78 (*n* = 5)
		Communication growth	.70 (*n* = 3)
		Interaction growth	.84 (*n* = 7)
General Growth			.95 (*n* = 22)
		Post-traumatic growth (PTGI)	.95 (*n* = 21)
		Positive effects	.
Negative change			.96 (*n* = 37)
		Depression (BSI)	.91 (*n* = 6)
		Hostility (BSI)	.79 (*n* = 4)
		Negative change	.84 (*n* = 4)
		Distress (IES-R)	.93 (*n* = 22)
		Negative effects	.
Positive expectations[1]			
	Optimism	Optimism (LOT-R)	.84 (*n* = 6)
	Initiator status	Initiator of breakup	.
	Personality		.64 (*n* = 17)
		Extraversion (TIPI)	.66 (*n* = 2)
		Neuroticism (TIPI)	.70 (*n* = 2)
		Control over the breakup and its effects	.74 (*n* = 3)
		Self-esteem (RSE)	.91 (*n* = 10)

Continued on next page

Table 16 continued

Final Constructs and Indicator Variables with Reliabilities

Latent Factor/Construct	Composite Variables*	Indicator Variables/Measures	α and Number of Items
Strong alliance[1]			
	Intimacy	Attachment: comfort with intimacy (RAAS)	.79 (*n* = 12)
	Anxiety	Attachment: anxiety about abandonment (RAAS)	.88 (*n* = 6)
	Support	Sought and received advice and emotional support from others (B-COPE)	.91 (*n* = 4)
Increased awareness[1]			
	Cognitive commitment	Action and meaning-making	.74 (*n* = 4)
	Acceptance	Acceptance of the reality of the breakup situation	.70 (*n* = 4)
Corrective experiences[1]			
	Active coping	Actively coping with the breakup	.76 (*n* = 5)
	Not giving up	Not giving up trying to cope with the breakup (B-COPE)	.78 (*n* = 2)
Ongoing reality testing			.59 (*n* = 5)
		Learning and insight	.78 (*n* = 2)
		Adaptation to the situation	.
		Adjusting to the new reality	.
		Forgiving past partner	.

Note: [1] indicates latent factor/construct which did not fit the tested model; * Composite variables were calculated when the latent factor/construct did not yield a solution; *n* indicates number of items; . indicates *n* = 1; PTGI = Post-traumatic Growth Inventory (Tedeschi & Calhoun, 1996); BSI = Brief Symptom Inventory (Derogatis, 1993); IES-R = Impact of Events — Revised (Weiss & Marmar, 1997); LOT-R = Life Orientation Test (Scheier, Carver, & Bridges, 1994); TIPI = Ten-item Personality Inventory (Gosling, Rentfrow, & Swann, 2003); RSE = Rosenberg Scale (Rosenberg, 1965); RAAS = Revised Adult Attachment Scale (Collins & Read, 1990); B-COPE = Brief COPE (Carver, 1997); Other measures were developed for this study.

Table 17

Reliability of Other Measures

Measure	α and Number of Items
Current relationship satisfaction (CSI-4)	.95 (*n* = 4)
Past relationship satisfaction (CSI-4)	.89 (*n* = 4)
Breakup experienced as seismic disruption	.81 (*n* = 3)
Emotional resources overwhelmed	.86 (*n* = 2)

Note: n indicates number of items; CSI-4 = Couples Satisfaction Inventory (Funk & Rogge, 2007); Other measures were developed for this study.

Table 18

Descriptive Statistics for Negative and Positive Change

	M	*SD*
	Negative Change	
Depression (BSI)	17.26	6.98
Hostility (BSI)	8.31	3.96
Negative changes in functioning	2.83	1.20
Distress (IES-R)	58.24	18.27
Negative effects (general)	2.93	1.30
	Positive Change	
Positive effects	3.85	1.19
Post-traumatic growth (PTGI): Overall	78.42	25.06
PTGI: Personal strength	16.55	5.34
PTGI: New possibilities	20.59	6.94
PTGI: Relating to others	23.94	9.24
PTGI: Appreciation of life	11.96	4.10
PTGI: Spiritual change	5.37	3.64
Partner selection growth	12.51	2.23
Self-growth related to relationships	18.26	3.80
Improved communication	11.75	2.25
Interaction growth	24.64	5.36

Note: *N* ranges from 265 to 272. BSI = Brief Symptom Inventory (Derogatis, 1993); IES-R = Impact of Events — Revised (Weiss & Marmar, 1997); PTGI = Post-traumatic Growth Inventory (Tedeschi & Calhoun, 1996); Other measures were developed for this study.

Table 19

Frequencies of Growth and Negative Change

		Overall Growth		Relationship-relevant Growth		General Growth	
		Low	High	Low	High	Low	High
Negative Change	Low	1.1% *n* = 3	21.9% *n* = 59	6.7% *n* = 18	16.0% *n* = 43	1.5% *n* = 4	21.6% *n* = 58
	High	19.3% *n* = 52	57.6% *n* = 155	43.5% *n* = 117	33.8% *n* = 91	21.9% *n* = 59	55.0% *n* = 148

Table 20

Correlations Between Personality Variables and Growth

	Overall Growth	Relationship-Relevant Growth	General Growth
Sense of control	.266***	.233***	.254***
Extraversion (TIPI)	.247***	.189**	.296***
Neuroticism (TIPI)	-.290***	-.259***	-.271***
Self-esteem (RSE)	.328***	.291***	.310***

**p < 0.01, ***p < .001

Note: *N* ranges from 268 to 272. TIPI = Ten-item Personality Inventory (Gosling, Rentfrow, & Swann, 2003); RES = Rosenberg Scale (Rosenberg, 1965).

Table 21

Correlations Between Growth and Composite Variables

	Overall Growth	Relationship-Relevant Growth	General Growth
Positive Expectations			
Optimism (LOT-R)	.307***	.269***	.299***
Personality (TIPI, control, RSE)	.416***	.358***	.415***
Strong Alliance			
Comfort with intimacy (RAAS)	.338***	.341***	.252***
Anxiety in relationships (RAAS)	-.189**	-.204**	-.105
Advice and emotional support from others (B-COPE)	.262***	.245***	.248***
Increased Awareness			
Action and meaning-making (cognitive commitment, B-COPE)	.232***	.202**	.251***
Acceptance of new reality (accepted, B-COPE)	.136*	.126*	-.124*
Corrective Experiences			
Active coping (tried to understand, B-COPE)	.165**	.149*	.170**
Not giving up (B-COPE)	.269***	.278***	.179**
Ongoing Reality Testing (learning and insight, adaptation, forgiveness, adjustment)	.499***	.435***	.490***

*p < 0.05, **p < 0.01, ***p < .001

Note: *N* ranges from 269 to 272. LOT-R = Life Orientation Test (Scheier, Carver, & Bridges, 1994); TIPI = Ten-item Personality Inventory (Gosling, Rentfrow, & Swann, 2003); RSE = Rosenberg Scale (Rosenberg, 1965); RAAS = Revised Adult Attachment Scale (Collins & Read, 1990); B-COPE = Brief COPE (Carver, 1997); Other measures were developed for this study.

Table 22

Correlations Between Growth and Negative Change

	Overall Growth	Relationship-Relevant Growth	General Growth
Negative Change			
Depression (BSI)	-.307***	-.266***	-.299***
Hostility (BSI)	-.221***	-.208***	-.181**
Negative changes in functioning	-.306***	-.274***	-.282***
Distress/ PTSD symptoms (IES-R)	-.227***	-.225***	-.168**
Negative effects (general)	-.402***	-.317***	-.454***

**p < 0.01, ***p < .001

Note: *N* ranges from 268 to 272. BSI = Brief Symptom Inventory (Derogatis, 1993); IES-R = Impact of Events — Revised (Weiss & Marmar, 1997); PTGI = Post-traumatic Growth Inventory (Tedeschi & Calhoun, 1996); Other measures were developed for this study.

