THE IMPACT OF SOCIAL CONSTRAINTS ON ADJUSTMENT FOLLOWING THE DISSOLUTION OF A ROMANTIC RELATIONSHIP

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ABSTRACT

Many people experience a romantic breakup at some point in their lives, but people’s reactions can vary considerably. A common way of coping with the dissolution of a romantic relationship is to seek support and opportunities to talk with close others. Although talking with social network members may prove helpful for some, the Social-Cognitive Processing (SCP) model posits that interpersonal interactions can hinder emotional recovery and adjustment if the disclosers feel the social network members are responding in a socially constraining way. As a result of perceiving social constraints, individuals may try to avoid thinking and talking about the breakup altogether, which, in turn, may interfere with the cognitive processing necessary to move forward from the breakup. The current research marked the first time the SCP model was explored with regards to the dissolution of romantic relationships, and it evaluated the utility of the SCP model in potentially explaining the variable nature of adjustment to a romantic breakup. One hundred and seventy-four eligible participants completed this online study. Participants completed various questionnaires pertaining to their previous relationship and subsequent breakup, their feelings and experiences following the romantic dissolution, their tendencies to think about the breakup, and the degree to which they discussed the relationship dissolution with others and the reactions they received during these conversations. In support of the SCP model, the results indicated that social constraints were associated with greater psychological distress. Furthermore, avoidance partially mediated the relation between social constraints and psychological distress as levels of social support decreased. This suggests that higher levels of social support might help buffer against engaging in avoidance in response to social constraints. In an
initial attempt to examine whether the extent of avoidance displayed varied as a function of a dispositional variable (i.e., self-monitoring), no support was found. Future research should continue to investigate additional factors that may moderate the relation between social constraints and psychological distress through avoidance.
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DEDICATION

Dedicated to my mom and to the memory of my dad, with love and gratitude.
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CHAPTER 1

INTRODUCTION

Most people experience the dissolution of a romantic relationship at some point during their life (Chung et al., 2002, 2003; Hebert & Popadiuk, 2008; Lagrand, 1988; Mearns, 1991; Weber & Harvey, 1994). However, people’s reactions to such an event often vary (Boelen & Reijntjes, 2006; Chung et al., 2002; Frazier & Cook, 1993; Field, Diego, Pelaez, Deeds, & Delgado, 2009; Hebert & Popadiuk, 2008; Monroe, Rohde, Seeley, & Lewinsohn, 1999). For some people, they may be sad for a short period of time, whereas others may find that the breakup had a grave impact on their life (Field et al., 2009; Monroe et al., 1999; Najib, Lorberbaum, Kose, Bohning, & George, 2004).

Although there are numerous ways for people to cope with a romantic breakup, one of the most frequently used coping strategies is to seek social support from close others (Chung et al., 2002, 2003). By seeking social support from close friends or relatives, people are afforded the opportunity to talk about the breakup in an attempt to make sense of it. Similarly, research has shown that people dealing with other types of stressors (e.g., exposure to violence, cancer diagnosis) also have a tendency to seek social support and opportunities to disclose. Although these types of interactions may be beneficial for individuals experiencing different types of life events, researchers devised a Social-Cognitive Processing (SCP) model in which they consider the impact of negative social interactions in the form of social constraints on disclosure and how they may impact individuals coping with a major life stressor (Kliwer, Lepore, Oskin, & Johnson, 1998; Lepore, Silver, Wortman, & Wayment, 1996).
According to Lepore and Revenson (2007), social constraints on disclosure result from the interplay of social network members’ reactions to disclosers and the disclosers’ personal construal of those reactions. Disclosers may report feeling socially constrained, especially when the response by the social network member does not match the discloser’s desired response (Dakof & Taylor, 1990; Harber & Pennebaker, 1992; Reynolds & Perrin, 2004). For example, some disclosers may construe the advice or feedback that social network members provide as critical, disinterested, or dismissive, whereas the intention of the support was to provide encouragement (Lepore & Revenson, 2007).

The impact of social constraints on disclosure has been investigated in a number of different types of samples comprised of children and adolescents exposed to community violence (Kaynak, Lepore, & Kliewer, 2011; Kliewer et al., 1998), mothers who lost an infant to Sudden Infant Death Syndrome (SIDS; Lepore et al., 1996), adults diagnosed with cancer (Lepore, 2001; Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Roberts, Lepore, & Helgeson, 2006), and members of stigmatized groups (Lewis, Derlega, Clarke, & Kuang, 2006; Ullrich, Lutgendorf, & Stapleton, 2002, 2003). However, until now, the utility of the SCP model had not been investigated with regards to the dissolution of romantic relationships. Yet, it seemed appropriate to use the SCP model to further investigate romantic relationship dissolution and the role that social constraints may play in the adjustment of, and disclosure by, individuals dealing with a romantic breakup. Thus, the current dissertation research marked the first attempt to merge the literature and theory pertaining to the SCP model and the impact of social
constraints on disclosure with those findings concerning the dissolution of romantic relationships.