Table 23

Summary of One-way Analysis of Variance for Growth and Initiator Status

	Overall Growth		Relationship-relevant Growth		General Growth	
	M	*SD*	*M*	*SD*	*M*	*SD*
Self initiated breakup	.10	.68	.09	.76	.11	.78
Partner initiated breakup	-.22	.78	-.21	.83	-.24	.90
Both initiated breakup	.14	.71	.13	.69	.15	.15

Table 24

Independent Samples t test of Differences in Growth Based on Current Relationship Status

	Overall Growth		Relationship-relevant Growth		General Growth	
	M	*SD*	*M*	*SD*	*M*	*SD*
Single	-.23	.77	-.24	.80	-.20	.92
In a relationship[1]	.13	.68	.14	.74	.12	.77

Note: includes married, engaged, in a non-marital committed relationship, dating seriously, and dating casually.

Table 25

Correlations Between Growth and Other Factors (Continuous)

Subscale	Overall Growth	Relationship-Relevant Growth	General Growth
Seismic disruption	-.24***	-.21**	-.22***
Resources overwhelmed	-.19**	-.17**	-.17**
Time since breakup	.22***	.23***	.14**
Length of past relationship	.09	.06	.12*
Investment in relationship	-.09	-.13*	.02
Past satisfaction (CSI-4)	-.28***	-.26***	-.27***
Number of relationships	.21**	.18**	.20**
Time spent single	.06	.08	.02
Partner was abusive	.23***	.20**	.23***
Participant was abusive	.04	.01	.09
Partner abandoned	-.06	-.06	-.05
Participant abandoned	.07	.06	.07
Partner cheated	.11	.05	.18**
Participant cheated	.05	.04	.06
Irreconcilable differences	.15*	.12	.16**
Due to past partner	.13*	.09	.18**
Due to participant	-.08	-.07	-.08
Due to both	.17**	.16**	.15*
Due to outside elements	.06	.07	.02
Age	.09	.09	.09
Internet per day	-.11	-.07	-.15*
Internet per week	-.10	-.05	-.15*
Number of kids	.10	.06	.16**
Length of current relationship	.14	.16*	.08
Current satisfaction (CSI-4)	.43***	.47***	.28***
Time known current partner	.01	.02	-.04

*p < 0.05, **p < 0.01, ***p < .001

Note: *N* ranges from 149 to 270. CSI-4 = Couples Satisfaction Inventory (Funk & Rogge, 2007); Other measures were developed for this study.

Table 26

Summary of One-way Analysis of Variance for Growth and Other Factors (Non-Continuous)

		Overall Growth		Relationship-relevant Growth		General Growth	
		M	*SD*	*M*	*SD*	*M*	*SD*
Education							
	Less than 10th grade	-	-	-	-	-	-
	10th grade	-.09	.89	-.45	1.40	.63	.13
	11th grade	-1.19	1.13	-1.33	.74	-.90	1.99
	High school diploma	.01	.61	.03	.67	-.03	.76
	Some college/trade	.01	.77	-.02	.80	.06	.86
	AA degree/trade	-.29	.81	-.29	.80	-.28	.92
	BA or BS degree	.05	.69	.05	.73	.05	.84
	MA or MS degree	.09	.73	.11	.86	.05	.75
	Law degree	.40	.74	.45	.65	.30	.95
	PhD or PsyD	-.22	.65	-.00	.78	-.34	.82
	DDS	-	-	-	-	-	-
	MD	-	-	-	-	-	-
Region							
	Northeast U.S.	-.02	.74	.01	.84	-.08	.76
	Midwest U.S.	-.07	.74	-.09	.79	-.05	.85
	South U.S.	.18	.70	.14	.77	.22	.80
	West U.S.	.02	.69	.03	.69	.03	.90
	Other	-.14	.79	-.15	.81	-.12	.91
Location							
	Urban	.05	.76	.05	.79	.05	.87
	Suburban	-.10	.73	-.11	.79	-.09	.83
	Rural	.13	.67	.13	.73	.11	.81
Income							
	Less than $10,000	-.07	.76	-.02	.75	-.17	.97
	$10,000 - $15,000	-.16	.74	-.23	.83	-.03	.77
	$15,000 - $25,000	.01	.75	.01	.85	.04	.80
	$25,000 - $50,000	.03	.73	-.01	.78	.07	.83
	$50,000 - $75,000	-.11	.72	-.09	.78	-.13	.84
	$75,000 - $100,000	.11	.81	.09	.85	.15	.88
	$100,000 - $150,000	.07	.71	-.02	.76	.24	.64
	$150,000 - $200,000	.47	.55	.53	.55	.33	.64
	> $200,000	.08	.82	.13	.82	-.02	.93

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Table 26 continued

Summary of One-way Analysis of Variance for Growth and Other Factors (Non-Continuous) continued

		Overall Growth		Relationship -relevant		General Growth	
		M	*SD*	*M*	*SD*	*M*	*SD*
Race							
	African American/Black/African	.04	.60	-.03	.67	.11	.60
	American Indian/Alaskan	-.77	.	-.59	.	-1.12	.
	Asian American/ Asian origin/Pacific Islander	-.24	.56	-.34	.71	-.05	.65
	European origin/White	.02	.76	.03	.80	.00	.88
	Latino/Latina/Hispanic	-.14	.67	-.25	.78	.08	.79
	Middle Eastern	-	-	-	-	-	-
	Mixed	-.12	.64	-.03	.77	-.28	.72
Work							
	Management	-.12	.75	-.09	.70	-.17	.91
	Business or financial operations	.08	.55	.04	.51	.15	.72
	Computer or mathematical	-.31	.86	-.32	.81	-.28	1.18
	Architecture or engineering	-.16	1.26	-.30	1.33	.12	1.19
	Life, physical, or social science	-.06	.70	-.03	.77	-.14	.77
	Community or social services	.24	.73	.34	.64	.03	.95
	Legal	.42	.78	.45	.77	.37	.88
	Education, training, or library	-.07	.64	-.11	.75	.03	.74
	Arts, design, entertainment, sports, and media	.17	.68	.32	.79	-.13	.73
	Healthcare practitioner/technical	-.06	.66	-.17	.65	.18	.86
	Healthcare support	-.12	.42	-.16	.52	-.02	.60
	Protective service	-.84	.	-1.07	.	-.38	.
	Food preparation/serving related	.10	1.10	.07	1.12	.16	1.07
	Building grounds cleaning or maintenance	-	-	-	-	-	-
	Personal care or service	-.17	.85	.00	.87	-.50	1.02
	Sales and related	-.09	.88	-.06	.88	-.15	.97
	Office or administrative support	.63	.46	.62	.57	.63	.45
	Farming, fishing, or forestry	-	-	-	-	-	-
	Construction or extraction	.15	.	.06	.	.32	.

Continued on next page

Table 26 continued

Summary of One-way Analysis of Variance for Growth and Other Factors (Non-Continuous) continued

		Overall Growth		Relationship -relevant		General Growth	
		M	*SD*	*M*	*SD*	*M*	*SD*
Work	continued						
	Installation, maintenance, repair	.00	.09	-.12	.25	.25	.24
	Production	-.52	.67	-.93	.85	.32	.51
	Transportation, material moving	.33	.	.25	.	.50	.
	Military specific	-.03	.54	-.05	.41	.02	1.13
	Unemployed	-.37	.75	-.35	.76	-.40	.94
	Other	.00	.73	.08	.88	.01	.12

Note: . indicates $N = 1$; - indicates $N = 0$.

Table 27

Independent Samples t test of Differences in Growth Based on Participant's Sex

	Overall Growth		Relationship-relevant Growth		General Growth	
	M	*SD*	*M*	*SD*	*M*	*SD*
Male	-.24	.83	-.19	.86	-.33	.96
Female	.06	.69	.05	.76	.09	.79

Table 28

Independent Samples t test of Differences in Growth Based on Whether Current Partner is Same as Past Partner

	Overall Growth		Relationship-relevant Growth		General Growth	
	M	*SD*	*M*	*SD*	*M*	*SD*
Not the Same	.15	.68	.15	.75	.15	.75
Same	.51	.22	.78	.41	-.03	.17

Table 29

Independent Samples t test of Differences in Growth Based on Living Status

	Overall Growth		Relationship-relevant Growth		General Growth	
	M	*SD*	*M*	*SD*	*M*	*SD*
Living Without Partner	.07	.69	.04	.75	.12	.79
Living Together	.21	.65	.25	.72	.14	.73

References

Ahern, J., Galea, S., Fernandez, W., Koci, B., Waldman, R., & Vlahov, D. (2004). Gender, social support, and posttraumatic stress in postwar Kosovo. *Journal of Nervous and Mental Disease*, *192*, 762-770.

Ahrons, C. (2007). Family ties after divorce: Long-term implications for children. *Family Process*, *46*, 53-65.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA.: Sage.

Amato, P. R. (2000). The consequence of divorce for adults and children. *Journal of Marriage and the Family*, *62*, 1269-1287.

Amato, P., & Cheadle, J. (2005). The long reach of divorce: Divorce and child well-being across three generations. *Journal of Marriage and Family*, *67*, 191-206.

Amato, P., & Previti, D. (2003). People's reasons for divorcing: Gender, social class, the life course, and adjustment. *Journal of Family Issues*, *24*, 602-626

Andrews, B., Brewin, C., & Rose, S. (2003). Gender, social support, and PTSD in victims of violent crime. *Journal of Traumatic Stress*, *16*, 421-427.

Arbuckle, J. L. (2007). Amos (Version 16.0) [Computer Program]. Chicago: SPSS.

Baum, N., Rahav, G., & Sharon, D. (2005). Changes in the self-concepts of divorced women. *Journal of Divorce and Remarriage*, *43*, 47-67.

Benton, S. A., Robertson, J. M., Wen-Chih, T., Newton , F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice*, *34*, 66-72.

Berscheid, E., & Reis, H. T. (1998). Attraction and close relationships. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 193-281). New York: McGraw Hill.

Bhushan, B, & Hussain, D. (2007). Posttraumatic growth: Theory, research, and issues. *Psychological Studies*, *52*, 45-53.

Birnbaum, G. E., Orr, I., Mikulincer, M., & Florian, V. (1997). When marriage breaks up - Does attachment style contribute to coping and mental health? *Journal of Social and Personal Relationships, 14,* 643-654.

Booth, A., & Amato, P. R. (1991). Divorce and psychological stress. *Journal of Health and Social Behavior*, *32*, 396-407.

Brody, G. H., Neubaum, E., & Forehand, R. (1988). Serial marriage: A heuristic analysis of an emerging family form. *Psychological Bulletin*, *103*, 211-222.

Buehler, C., Hogan, M. J., Robinson, B., & Levy, R. (1986). The parental divorce transition: Divorce-related stressors and well-being. *Journal of Divorce*, *9*, 61-81.

Bursik, K. (1991). Adaptation to divorce and ego development in adult women. *Journal of Personality and Social Psychology*, *60*, 300-306.

Cadell, S., Regehr, C., Hemsworth, D. (2003). Factors contributing to posttraumatic growth: a proposed structural equation model. *American Journal of Orthopsychiatry*, *73*, 279-287.

Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress*, *13*, 521-527.

Calhoun, L. G., & Tedeschi, R. G. (1998). Posttraumatic growth: Future directions. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis* (pp. 215-238). Mahwah, NJ: Lawrence Erlbaum.

Calhoun, L. G., & Tedeschi, R. G. (2004). The foundations of posttraumatic growth: New considerations. *Psychological Inquiry*, *15*, 93-102.

Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In L. G. Calhoun, & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research and practice* (pp. 3-23). Mahwah, NJ, US: Lawrence Erlbaum.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, *4*, 92-100.

Cherlin, A. (1978). Remarriage as an incomplete institution. *American Journal of Sociology*, *84*, 634-650.

Cherlin, A. (1992). *Marriage, divorce, remarriage*. Cambridge, MA: Harvard University Press.

Choo, P., Levine, T., & Hatfield, E. (1996). Gender, love schemas, and reactions to romantic break-ups. *Journal of Social Behavior and Personality*, *11*, 143-160.

Chung, M. C., Farmer, S., Grant, K., Newton, R., Payne, S., Perry, M., et al. (2003). Coping with post-traumatic stress symptoms following relationship dissolution. *Stress and Health*, *19*, 27-36.

Colburn, K., Jr., Lin, P. L., & Moore, M. C. (1992). Gender and divorce experience. *Journal of Divorce and Remarriage*, *17*, 87-108.

Collins, N., & Feeney, B. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, *87*, 363-383.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models and relationship quality in dating couples. *Journal of Personality and Social Psychology*, *58*, 644-663.

Cordova, M. J., Cunningham, L. C., Carlson, C. R., & Andrykowski, M. A. (2001). Posttraumatic growth following breast cancer: A controlled comparison study. *Health Psychology*, *20*, 176-185.

Cotten, R. S., (1999). Marital status and mental health revisited: Examining the importance of risk factors and resources. *Family Relations*, *48*, 225-233.

Cramer, P. (2004). Identity change in adulthood: The contribution of defense mechanisms and life experiences. *Journal of Research in Personality*, *38*, 280-316.

Davis, D., Shaver, P., R., & Vernon, M. L. (2003). Physical, emotional, and behavioral reactions to breaking up: The roles of gender, age, emotional involvement, and attachment style. *Personality and Social Psychology Bulletin*, *29*, 871-884.

DeGarmo, D. S., & Kitson, G. C. (1996). Identity relevance and disruption as predictors of psychological distress for widowed and divorced women. *Journal of Marriage and the Family*, *58*, 983-997.

Derogatis, L. R. (1993*). The Brief Symptom Inventory (BSI): Administration, Scoring and Procedures Manual*, 3rd Ed. Minneapolis, MN: National Computer Systems.

Eldar-Avidan, D., & Haj-Yahia, M. M. (2000). The experiences of formerly battered women with divorce: A qualitative descriptive study. *Journal of Divorce and Remarriage*, *32*, 19-40.

Farhood, L., Zurayk, H., Chaya, M., Saadeh, F., Meshefedjian, G., & Sidani, H. (1993). The impact of war on the physical and mental health of the family: The Lebanese experience. *Social Science and Medicine*, *36*, 1555-1567.

Foa, E. B., Zinbarg, R., Rothbaum, B. O. (1992). Uncontrollability and unpredictability in post-traumatic stress disorder: an animal model. *Psychological Bulletin*, *112*, 218-238.

Fortson, B. L., Scotti, J. R., Del Ben, K. S., & Chen, Y.-C. (2006). Reliability and validity of an internet traumatic stress survey with a college student sample. *Journal of Traumatic Stress*, *19*, 709-720.

Frazier, P. A., & Cook, S. W. (1993). Correlates of distress following heterosexual relationship dissolution. *Journal of Social and Personal Relationships*, *10*, 55-67.

Frazier, P., Steward, J. & Mortensen, H. (2004). Perceived control and adjustment to trauma: a comparison across events. *Journal of Social and Clinical Psychology, 23*, 303-324.

Funk, J. L., & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology*, *21*, 572-583.

Glick, P. (1989). Remarried families, stepfamilies, and stepchildren: A brief demographic profile. *Family Relations*, *38*, 24-27.

Goldfried, M. (1980). Toward the delineation of therapeutic change principles. *American Psychologist*, *35*, 991-999.