According to the SCP model, social constraints may impact people’s willingness to discuss an experience further (Kliewer et al., 1998; Lepore, 1997; Lepore & Helgeson, 1998; Lepore, Ragan, & Jones, 2000; Lepore & Revenson, 2007; Lepore et al., 1996; Tait & Silver, 1989). Consequently, disclosers may modify the way they converse about their stressful experience or they may try to avoid thinking about or discussing the particular event altogether. Among cancer patients, research has demonstrated that avoidant coping mediates or partially mediates the association between social constraints and both psychological distress and mental health (Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Manne & Glassman, 2000; Manne, Ostroff, Winkel, Grana, & Fox, 2005; Schnur, Valdimarsdottir, Montgomery, Nevid, & Bovbjerg, 2004).

Prior to the current study, the mediating role of avoidance on the relation between social constraints and psychological distress had not yet been investigated as it pertains to the dissolution of romantic relationships. Despite this, there was evidence to suggest a similar effect would be found. For instance, research has already shown that some individuals are vulnerable to anxiety and depression following a romantic breakup (Chung et al., 2002, 2003; Lagrand, 1988; Sprecher, 1994). Furthermore, researchers have posited that avoidance is often utilized as a coping strategy following the dissolution of a romantic relationship and has been associated with increased psychological distress (Chung et al., 2002, 2003; Mearns, 1991). Thus, I expected that the relation between social constraints and psychological distress would be at least partially explained through the use of cognitive and behavioral avoidance.
Although previous research has posited that avoidant coping may partially or completely mediate the association between social constraints and psychological distress, I proposed that the relation between social constraints and avoidance would be further influenced by self-monitoring. Self-monitoring pertains to the degree to which people monitor the behavior of others to provide cues as to how they should behave (Snyder, 1974). Higher self-monitors are often better than lower self-monitors at altering their own behavior according to the cues provided by their interaction partners. Lepore and Revenson (2007) suggested that one reason social constraints may lead to an increase in avoidance behaviors is due to people’s desire to preserve their social relationships. In other words, when disclosers perceive their social network members to be disinterested or uncomfortable whenever they try to discuss their stressful experience they alter their behavior accordingly. Subsequently, I posited that the association between social constraints and the mediating variable of avoidance would vary as a function of their tendency to self-monitor. The current research marked the first time a dispositional factor was examined as a potential moderator in helping to elucidate the mediating role of avoidance on the relation between social constraints and distress.

Ultimately, the current research focused on how social constraints impacts subsequent disclosure and psychological adjustment following the dissolution of a romantic relationship. Moreover, avoidance was examined as a potential mediator of the relation between social constraints and psychological distress, and self-monitoring was investigated as a moderator of the path between social constraints and the mediating variable of avoidance.
CHAPTER 2
LITERATURE REVIEW

Dissolution of Romantic Relationships

The subject of romantic relationship dissolution has long been an area of interest to psychologists. Researchers have often focused on the negative psychological effects associated with a breakup as well as possible coping strategies and adjustment following such events (Chung et al., 2002, 2003; Hebert & Popadiuk, 2008; Lagrand, 1988; Mearns, 1991; Weber & Harvey, 1994). The dissolution of a romantic relationship can be extremely upsetting and stressful, and people may become so distressed that their daily routines are interrupted (Chung et al., 2002; Monroe et al., 1999). Among college students, the grief and symptoms experienced following the dissolution of a romantic relationship may be comparable to that following the death of an individual (Field et al., 2009; Lagrand, 1988). Many individuals report feelings of hurt, grief, betrayal, hopelessness, loneliness, anxiety, and depression (Bloom, Asher, & White, 1978; Chung et al., 2002, 2003; Davis, Shaver, & Vernon, 2003; Field et al., 2009; Frazier & Cook, 1993; Lagrand, 1988; Mearns, 1991; Menaghan & Lieberman, 1986; Monroe et al., 1999; Simpson, 1987; Sprecher, 1994). In addition, feelings of fear and helplessness concerning the future have been reported in response to the dissolution of a romantic relationship (Lagrand, 1988; Lorenz, Simons, & Chao, 1996; Simpson, 1987). Furthermore, the adverse effects associated with relationship dissolution are not short-lived and are likely to persist even months after a breakup.