Goldfried, M., & Davila, J. (2005). The role of relationship and technique in therapeutic change. *Psychotherapy: Theory, Research, Practice, Training*, *42*, 421-430.

Goodman, C. C. (1993). Divorce after long term marriages: Former spouse relationships. *Journal of Divorce and Remarriage*, *20*, 43-61.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the big five personality domains. *Journal of Research in Personality*, *37*, 504-528.

Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparison analysis of six preconceptions about internet questionnaires. *American Psychologist*, *59*, 93-104.

Gray, J., & Silver, R. (1990). Opposite sides of the same coin: Former spouses' divergent perspectives in coping with their divorce. *Journal of Personality and Social Psychology*, *59*, 1180-1191.

Grubaugh, A. L., & Resick, P. A. (2007). Posttraumatic growth in treatment-seeking femal assault victims. *Psychiatry Quarterly*, *78*, 145-155.

Ham, B. (2004). The effects of divorce and remarriage on the academic achievement of high school seniors. *Journal of Divorce and Remarriage*, *42*, 159-178.

Heatherton, T. F., & Nichols, P. A. (1994). Personal accounts of successful versus failed attempts at life change. *Personality and Social Psychology Bulletin*, *20*, 664-675.

Helgeson, V. S. (1994). Long-distance romantic relationships: Sex differences in adjustment and breakup. *Personality and Social Psychology Bulletin*, *20*, 254-265.

Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, *74*, 797-816.
Herbert, S., & Popadiuk, N. (2008). University students' experience of nonmarital breakups: A grounded theory. *Journal of College Student Development*, *49*, 1-14.
Herzberg, P., & Brähler, E. (2006). Assessing the big-five personality domains via short forms: A cautionary note and a proposal. *European Journal of Psychological Assessment*, *22*, 139-148.
Hetherington, E. M., & Kelly, J. (2002). *For better of for worse: Divorce reconsidered*. New York: Norton.
Hobfall, S.E. (1989). Conservation of resources: a new attempt at conceptualizing Stress. *American Psychologist*, *44*, 513-524.
Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, *2*, 213-218.
Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: a measure of subjective stress. *Psychosomatic Medicine*, *41*, 209-218.
Huurre, T., Junkkari, H., & Aro, H. (2006, June). Long-term psychosocial effects of parental divorce: A follow-up study from adolescence to adulthood. *European Archives of Psychiatry and Clinical Neuroscience*, *256*, 256-263.
Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
Joseph, S., & Linley, P.A. (2006). Growth following adversity: Theoretical perspectives and implications for clinical practice. *Clinical Psychology Review*, *26*, 1041-1053.
Kaslow, F., & Hyatt, R. (1982). Divorce: A potential growth experience for the extended family. *Journal of Divorce*, *6*, 115-125.
Kitson, G. C. (1992). *Portrait of divorce: Adjustment to marital breakdown*. New York: Guilford Press.
Kraut, R., Patterson, V., Lundmark, M., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, *53*, 1017-1031.
Lechner, S. C., & Antoni, M. H. (2004). Posttraumatic growth and group-based interventions for persons dealing with cancer: What have we learned so far? *Psychological Inquiry*, *15*, 35-41.
Lehman, D. R., Davis, C. G., Delongis, A., et al. (1993). Positive and negative life changes following bereavement and their relations to adjustment. *Journal of Social and Clinical Psychology*, *12*, 90-112.
Lehman, D. R., Ellard, J. H., & Wortman, C. B. (1986). Social support for the bereaved: Recipients' and providers' perspectives on what is helpful. *Journal of Consulting and Clinical Psychology, 54*, 438-446.
Linley, P. A. (2003). Positive adaptation to trauma: Wisdom as both process and outcome. *Journal of Traumatic Stress*, *16*, 601-610.
Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, *17*, 11-21.
Lorenz, F. O., Simons, R. L, Conger, R. D., Elder, G. H. Jr., Johnson, C., & Chao., W. (1997). Married and divorced mothers' stressful life events and distress: Tracing

change across time. *Journal of Marriage and the Family, 59*, 219-232.
Maciejewski, P. K., Prigerson, H. G., & Mazure, C. M. (2001). Sex differences in event-related risk for major depression. *Psychological medicine*, *31*, 593-604.
Magai, C. (1999). Personality change in adulthood: Loci of change and the role of interpersonal process. *International Journal of Aging and Human Development*, *49*, 339-352.
Mearns, J. (1991). Coping with a breakup: Negative mood regulation expectancies and depression following the end of a romantic relationship. *Journal of Personality and Social Psychology*, *60*, 327-334.
Miller, M. R., & Davila, J. (2009). *An organizing framework for understanding stress-related growth*. Manuscript in preparation.
Miller, N. B., Smerglia, V. L., Gaudet, D. S., & Kitson, G. C. (1998). Stressful life events, social support, and the distress of widowed and divorced women: A counteractive model. *Journal of Family Issues*, *19*, 181-203.
Mol, S., Arntz, A., Metsemakers, J., Dinant, G., Vilters-Van Montfort, P., & Knottnerus, J. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *British Journal of Psychiatry*, *186*, 494-499.
Molina, O. (1999). The effect of divorce on African American working women. *Journal of Divorce and Remarriage*, *32*, 1-15.
National Center for Health Statistics. National Vital Statistics Reports. Births, marriages, divorces, and deaths: Provisional data for November 2006, 55(18), June 21, 2007.
Orcutt, H., Pickett, S., & Pope, E. (2005). Experiential avoidance and forgiveness as mediators in the relation between traumatic interpersonal events and posttraumatic stress disorder symptoms. *Journal of Social and Clinical Psychology*, *24*, 1003-1029.
Orenstein, S. W. (1999). Predictors of explanatory style among Holocaust survivors. *Dissertation Abstracts International*, *59*, 5583B.
Overbeek, G., Vollebergh, W., de Graaf, R., Scholte, R., de Kemp, R., & Engels, R. (2006). Longitudinal associations of marital quality and marital dissolution with the incidence of DSM-III-R disorders. *Journal of Family Psychology*, *20*, 284-291.
Park, C. L. (1998). Implications of posttraumatic growth for individuals. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive change in the aftermath of crisis* (pp. 153-177). Mahwah, NJ: Lawrence Erlbaum.
Park, C. L., Cohen, L. H., & Murch, R. (1996). Assessment and prediction of stress-related growth. *Journal of Personality*, *64*, 71-105.
Peterson, C., Rosenbaum, A. C., & Conn, M. K. (1985). Depressive mood reactions to breaking up: Testing the learned helplessness model of depression. *Journal of Social and Clinical Psychology*, *3*, 161-169.
Pettit, E. J., & Bloom, B. L. (1984). Whose decision was it? The effects of initiator status on adjustment to marital disruption. *Journal of Marriage and the Family*, *46*, 587-595.

Rabe, S., Zöllner, T., Maercker, A., & Karl, A. (2006). Neural correlates of posttraumatic growth after severe motor vehicle accidents. *Journal of Consulting and Clinical Psychology*, *74*, 880-886.

Reissmann, C. K. (1990). *Divorce talk: Women and men make sense of personal relationships*. New Brunswick, NJ: Rutgers University Press.

Robins, R. W., Caspi, A., & Moffitt, T. E. (2002). It's not just who you're with, it's who you are: Personality and relationship experiences across multiple relationships. *Journal of Personality*, *70*, 925-964.

Rogge, R. D. (personal communication) The Attention and Effort Scale.

Romanoff, B. D. (2001). Research as therapy. In R. A. Neimeyer (Ed.), *Meaning reconstruction and the experience of loss* (pp. 245-257). Washington, DC: American Psychological Association.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, *16*, 172-186.

Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, *45*, 101-117.

Sbarra, D. A. (2006). Predicting the onset of emotional recovery following nonmarital relationship dissolution: Survival analyses of sadness and anger. *Personality and Social Psychology Bulletin*, *32*, 298-312.

Sbarra, D.S., & Emery, R.E. (2005). The emotional sequelae of non-marital relationship dissolution: Descriptive evidence from a 28-day prospective study. *Personal Relationships*, *12*, 213-232.

Schaefer, J. A., & Moos, R. H. (1992). Life crises and personal growth. In B. N. Carpenter (Ed.), *Personal coping: Theory, research and application* (pp. 149-170). Westport, CT: Praeger.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, *1*, 23-43.

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, *16*, 201-228.

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology,* 67, 1063-1078.

Schneller, D. P., & Arditti, J. A. (2004). After the breakup: Interpreting divorce and rethinking intimacy. *Journal of Divorce and Remarriage*, *42*, 1-37.

Siegel, K., & Schrimshaw, E. W. (2000). Perceiving benefits in adversity: Stress-related growth in women living with HIV/AIDS. *Social Science and Medicine*, *51*, 1543-1554.

Simon, R. W., & Marcussen, K. (1999). Marital transitions, marital beliefs, and mental health. *Journal of Health and Social Behavi*or, *40*, 111-125.

Simpson, J. A. (1987). The dissolution of romantic relationships: Factors involved in

relationship stability and emotional distress. *Journal of Personality & Social Psychology*, *53*, 683-692.
Sirvanli-Ozen, D. (2005). Impacts of divorce on the behavior and adjustment problems, parenting styles, and attachment styles of children: Literature review including Turkish studies. *Journal of Divorce and Remarriage*, *42*, 127-151.
Smith, H. S., & Cohen, L. H. (1993). Self-complexity and reactions to a relationship breakup. *Journal of Social and Clinical Psychology*, *12*, 367-384.
Spanier, G. B., & Glick, P. C. (1980). Paths to remarriage. *Journal of Divorce*, *3*, 283-298.
Spanier, G. B., & Thompson, L. (1983). Relief and distress after marital separation. *Journal of Divorce*, *7*, 31-49.
Sprecher, S. (1994). Two sides to the breakup of dating relationships. *Personal Relationships*, *1*, 199-222.
Sprecher, S., Felmlee, D., Metts, S., Fehr, B., & Vanni, D. (1998). Factors associated with distress following the break-up of a close relationship, *Journal of Social and Personal Relationships*, *15*, 792-810.
Stewart, A., Copeland, A., Chester, N., Malley, J., & Barenbaum, N. (1997). *Separating together: How divorce transforms families*. New York; Guilford Press.
Størksen, I., Røysamb, E., Holmen, T. L., & Tambs, K. (2006). Adolescent adjustment and well-being: Effects of parental divorce and distress. *Scandinavian Journal of Psychology*, *47*, 75-84.
Straus, M. A., & Sweet, S. (1992). Verbal/symbolic aggression in couples: Incidence rates and relationships to personal characteristics. *Journal of Marriage and the Family*, *54*, 346-357.
Strohschein, L. (2005). Parental divorce and child mental health trajectories. *Journal of Marriage and Family, 67*, 1286-1300.
Tashiro, T., & Frazier, P. (2003). "I'll never be in a relationship like that again": Personal growth following romantic relationship breakups. *Personal Relationships*, *10*, 113-128.
Tashiro, T., Frazier, P., & Berman, M. (2006). Stress-related growth following relationship dissolution and divorce. In. M. Fine and J. Harvey (Eds.), *Handbook of divorce and relationship dissolution (pp. 361-384)*. Mahwah, NJ: Erlbaum.
Tedeschi, R. G., & Calhoun, L. G. (1996). The post-traumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, *9*, 455-471.
Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (1998) *Posttraumatic growth*: *Positive changes in the aftermath of crisis*. Mahwah, NJ: Lawrence Erlbaum.
Thabes, V. (1997). A survey analysis of women's long- term postdivorce adjustment. *Journal of Divorce and Remarriage*, *27*, 163-175.
Tschann, J. M., Johnston, J. R., & Wallerstein, J. S. (1989). Resources, stressors, and attachment as predictors of adult adjustment after divorce: A longitudinal study. *Journal of Marriage and the Family*, *51*, 1033-1046.
U.S. Department of Labor, Bureau of Labor Statistics. www.bls.gov
van Daalen, G., Sanders, K., & Willemsen, T. (2005). Sources of social support as predictors of health, psychological well-being and life satisfaction among Dutch male and female dual-earners. *Women and Health*, *41*, 43-62.

Wang, H., & Amato, P. R. (2000). Predictors of divorce adjustment: Stressors, resources, and definitions. *Journal of Marriage and the Family*, *62*, 655-668.
Weinrib, A., Rothrock, N., Johnsen, E., & Lutgendorf, S. (2006). The assessment and validity of stress-related growth in a community-based sample. *Journal of Consulting and Clinical Psychology*, *74*, 851-858.
Weiss, D., & Marmar, C. (1997). The Impact of Event Scale -Revised. In J. Wilson & T. Keane (Eds), *Assessing psychological trauma and PTSD*. New York: Guildford.
Wild, N., & Paivio, S. (2003). Psychological Adjustment, Coping, and Emotion Regulation as Predictors of Posttraumatic Growth. *Journal of Aggression, Maltreatment and Trauma*, *8*, 97-122.
Williams, K., & Dunne-Bryant, A. (2006). Divorce and adult psychological well-being: Clarifying the role of gender and child age. *Journal of Marriage and Family*, *68*, 1178-1196.
World Report on Violence and Health. Geneva, Switzerland: World Health Organization; 2002.

Appendix

Screening Questions:

A. Were you involved in a marriage or a cohabiting romantic relationship that lasted for at least 6 months?

_____ Yes _____No

B. Did this relationship end a year or more ago?

_____ Yes _____No

C. Are you 18 years old or older?

_____ Yes _____No

If yes to A and B, and you are over 18, please continue.

PART A: Please answer the following questions about yourself.

RSE

Please indicate the extent to which you agree or disagree with the statements below:
1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree

	Strongly AGREE			Strongly DISAGREE
1. On the whole, I am satisfied with myself.	1	2	3	4
2. At times I think I am no good at all.	1	2	3	4
3. I feel that I have a number of good qualities.	1	2	3	4
4. I am able to do things as well as most other people.	1	2	3	4
5. I feel I do not have much to be proud of.	1	2	3	4
6. I certainly feel useless at times.	1	2	3	4
7. I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4
8. I wish I could have more respect for myself.	1	2	3	4
9. All in all, I am inclined to feel that I am a failure.	1	2	3	4
10. I take a positive attitude toward myself.	1	2	3	4

TIPI

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate *the extent to which you agree or disagree with that statement*. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

1	2	3	4	5	6	7
Disagree strongly	Disagree moderately	Disagree a little	Neither agree nor disagree	Agree a little	Agree moderately	Agree strongly

I see myself as:

1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganized, careless.
9. _____ Calm, emotionally stable.
10. ____ Conventional, uncreative.

RAAS — GENERAL

Please read each of the following statements and rate the extent to which it describes you and your feelings about RELATIONSHIPS IN GENERAL. Think about ALL your relationships (past and present) and respond in terms of HOW YOU GENERALLY FEEL in these relationships.

Rate the degree to which each statement characterizes you using the following scale.

1	2	3	4	5
not at all characteristic of me				very characteristic of me

_____ 1. I find it relatively easy to get close to others.
_____ 2. I find it difficult to allow myself to depend on others.
_____ 3. In relationships, I often worry that the other person does not really love me.
_____ 4. I find that others are reluctant to get as close as I would like.
_____ 5. I am comfortable depending on others.
_____ 6. I do NOT worry about someone getting too close to me.
_____ 7. I find that people are never there when you need them.
_____ 8. I am somewhat uncomfortable being close to others.