Strategies to cope with relationship dissolution. Adjustment following the dissolution of a romantic relationship can be challenging, and methods of coping may
vary based on the individual (Chung et al., 2003; Weber & Harvey, 1994). The most commonly used coping strategies included taking responsibility for the dissolution, actively avoiding and/or distancing oneself from anything related to the previous relationship, and seeking social support from others. Previous research has shown that people often cope and/or adjust better when they perceive themselves as responsible for initiating the breakup (Field et al., 2009; Fletcher, 1983; Frazier & Cook, 1993; Gray & Silver, 1990; Pettit & Bloom, 1984). This strategy provides a sense of control over the situation, which has been associated with a reduction in stress and better adaptation (Fiske & Taylor, 1984). Those who believe they have no control over a breakup have a greater likelihood of experiencing depression (Peterson, Rosenbaum, & Conn, 1985), more overall distress (Frazier & Cook, 1993; Gray & Silver, 1990; Sprecher, 1994), and worse overall adjustment (Gray & Silver, 1990). Similarly, Sprecher (1994) found that people who had been broken up with reported more negative emotions and fewer positive emotions compared to individuals who had initiated the breakup or jointly decided to dissolve the relationship. Being able to perceive a breakup as at least partially under one’s control appears to have some adaptive function in that the breakup is likely to be characterized as less stressful and the individual is likely to feel more recovered (Frazier & Cook, 1993).

At times, people may employ avoidant coping strategies in which they intentionally try to avoid thoughts related to their ex-partner and the previous relationship (Chung et al., 2002, 2003; Mearns, 1991). Avoidance behaviors may help reduce or eliminate the emotional sensations connected with an incident or event (Lepore, 2001; Lepore et al., 2000), but the long-term reliance on avoidance behaviors may lead to
increased suffering (Baum, Cohen, & Hall, 1993; McCann & Pearlman, 1990). When people seek to avoid dealing with feelings and thoughts as they pertain to a specific event, they often do not engage in the cognitive processing necessary to come to a better understanding of that event (Horowitz, Field, & Classen, 1993; Horowitz, 1986b).

Finally, seeking social support is one of the most commonly used coping strategies following a romantic breakup (Chung et al., 2003). Frazier and Cook (1993) found that social support was positively correlated with both current recovery and current adjustment following relationship dissolution. Moreover, in addition to no longer wanting to be involved in the relationship, perceived social support significantly predicted how recovered participants felt from the breakup.

Nevertheless, there may be times when social support is not actually supportive, or at least it is not perceived as supportive, despite the efforts of the social network members. Members of a social network may offer advice that is dismissive in content and tone to someone experiencing such an event, and, in turn, act in a socially constraining manner. For example, stating that "with time it will get easier" or that "someone better is out there" may be more likely to convey social constraints on disclosure as opposed to the reassurance and support the network members intended. When such instances occur, the recipients may perceive social constraints, which, in turn, may impact both their future tendencies to disclose as well as the content they are willing to share.

Research has shown that psychological distress related to a romantic breakup declines as more time since the dissolution passes (Knox, Zusman, Kaluzny, & Cooper, 2000; Moller, Fouladi, McCarthy, & Hatch, 2003). However, the potential negative impact that social constraints may have on disclosure, and in turn, on recovery and
adjustment from a breakup even when a substantial amount of time has elapsed has not yet been investigated.

**Social Constraints and the Social-Cognitive Processing Model**

Lepore and colleagues (1996) and Kliewer and colleagues (1998) devised a social-cognitive approach to adjustment in which they consider the impact of social variables, specifically negative social interactions in the form of social constraints on disclosure and how they may impact individuals coping with a major life experience. Lepore (2001) and Lepore and Revenson (2007) acknowledged the benefits of social support but recognized that much of the early research on cognitive processing theories (See Epstein, 1985; Horowitz, 1986a; Janoff-Bulman, 1992 for a review) failed to account for the influence of social constraints.

In general, cognitive processing theories focus on the processing of information that is incompatible with already existing schemas (Epstein, 1985; 1991; Horowitz, 1976, 1986b; Janoff-Bulman, 1992; Lepore et al., 1996). Cognitive processing theories emphasize the need to assimilate new information into existing schemas or to accommodate new information by modifying pre-existing schemas in order to interpret an incident in a way that makes sense to them personally (Epstein, 1985; Horowitz, 1986a; Janoff-Bulman, 1992). However, if the assimilation and accommodation processes are unsuccessful at integrating the experience, the cognitive processing of the event is likely to remain incomplete or be prolonged, which often leads to feelings of distress and the experience of intrusive thoughts (Baum et al., 1993; Creamer, Burgess, & Pattison, 1990; Horowitz, 1976, 1986a, 1986b; Janoff-Bulman, 1992; Silver, Boon, & Stones, 1983).
When major life events are not easily assimilated or accommodated, research has found that individuals are often re-exposed to the experience through thoughts, memories, and related images, and they often seek out opportunities to discuss the stressor (Lepore et al., 1996). Re-exposure and opportunities to talk may aid in integrating event-related information into pre-existing mental schemas, and this is believed to lead to better emotional adaptation in certain contexts (Fagundes, Berg, & Wiebe, 2012; Harber & Pennebaker, 1992; Horowitz, 1986a; Horowitz et al., 1993; Janoff-Bulman, 1992; Pennebaker, 1989; Rachman, 1980; van der Kolk & van der Hart, 1991). Although conversations with social network members may help hasten the overall process of finding meaning, understanding, and perspective about the trauma (Clark, 1993; Lagrand, 1988), researchers have begun to examine how social constraints imposed by close others’ can impact subsequent disclosure, and, in turn, the cognitive processing of the experience.

The investigation into the construct of social constraints remains fairly new although the empirical evidence which has been garnered thus far shows a clear utility for further investigation and applicability of such a construct. Social constraints are best conceptualized as a two-part interconnected process: a) social network members can behave in a way that may constrain the disclosure of a friend or relative in need through their actions and mannerisms, whether overt or covert, and b) the friend or relative in need perceives these actions or thoughts as restrictive or constraining (Lepore & Revenson, 2007). Hence, social constraints create a psychological barrier that likely limits an individual’s coping options and willingness to discuss and share thoughts and feelings pertaining to an event or experience (Lepore, 2001). Moreover, according to the
SCP model, when people are met with social constraints in response to disclosing information about a stressful experience, disclosers are more likely to utilize an avoidant coping approach in which they try to avoid having thoughts or feelings about the stressful experience. In turn, the disclosers are less apt to seek out further opportunities to share with close others and risk encountering additional social constraints (Lepore et al., 1996). Thus, social constraints may lead to interruptions in the cognitive processing of the event and continued distress (Lepore et al., 2000; Lepore et al., 1996).

The consequences of avoidance in response to socially constraining interactions are similar to the effects of thought suppression, such that avoidance or suppression of event-related thoughts may lead to the unexpected maintenance of such thoughts (Lepore et al., 1996; Salkovskis & Campbell, 1994; Wegner, 1994; Wegner, Schneider, Carter, & White, 1987). In fact, the social constraints literature views attempts at active thought suppression as a type of avoidant coping (Lepore et al., 1996). When people engage in avoidant coping following a socially constraining interaction, they often experience increased distress and intrusions. In turn, the residual effects of the avoidance manifests in a way similar to thought suppression. Although avoidance and active thought suppression may initially provide some emotional relief in the short term, both types of coping mechanisms are related to less cognitive processing, greater distress overall, and a reduced tendency to disclose (Cordova, Walser, Neff, & Ruzek, 2005; Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Lepore et al., 1996). Furthermore, because people are unlikely to be engaging in the cognitive processing needed, they are at risk of entering into a cycle of intrusions and avoidance (Lepore et al., 1996; Wegner, 1994).
Differences between social constraints and social support. Social constraints are not the same as negative social support or low social support (Lepore & Revenson, 2007). Several researchers have demonstrated that the correlation between social constraints and social support is weak ($r = .18$ in Kaynak et al., 2011; spouse: $r = -.22$, range for friends/family: $r = -.12$ to .05 in Lepore & Ituarte, 1999). In addition, research has shown that social constraints and social support relate differently to psychological outcomes (Harper et al., 2007; Kratz et al., 2010). For instance, social constraints are more closely related to negative affect compared to social support (Lepore & Ituarte, 1999). Furthermore, Schmidt and Andrykowski (2004) found that social constraints were associated with depression, anxiety, intrusions, and avoidance whereas social support was only associated with depression, and Kaynak et al. (2011) demonstrated independent effects of social support and social constraints in predicting depressive symptoms among adolescents exposed to community violence.