_____ 9. In relationships, I often worry that the other person will not want to stay with me.
_____ 10. When I show my feelings for others I am always afraid they will not feel the same about me.
_____ 11. I often wonder whether people really care about me.
_____ 12. I am comfortable developing close relationships with others.
_____ 13. I am nervous when anyone gets too close.
_____ 14. I know that people will be there when I need them.
_____ 15. I want to get close to people, but I worry about being hurt by them.
_____ 16. I find it difficult to trust others completely.
_____ 17. Often, people want me to be closer than I feel comfortable being.
_____ 18. I am not sure that I can always depend on others to be there when I need them.

LOT-R

Please rate your agreement with the following statements about yourself.

1 DISAGREE Strongly	2 Disagree	3 Neutral	4 Agree	5 AGREE Strongly

1. In uncertain times, I usually expect the best.	1	2	3	4	5
2. It's easy for me to relax.	1	2	3	4	5
3. If something can go wrong for me, it will.	1	2	3	4	5
4. I'm always optimistic about my future.	1	2	3	4	5
5. I enjoy my friends a lot.	1	2	3	4	5
6. It's important for me to keep busy.	1	2	3	4	5
7. I hardly ever expect things to go my way.	1	2	3	4	5
8. I don't get upset too easily.	1	2	3	4	5
9. I rarely count on good things happening to me.	1	2	3	4	5
10. Overall, I expect more good things to happen to me than bad.	1	2	3	4	5

Attention and Effort Scale — part 1

In general...	Not at all TRUE	A little TRUE	Some-what TRUE	Mostly TRUE	VERY TRUE
I am an active person	1	2	3	4	5

In general...	Not at all TRUE	A little TRUE	Some-what TRUE	Mostly TRUE	VERY TRUE
I enjoy the company of my friends	1	2	3	4	5
If I don't feel like doing something, sometimes I will put it off	1	2	3	4	5
It frustrates me when people keep me waiting	1	2	3	4	5
Sometimes I get distracted	1	2	3	4	5
I find it easy to open up to my friends	1	2	3	4	5
It can be annoying when people cut in line	1	2	3	4	5
I spend most of my time worrying	1	2	3	4	5
Occasionally people annoy me	1	2	3	4	5
I look forward to my time off	1	2	3	4	5
Sometimes I make impulsive decisions	1	2	3	4	5
I find praetology interesting	1	2	3	4	5
I enjoy relaxing in my free time	1	2	3	4	5
I don't like getting speeding tickets	1	2	3	4	5

PART B: The following pages ask about how you *felt* and *thought* about yourself, your past partner, and your relationship during the time that you were together. Please do your best to think back to that time in answering these questions.

PAST RELATIONSHIP INFORMATION

1. For how long were you and your past partner involved? (Please fill in the appropriate number(s):

_____ years _____ months _____ days*

(**Note*: years and months were converted to days if participant provided a response in years and/or months)

2. Who initiated the breakup? (select one):

_____ I did _____ My partner did _____ It was mutual

3. How long ago (from today) did you and your past partner breakup? (If you are unsure, please just take your best guess):

_____ years ago

_____ months ago (**Note*: years were converted to months if participant provided a response in years)

4. How much control did you feel you had over the occurrence of the breakup?

1	2	3	4	5
Not at all		Somewhat		Very much

5. How much control did you feel your past partner had over the occurrence of the breakup?

1	2	3	4	5
Not at all		Somewhat		Very much

6. How invested in/committed to the relationship were you?

1	2	3	4	5
Not at all		Somewhat		Very much

CSI — 4 — PAST PARTNER (adapted)

Please rate the following thinking back to how you felt at the end of your past relationship.

1. Please indicate the degree of happiness, all things considered, of your past relationship.

_____ Extremely Unhappy
_____ Fairly Unhappy
_____ A Little Unhappy
_____ Happy
_____ Very Happy
_____ Extremely Happy
_____ Amazingly Happy
_____ Could not possibly have been happier

	Not at all TRUE	A little TRUE	Some-what TRUE	Mostly TRUE	Very TRUE	Extrem-ely TRUE	Absolut-ely and complet-ely TRUE
2. I had a warm and comfortable relationship with my PAST partner	1	2	3	4	5	6	7

	Not at all	A little	Some-what	Mostly	Very	Extrem-ely	Absolut-ely and complet-ely
3. How rewarding was your relationship with your PAST partner?	1	2	3	4	5	6	7
4. In general, how satisfied were you with your PAST relationship?	1	2	3	4	5	6	7

Attributions and Reasons for Breakup

How much do you attribute the breakup to the following (i.e., how much did the following cause the breakup or how much were the reasons for the breakup)?

1. It was due to my past partner and their problems (e.g., my partner's insensitivity, my partner's possessiveness, my partner's difficulty being close or committing to the relationship, etc.).

1	2	3	4	5
Not at all		Somewhat		Very much

2. It was due to me and my problems (e.g., my insensitivity, my possessiveness, my difficulty being close or committing to the relationship, etc.).

1	2	3	4	5
Not at all		Somewhat		Very much

3. It was both of us — we were just not right for each other (e.g., we had conflicting values, different interests, etc.).

1	2	3	4	5
Not at all		Somewhat		Very much

4. It was due to something situational and beyond our control (e.g., distance, work stress, parental disapproval, etc.).

1	2	3	4	5
Not at all		Somewhat		Very much

5. My past partner was physically, verbally, and/or emotionally abusive.

1	2	3	4	5
Not at all		Somewhat		Very much

6. I was physically, verbally, and/or emotionally abusive.

1	2	3	4	5
Not at all		Somewhat		Very much

7. My past partner abandoned me (i.e., moved out of our home, locked me out of our home, or withdrew sexually for one year or more).

1	2	3	4	5
Not at all		Somewhat		Very much

8. I abandoned my past partner (i.e., moved out of our home, locked him/her out of our home, or withdrew sexually for one year or more).

1	2	3	4	5
Not at all		Somewhat		Very much

9. I cheated on my past partner.

1	2	3	4	5
Not at all		Somewhat		Very much

10. My past partner cheated on me.

1	2	3	4	5
Not at all		Somewhat		Very much

11. There were “irreconcilable” differences between us.

1	2	3	4	5
Not at all		Somewhat		Very much

PART C: People often say that they experience significant life changes during and after a great personal difficulty. In the next questions, please think about the reactions and changes you may have experienced as a result of the breakup with your past partner.

BSI — (adapted)

Please indicate how much were you been bothered or distressed by the following after your breakup.

1	2	3	4	5
Not at all	A little bit	Moderately	Quite a bit	Extremely

____ 1. Feeling easily annoyed or irritated.
____ 2. Thoughts of ending your life.
____ 3. Temper outbursts that you could not control.
____ 4. Feeling lonely.
____ 5. Feeling blue.
___ 6. Feeling no interest in things.
____ 7. Feeling hopeless about the future.
____ 8. Having urges to beat, injure, or harm someone.
____ 9. Having urges to break or smash things.
____10. Getting into frequent arguments.
____11. Feelings of worthlessness.

Response to Breakup

Please indicate how well the following describe how you responded to the breakup:

1. It was very difficult for me to move forward.

1	2	3	4	5
Not at all		Somewhat		Very much

2. My emotional "resources" were overwhelmed (i.e., I felt like I might not be able to handle it).

1	2	3	4	5
Not at all		Somewhat		Very much

3. It was a radical loss (i.e., it turned my world upside down).

1	2	3	4	5
Not at all		Somewhat		Very much

4. I didn't really know what would be next; it was an ambiguous and confusing time.

1	2	3	4	5
Not at all		Somewhat		Very much

5. I had a harder time functioning at work/school.

1	2	3	4	5
Not at all		Somewhat		Very much

6. I had a harder time functioning socially.

1	2	3	4	5
Not at all		Somewhat		Very much

7. I was fine — it was no big deal.

1	2	3	4	5
Not at all		Somewhat		Very much

8. I felt like I didn't know who I was anymore.

1	2	3	4	5
Not at all		Somewhat		Very much

9. I felt like I had no control over the situation, the outcome, or how I was feeling.

1	2	3	4	5
Not at all		Somewhat		Very much

10. I became more distressed (upset) as time went on.

1	2	3	4	5
Not at all		Somewhat		Very much

11. I adapted to the situation — I was able to move forward.

1	2	3	4	5
Not at all		Somewhat		Very much

IES-R — (adapted)

Below is a list of responses people sometimes have following stressful life events. Please read each item, and then indicate how distressing each reaction was for you following your breakup, that is, how much were you distressed or bothered by these difficulties?