The term, social support, is often used to refer to the benefits that interpersonal relationships provide to individuals who are experiencing stressful circumstances (Kessler, Price, & Wortman, 1985). Through interpersonal relationships that are perceived as socially supportive, individuals are afforded outlets through which they can disclose details, thoughts, and feelings related to a stressful event. The act of disclosing information related to a stressful event has been associated with less distress compared to not sharing such information (Harber & Pennebaker, 1992; Stiles, 1987). Moreover, those who seek support and retain a willingness to share and discuss the details of a stressful event typically experience less physical and psychological problems (Pennebaker, 1989, 1990; Pennebaker & Harber, 1993; Pennebaker & O’Heeron, 1984).
Social support has been widely investigated and most research has found that it offers significant benefit to individuals experiencing a major life event (Brewin, Andrews, & Valentine, 2000; Dagan et al., 2011; Guay, Billette, & Marchand, 2006; Helgeson & Cohen, 1996; Roberts et al., 2006; Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). For instance, it has been found that social support may serve as a protective factor, or at least a buffer, against stress while also fostering better emotional adjustment (Kessler et al., 1985; Lepore, 1992; Thoits, 1982; Zakowski et al., 2003). Interestingly, regardless of whether social support is actually sought, simply knowing that people exist who could provide such support can help ameliorate the impact of life’s stressors (Dunkel-Schetter & Bennett, 1990; Wethington & Kessler, 1986).

With regards to social constraints, oftentimes social network members are trying to provide social support and help the individual cope with, and recover from, the stressful event. However, their efforts at providing support fall short, and in turn, they end up constraining the person (Pistrang & Barker, 2005; Reynolds & Perrin, 2004). In other words, social support is either provided or not provided as part of the interaction, whereas social constraints characterize the outcome of such interactions (Lepore & Revenson, 2007). People can provide social support to individuals coping with a major life event, and at times, that support may be helpful whereas at other times it may constrain subsequent disclosure. For example, social network members may think they are acting in a supportive manner when they dismiss the issue by trying to reassure the disclosers that it will get better or attempt to provide a distraction by offering a different topic of conversation. They make these efforts because they believe their actions will help their friends in need, not because they do not want to be supportive. For some
friends, such actions may be welcomed, but other friends may construe such efforts as constraining, and in turn, may inhibit or modify the way they disclose their thoughts and feelings going forward.

Expression of social constraints. Social constraints may be expressed in a variety of ways, such as criticism, withdrawal, or minimizing opportunities for interaction (Kliwer et al., 1998; Lepore & Helgeson, 1998; Lepore & Ituarte, 1999; Lepore & Revenson, 2007; Lepore et al., 1996; Manne, 1999; Manne & Glassman, 2000; Zakowski, Ramati, Morton, Johnson, & Flanigan, 2004). For instance, a family member or friend who was sought out to provide social support may unexpectedly criticize the distressed individual for the way he/she is perceiving and coping with the stressful experience. Similarly, if a friend is seeking support following a recent breakup with an individual the social network member did not like or feel was good for the friend, it may be difficult for the network member to figure out how best to respond. In turn, this may lead to behavior by the social network member that is perceived as socially constraining by the discloser. Social constraints can also be conveyed nonverbally by appearing disinterested (e.g., looking around, not maintaining eye contact), agitated, or uncomfortable (Lepore & Helgeson, 1998; Lepore et al., 1996; Manne, 1999; Manne & Glassman, 2000).

Social constraints do not necessarily emerge out of malicious intent. Although social constraints may be perceived after a social network member acts in a critical manner, they can also emerge when support is delivered with good intention (Lepore & Revenson, 2007). For example, social network members may unintentionally act in a constraining manner if they are not comfortable with the topic of discussion.
Furthermore, they may be concerned about saying the wrong thing and causing the discloser additional distress (Badr & Carmack Taylor, 2006). Similarly, there are topics in which people are not sure how to respond. In turn, this ambivalence may be perceived by the discloser as unfeeling, rejecting, and socially constraining (Lepore & Revenson, 2007; Wortman & Lehman, 1985). For instance, in a study by Pistrang and Barker (2005), a husband’s remarks were perceived by his wife who was battling breast cancer as socially constraining as she desired for him to act more supportive, but he asserted that he was trying to maintain a positive outlook. This illustrates an apparent mismatch between the husband’s response and the wife’s desired response. Furthermore, there was a discrepancy between the husband’s intention and the wife’s perception; the husband intended to act supportive by maintaining a positive outlook, but the wife perceived the husband’s remarks as dismissive, and, therefore, constraining.

**Prevalence and consequences of social constraints.** Many people experience social constraints from their interactions with social network members (Lehman, Ellard, & Wortman, 1986; Lehman & Hemphill, 1990; Pennebaker & Harber, 1993). In a study that focused on lung cancer patients and spouses of other lung cancer patients, more than 30% of participants reported that they avoided or had difficulty discussing cancer. Nearly one-third of the patients reported that their spouses were in denial of the cancer which, in turn, could impact the patients’ willingness to disclose. Moreover, more than half of the sample (both patients and spouses) explained that they avoided topics related to the cancer, such as prognosis and fears of death (Badr & Carmack Taylor, 2006). Thus, the presence of social constraints in relationships that are perceived as supportive is not a small-scale issue but rather one that needs attention given its widespread
implications, especially given the limitations that constraints may pose to coping with a significant life event.

Social constraints are likely to impact people who are trying to cope with a stressful experience both initially through their willingness to disclose, as well as in the long term as a consequence of being associated with various adverse effects (e.g., depression, distress, maladjustment, interruption to cognitive processing) on overall recovery and adjustment (Kliewer et al., 1998; Lepore et al., 1996; Lepore & Revenson, 2007; Pagel, Erdly, & Becker, 1987; Silver et al., 1983; Silver, Wortman, & Crofton, 1990). Consistently, research has found evidence that social constraints are associated with an increase in distress, intrusive thoughts, and avoidance behaviors, and are likely to lead to problems related to adjustment following a major life event (Cordova et al., 2005; Lepore, 2001; Lepore & Helgeson, 1998; Manne, 1999; Schnur et al., 2004).

When friends or family members behave in a socially constraining manner, the distressed individuals may modify the way the information is delivered in an attempt to avoid further constraints (Tait & Silver, 1989). For instance, lung cancer patients reported that they changed their approach and interaction with their spouses because they believed their spouses felt uncomfortable and were trying to avoid the topic (Badr & Carmack Taylor, 2006). Despite their attempt to modify the delivery of the conversation, they continued to perceive marital strain and social constraints. Additionally, distressed individuals may refrain from seeking support not only from the particular network member who was socially constraining but from others as well out of fear of being further criticized and rejected (Lepore & Revenson, 2007).
Alternatively, they may try to inhibit any thoughts or feelings related to the trauma. They may grow increasingly reluctant to think or talk about the traumatic experience if the social network members they attempted to converse with did not validate their thoughts and feelings. Researchers have suggested that social constraints may serve as a risk factor, in part because they are associated with an increased tendency to engage in avoidance behaviors, which, in turn, will reduce individuals’ chances to engage in the cognitive processing necessary to make sense of the stressful experience (Kaynak et al., 2011; Lepore & Helgeson, 1998; Lepore et al., 2000; Manne & Glassman, 2000; Manne et al., 2005). Furthermore, when disclosers actively try to avoid or suppress thoughts and feelings pertaining to a stressor, they tend to think about those topics even more and experience greater emotional distress (Lepore, 2001; Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Lepore et al., 1996; Wegner, 1994). For instance, women who had lost an infant to SIDS were more likely to avoid talking about their thoughts and feelings if they had encountered social constraints, and they also reported more distress associated with their intrusive thoughts (Lepore et al., 1996). Similar effects of avoidance have been evidenced in research on cancer patients, and across several studies, avoidance has been found to mediate the relation between social constraints and psychological distress (Lepore & Helgeson, 1998; Manne & Glassman, 2000; Manne et al., 2005; Schnur et al., 2004).

Regardless of how social constraints are conveyed, they can have a significant impact on levels of emotional distress and overall psychological adjustment (Lepore & Helgeson, 1998; Lepore & Ituarte, 1999; Lepore & Revenson, 2007). Specifically, research has demonstrated that social constraints are related to and predictive of both
event-related distress (e.g., cancer-related intrusive thoughts) as well as measures of overall distress (e.g., depressed mood) (Cordova et al., 2005; Eton, Lepore, & Helgeson, 2005; Hoyt, 2009; Ullrich et al., 2002). Ultimately, it does not appear to be enough to simply offer social support; rather, the supportive efforts must be provided and subsequently perceived in a non-constraining manner. If a social network member offers support in such a way that it is perceived to be not meaningful or delivers a message of judgment or disinterest, the potential benefits of the social support may be nullified (Lepore & Revenson, 2007). Supportive social networks have the potential to promote psychological adjustment as long as they are not simultaneously constraining.