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Any reminder brought back feelings about it	1	2	3	4	5
2. I had trouble staying asleep	1	2	3	4	5
3. Other things kept making me think about it	1	2	3	4	5
4. I felt irritable and angry	1	2	3	4	5

	Not at all	A little bit	Moderately	Quite a bit	Extremely
5. I avoided letting myself get upset when I thought about it or was reminded of it	1	2	3	4	5
6. I thought about it when I didn't mean to	1	2	3	4	5
7. I felt as if it hadn't happened or wasn't real	1	2	3	4	5
8. I stayed away from reminders about it	1	2	3	4	5
9. Pictures about it popped into my mind	1	2	3	4	5
10. I was jumpy and easily startled	1	2	3	4	5
11. I tried not to think about it	1	2	3	4	5
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them	1	2	3	4	5
13. My feelings about it were kind of numb	1	2	3	4	5
14. I found myself acting or feeling as though I was back at that time	1	2	3	4	5
15. I had trouble falling asleep	1	2	3	4	5
16. I had waves of strong feelings about it	1	2	3	4	5
17. I tried to remove it from my memory	1	2	3	4	5
18. I had trouble concentrating	1	2	3	4	5
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart	1	2	3	4	5
20. I had dreams about it	1	2	3	4	5
21. I felt watchful or on-guard	1	2	3	4	5
22. I tried not to talk about it	1	2	3	4	5

B-COPE — (adapted)

These items deal with ways you coped with the relationship ending. There are many ways to try to deal with problems, and obviously, different people deal with things in different ways. We are interested in how you tried to deal with the breakup experience.
Please indicate to what extent you did what the item says — How much or how frequently. Don't answer on the basis of whether it worked or not — just whether or not you did it.

1 = I didn't do this at all
2 = I did this a little bit
3 = I did this a medium amount
4 = I did this a lot

____ 1. I turned to work or other activities to take my mind off things.
____ 2. I concentrated my efforts on doing something about the situation I was in.
____ 3. I said to myself "this isn't real."
____ 4. I used alcohol or other drugs to make myself feel better.
____ 5. I got emotional support from others.
____ 6. I gave up trying to deal with it.
____ 7. I took action to try to make the situation better.
____ 8. I refused refusing to believe that it has happened.
____ 9. I said things to let my unpleasant feelings escape.
____ 10. I got help and advice from other people.
____ 11. I used alcohol or other drugs to help me get through it.
____ 12. I tried to see it in a different light, to make it seem more positive.
____ 13. I criticized myself.
____ 14. I tried to come up with a strategy about what to do.
____ 15. I got comfort and understanding from someone.
____ 16. I gave up the attempt to cope.
____ 17. I looked for something good in what was happening.
____ 18. I made jokes about it.
____ 19. I did something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
____ 20. I accepted the reality of the fact that it happened.
____ 21. I expressed my negative feelings.
____ 22. I tried to find comfort in my religion or spiritual beliefs.
____ 23. I tried to get advice or help from other people about what to do.
____ 24. I learned to live with it.
____ 25. I thought hard about what steps to take.
____ 26. I blamed myself for things that happened.
____ 27. I prayed or meditated.
____ 28. I made fun of the situation.

Coping Items

How well do the following describe how you dealt with or coped with the breakup:

1. I really focused on and tried to understand what had happened.

1	2	3	4	5
Not at all		Somewhat		Very much

2. I contacted my past partner repeatedly to try and get back together.

1	2	3	4	5
Not at all		Somewhat		Very much

3. I got in a new relationship right away.

1	2	3	4	5
Not at all		Somewhat		Very much

4. It was important to me to try and make sense of and understand the breakup, what led up to it, and what to do afterwards.

1	2	3	4	5
Not at all		Somewhat		Very much

5. I tried to adjust to my "new reality" (i.e., being single, the relationship having ended).

1	2	3	4	5
Not at all		Somewhat		Very much

6. I worked hard to develop coping skills to manage my emotions during this time.

1	2	3	4	5
Not at all		Somewhat		Very much

7. I forgave my past partner for the past/the breakup.

1	2	3	4	5
Not at all		Somewhat		Very much

Positive and Negative Effects

1. To what extent do you feel that the breakup had a positive effect on you?

1	2	3	4	5
Not at all positive		Mixed		Completely positive

2. To what extent do you feel that the breakup had a negative effect on you?

1	2	3	4	5
Not at all negative		Mixed		Completely negative

Learning and Insight

1. To what extent do you feel you have learned specific lessons from your breakup that will affect or have affected your behavior in romantic relationships?

1	2	3	4	5
Not at all		Somewhat		Very much

2. To what extent do you feel that you have gained insight from the experience of the breakup, and used that in your broader life (i.e., other areas of your life beyond just your romantic relationships)?

1	2	3	4	5
Not at all		Somewhat		Very much

PTGI — (adapted)

Please indicate for each of the statements below the degree to which this change occurred in your life as a result of your breakup, using the following scale.

1 = I did not experience this change as a result of my breakup.
2 = I experienced this change to a *very small degree* as a result of my breakup.
3 = I experienced this change to a *small degree* as a result my breakup.
4 = I experienced this change to a *moderate degree* as a result of my breakup.
5 = I experienced this change to a *great degree* as a result of my breakup.
6 = I experienced this change to a *very great degree* as a result of my breakup.

1. My priorities about what is important in life.	1	2	3	4	5	6
2. I'm more likely to try to change things which need changing.	1	2	3	4	5	6
3. An appreciation for the value of my own life.	1	2	3	4	5	6
4. A feeling of self-reliance.	1	2	3	4	5	6
5. A better understanding of spiritual matters.	1	2	3	4	5	6
6. Knowing that I can count on people in times of trouble.	1	2	3	4	5	6
7. A sense of closeness with others.	1	2	3	4	5	6
8. Knowing I can handle difficulties.	1	2	3	4	5	6
9. A willingness to express my emotions.	1	2	3	4	5	6
10. Being able to accept the way things work out.	1	2	3	4	5	6
11. Appreciating each day.	1	2	3	4	5	6
12. Having compassion for others.	1	2	3	4	5	6
13. I'm able to do better things with my life.	1	2	3	4	5	6
14. New opportunities are available which wouldn't have been otherwise.	1	2	3	4	5	6
15. Putting effort into my relationships.	1	2	3	4	5	6
16. I have a stronger religious faith.	1	2	3	4	5	6
17. I discovered that I'm stronger than I thought I was.	1	2	3	4	5	6
18. I learned a great deal about how wonderful people are.	1	2	3	4	5	6

19. I developed new interests.	1	2	3	4	5	6
20. I accept needing others.	1	2	3	4	5	6
21. I established a new path for my life.	1	2	3	4	5	6

Relationship Effects

How has your experience with the breakup affected or impacted your thinking about romantic relationships? (*Please answer these questions whether you are single or if you are in a new relationship*)

1. I have a _*(pick the number on scale that fits your thoughts)*_ sense of what type of partner I want.

1	2	3	4	5
Much WORSE		Somewhat worse/better		Much BETTER

2. I believe I could/can communicate _____ with a partner.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

3. I believe I won't/don't speak up because I will be/am afraid of what might happen.

1	2	3	4	5
For sure WON'T		Somewhat won't/will		For sure WILL

4. My expectations about myself (while in a relationship) have changed.

1	2	3	4	5
Not at all		Somewhat		Very much

5. I will/do try to make sure my relationship is a true partnership.

1	2	3	4	5
Not at all		Somewhat		Very much

6. I believe I will/do turn to a partner _____ now in times of need.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