The Impact of Self-Monitoring on Responses to Social Constraints

Previous research on the relation between dispositional characteristics and social constraints. More recently, researchers have begun to speculate about the potential impact that personality factors may have on the perception of social constraints. For example, Lepore and Revenson (2007) conjectured that individuals with high levels of anxiety or people who have difficulty expressing their emotions might be more likely to face social constraints in response to their disclosures. Furthermore, the level of social constraints on disclosure may vary based on whether an individual has an optimistic versus a pessimistic outlook (Lepore & Ituarte, 1999). People who exhibit a pessimistic outlook and are seeking support are likely to encounter greater social constraints from members of their social networks. People who are pessimistic are generally more unpleasant to be around; thus, social network members are not as eager to provide social support (Lepore & Ituarte, 1999). In addition, pessimists are often limited in their use of adaptive coping strategies (Lepore & Ituarte, 1999). For example, pessimistic disclosers
are more apt to reject social network members’ attempts at providing a positive outlook on the situation, in turn making it more difficult to provide support in a non-constraining manner (Lepore & Ituarte, 1999; Lepore & Revenson, 2007; Silver et al., 1990).

Another way disposition may be related to social constraints pertains to how people deal with a major life event (Coates, Wortman, & Abbey, 1979; Lepore, 1997; Silver et al., 1990). Research suggests that people who have a more difficult time coping with a major stressor are typically more likely to be confronted by social constraints (Quartana, Schmaus, & Zakowski, 2005). Brady and Helgeson (1999) found that a patient’s psychological adjustment following a recurrence of breast cancer was related to a decrease in the amount of emotional support provided by the partner. Similarly, Bolger, Foster, Vinokur, and Ng (1996) reported a negative relation between a patient’s psychological distress and the amount of emotional support provided by the partner. In both of these studies, it appears that how a patient adjusts to her illness impacts the perceived support and constraint tendencies of social network members. Importantly, neither study by Brady and Helgeson (1999) nor Bolger et al. (1996) specifically assessed social constraints. Nevertheless, these studies were particularly important in examining the relation between social support and distress within a longitudinal framework. Interestingly, in both of these studies, no evidence was found for social support at Time 1 impacting adjustment or distress at Time 2. However, poor psychological adjustment (Brady & Helgeson, 1999) and emotional distress (Bolger et al., 1996) at Time 1 were related to reduced social support at the time of follow-up.

Furthermore, Quartana et al. (2005) found that neuroticism and constraints imposed by the spouses of cancer patients were positively related. Moreover, the
researchers reported that emotional expressivity moderated this effect, but only among female patients. These results suggest that women who both exhibit a great deal of distress and also have a tendency to share this distress with close others are more likely to perceive a greater level of social constraints. A similar relation was found in research conducted by Agustsdottir et al. (2010). In this study, distress and perceived social constraints were positively correlated among individuals characterized by high emotional expressivity.

Research has clearly demonstrated that how individuals view, handle, and adjust to their illness may influence members of their social networks, and in turn, the social support they receive as well as the possibility of constraints on subsequent disclosure. However, what had not yet been investigated was how dispositional factors may impact people’s reactions to social constraints. There is reason to believe that people’s tendency to engage in avoidance behavior in response to social constraints may differ depending on the degree to which they self-monitor.

**Self-monitoring and its hypothesized impact on reactions to social constraints.** Self-monitoring pertains to the degree to which people monitor the behavior of others to provide cues as to how they should behave (Snyder, 1974). Social acceptance is of greater concern for higher self-monitors (Snyder, 1987). Subsequently, higher self-monitors are more likely than lower self-monitors to be influenced by social cues and they are more likely to alter their own behavior according to the cues provided by their interaction partner (DeBono & Omoto, 1993). However, the behavior of those who are lower in self-monitoring is more consistent across different situations as the
attitudes and beliefs guiding their behavior are likely to be more stable (Gangestad & Snyder, 2000).

Guarino, Michael, and Hocevar (1998) investigated how individuals would adjust both socially and academically in college. They predicted that high self-monitors would show better social integration in college compared to low self-monitors, while low self-monitors would show better academic adjustment. High self-monitors tend to be more aware of their social environments and more knowledgeable as to which behaviors should be exhibited in order to achieve social acceptance. On the contrary, low self-monitors tend to show less regard for what is socially acceptable and are less concerned about what others may think of them, and, therefore, they may be less worried about seeking social acceptance. The results partially supported Guarino et al.’s (1998) prediction. They found that men who were high self-monitors showed better social integration compared to men who were low self-monitors; however, no difference was found for women. Furthermore, the results suggested that low self-monitors were more likely than high self-monitors to become integrated academically.

Furthermore, Gangestad and Snyder (2000) explained that high self-monitors have the capabilities to monitor their behavior so that their actions appear most desirable in social situations. Moreover, Li and Zhang (1998) found that high self-monitors show a greater attention to how others react in social situations so that they can use those reactions to guide their own behavior when faced with similar social situations. However, researchers (Gangestad & Snyder, 2000; Li & Zhang, 1998) found that low self-monitors are considerably less likely to develop a concern for other’s opinions and are never as driven to achieve social acceptance as those individuals who are high in self-
monitoring. Low self-monitors seek to act in accordance with their own attitudes and beliefs as opposed to acting in ways that will be viewed as socially appropriate.