7. What I expect from a partner in a relationship has changed.

1	2	3	4	5
Not at all		Somewhat		Very much

8. I believe it will be/is _____ to trust my partner.

1	2	3	4	5
Much HARDER		Somewhat harder/easier		Much EASIER

9. I believe I will be/am _____ self-confident in my relationship.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

10. I believe I will/do find it _____ to get close to my partner.

1	2	3	4	5
Much HARDER		Somewhat harder/easier		Much EASIER

11. I believe I will/do trust myself, my thoughts and feelings _____ in a relationship.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

12. I believe I will be/am _____ mature in a relationship now.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

13. I believe I will be/am _____ skeptical or pessimistic about the relationships.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

14. I now will/do communicate my positive feelings_____.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

15. Through breaking up, I believe I could/can handle things that may come up in a relationship.

1	2	3	4	5
Not at all		Somewhat		Very much

16. I believe I will admit that I am wrong sometimes _____.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

17. I believe I will/do trust a partner and their thoughts, feelings, and actions _____.

1	2	3	4	5
Much LESS		Somewhat less/more		Much MORE

18. I've learned new positive relationship skills.

1	2	3	4	5
Not at all		Somewhat		Very much

19. I believe I will/do a _____ job of communicating my negative (e.g., anger, sadness) feelings.

1	2	3	4	5
Much WORSE		Somewhat worse/better		Much BETTER

20. I revised what I want from a partner in a relationship.

1	2	3	4	5
Not at all		Somewhat		Very much

21. I think I will/do relate to a partner in a better way.

1	2	3	4	5
Not at all		Somewhat		Very much

Attention and Effort Scale — part 2

In general...	Not at all True	A little TRUE	Some-what TRUE	Mostly TRUE	VERY TRUE
I enjoy receiving telemarketer's calls	1	2	3	4	5
I have an active lifestyle	1	2	3	4	5
I like to spend time with my friends	1	2	3	4	5
Sometimes I feel like I have too many things to do	1	2	3	4	5
It's annoying when people are late	1	2	3	4	5
Sometimes I find it hard to concentrate	1	2	3	4	5
It's easy for me to confide in my friends	1	2	3	4	5
I worry about things a lot	1	2	3	4	5
I enjoy the music of Marlene Sandersfield	1	2	3	4	5
Sometimes I find people irritating	1	2	3	4	5
It feels good to be appreciated	1	2	3	4	5
Occasionally I make choices without thinking	1	2	3	4	5
I'd be happy if I won the lottery	1	2	3	4	5
In my time off I like to relax	1	2	3	4	5

PART D: The following question concern your current relationship status.

1. Are you currently:

_____ Single
_____ Married
_____ Engaged

_____ In a non-marital committed relationship
_____ Dating seriously
_____ Dating casually

If select anything above other than single:

How long (*in months*) have you known your current partner? _____

How long (*in months*) have you been together as a couple with your current partner? _____

What is your current living situation?
_____ Living together
_____ Living separately but spending most nights together
_____ Living separately but frequently spending nights together
_____ Living separately but occasionally spending nights together
_____ Living separately and rarely or never spending nights together
_____ Living in different cities — long distance relationship

Is your current partner the same person as your past partner (i.e., are you back together now)? _____ No _____ Yes

What is your partner's gender? _____ male _____ female

2. After you past relationship ended, how many other serious romantic involvements did you have after your breakup. *(If you are currently in a relationship, please count your current relationship)*

_____

3. After the end of your past relationship, how long was it before your next relationship (or when you began dating)?

_____ months _____ weeks_____ days*

(**Note*: months and weeks were converted to days if participant provided a response in months and/or weeks)

CSI - 4 — CURRENT PARTNER (adapted)

<u>If you are currently involved in a relationship, please answer these 4 questions below. Otherwise, skip them and go onto the final section, Part E.</u>:

1. Please indicate the degree of happiness, all things considered, of your relationship.

_____ Extremely Unhappy
_____ Fairly Unhappy
_____ A Little Unhappy
_____ Happy
_____ Very Happy
_____ Extremely Happy
_____ Amazingly Happy
_____ Could not possibly have been happier

	Not at all TRUE	A little TRUE	Some-what TRUE	Mostly TRUE	Very TRUE	Extrem-ely TRUE	Absolut-ely and complet-ely TRUE
2. I have a warm and comfortable relationship with my partner	1	2	3	4	5	6	7

	Not at all	A little	Some-what	Mostly	Very	Extrem-ely	Absolut-ely and complet-ely
3. How rewarding is your relationship with your partner?	1	2	3	4	5	6	7
4. In general, how satisfied are you with your relationship?	1	2	3	4	5	6	7

Part E: Additional questions about you.

Please respond to the following final questions:

1. Are you: _____ Male _____ Female

2. How old are you? _____

3. About how many hours do you use the Internet for sending and receiving e-mail or for any other purpose, such as making purchases, searching for information, online groups or chat rooms, or making travel reservations?

_____ per day _____ per week

4. What is the last year of school you have completed?

_____ a) Less than 10th grade
_____ b) 10th grade
_____ c) 11th grade
_____ d) High school diploma (12th grade)
_____ e) Some college or trade school
_____ f) AA degree or trade school certificate
_____ g) BA or BS degree
_____ h) MA or MS degree
_____ i) Law degree
_____ j) PhD or PsyD
_____ k) DDS
_____ l) MD

5. Please indicate the region where you live (select one):

_____ a) Northeast (U.S.)
_____ b) Midwest (U.S.)
_____ c) South (U.S.)
_____ d) West (U.S.)
_____ e) Other. Please type your region or country: _____

6. Is the area where you live (please select one):

_____ a) Urban
_____ b) Suburban
_____ c) Rural

7. Do you have children? (please select one):

___ No children ___ 1___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ more than 6

8. Please indicate your annual income (yours and your partner's if you live together) before taxes (select one):

_____ a) less than $10,000
_____ b) $10,000 - $15,000
_____ c) $15,000 - $25,000
_____ d) $25,000 - $50,000
_____ e) $50,000 - $75,000

_____ f) $75,000 - $100,000
_____ g) $100,000 - $150,000
_____ h) $150,000 - $200,000
_____ i) greater than $200,000

9. What is your race/ethnicity (check all that apply):
_____ a) African American/Black/African
_____ b) American Indian/Alaskan Native/Aboriginal Canadian
_____ c) Asian-American/Asian origin/Pacific Islander
_____ d) Biracial/Multiracial
_____ e) European origin/White
_____ f) Latino/Latina/Hispanic
_____ g) Other

10. What type of work do you do? (please indicate your occupation[3]):
_____ a) Management
_____ b) Business or financial operations
_____ c) Computer or mathematical
_____ d) Architecture or engineering
_____ e) Life, physical, or social science
_____ f) Community or social services
_____ g) Legal
_____ h) Education, training, or library
_____ i) Arts, deign, entertainment, sports, and media
_____ j) Healthcare practitioner or technical
_____ k) Healthcare support
_____ l) Protective service
_____ m) Food preparation and serving related
_____ n) Building and grounds cleaning or maintenance
_____ o) Personal care or service
_____ p) Sales and related
_____ q) Office or administrative support
_____ r) Farming, fishing, or forestry
_____ s) Construction or extraction
_____ t) Installation, maintenance, or repair
_____ u) Production
_____ v) Transportation or material moving
_____ w) Military specific
_____ x) Unemployed
_____ y) Other

[3] Based on U.S. Department of Labor, Bureau of Labor Statistics, Standard Occupational Classification groups, www.bls.gov