Based on the research above, it seemed logical to expect those higher in self-monitoring to be more likely to alter their disclosure behavior in response to the social constraints they perceive from social network members whereas lower self-monitors are likely to perceive the same level of social constraints but are less inclined to react or modify their behavior accordingly. Lepore and Revenson (2007) suggested that one reason social constraints may lead to an increase in avoidance behaviors is people’s desire to preserve their social relationships. In other words, when disclosers perceive their social network members to be disinterested or uncomfortable whenever they try to discuss their stressful experience, they alter their behavior accordingly. Thus, higher self-monitors would be expected to be more likely than lower self-monitors to alter their behavior to bring it more in line with what is expected by social network members in order to evade any (further) potential conflict or discomfort in the relationship. According to the SCP model, the alteration in behavior is likely to manifest as increased avoidance. Together this suggests that individuals higher in self-monitoring are more likely than those lower in self-monitoring to avoid further disclosure related to the stressful experience. If this is true, higher self-monitors may be vulnerable to experience an exaggerated avoidance reaction compared to lower self-monitors, which, in turn, may predispose them to experience higher levels of psychological distress.

**Study Hypotheses**

Research has consistently shown that the dissolution of a romantic relationship can be very distressing and upsetting, and has been associated with feelings of anxiety
and depression (Chung et al., 2002, 2003; Lagrand, 1988; Sprecher, 1994). Similar to other major life events, people recovering from a breakup may experience intrusive thoughts and increases in psychological distress (Chung et al., 2002, 2003; Davis et al., 2003). One way people may cope with a relationship breakup is to seek support and opportunities to talk with close others (Chung et al., 2003). Although interpersonal interactions with close friends and relatives may be beneficial for some, it also provides opportunities for the disclosers to perceive social constraints that can hinder adjustment and exacerbate distress.

In general, research utilizing the SCP model (Kliwer et al., 1998; Lepore et al., 1996) has shown that social constraints are related to several negative outcomes including intrusive thoughts, avoidance behavior, distress and negative affect. Although this research marked the first time social constraints and the SCP model were investigated with regards to relationship dissolution, I expected to find similar relations between social constraints and the outcome measures. First, I hypothesized that social constraints would be positively related to both intrusive thoughts and avoidance behaviors, such that participants who reported higher levels of social constraints would also indicate that they experienced more frequent intrusive thoughts and engaged in more avoidance behaviors. Furthermore, I expected social constraints to be positively correlated with breakup distress and depressed mood.

Following the breakup of a romantic relationship, many people report that they experience intrusive thoughts and a great deal of associated distress (Chung et al., 2002, 2003; Davis et al., 2003). Research has suggested that the experience of intrusive thoughts may be the result of incomplete processing of an important life event (Baum et
al., 1993; Creamer et al., 1990; Horowitz, 1976, 1986a, 1986b; Janoff-Bulman, 1992; Silver et al., 1983). Furthermore, research suggests that by being re-exposed to the situation and by talking about the event, people may be able to make sense of the experience and in turn report a decline in intrusive thoughts, and ultimately, in distress. However, a decline in intrusive thoughts and a weakening of the association between intrusive thoughts and distress is more likely to occur when people can discuss their experience with social network members who do not act in a constraining manner (Lepore & Helgeson, 1998; Lepore et al., 1996).

Thus, I hypothesized that social constraints would moderate the relation between intrusive thoughts and breakup distress (See Figure 1). In other words, I expected the association between intrusive thoughts and distress to vary depending on whether social constraints were high versus low. Those individuals who recently endured the dissolution of a romantic relationship and report experiencing intrusive thoughts as well as encountering social constraints are likely to indicate higher levels of distress compared to those who report experiencing intrusive thoughts but a lower amount of social constraints. A similar moderation effect by social constraints was hypothesized to exist for the relation between intrusive thoughts and depressed mood.

The potential negative impact that social constraints may have on recovery and adjustment from a breakup even when a substantial amount of time has elapsed had not yet been investigated. However, I expected that social constraints would moderate the relation between time since the romantic dissolution and the outcome variables of breakup distress and depressed mood (See Figure 2). Thus, I believed the association between time since the breakup and distress would differ as a function of level of social
constraints. Research has suggested that the amount of time since the breakup is negatively correlated with breakup distress (Knox, et al., 2000; Moller et al., 2003). This statistical relationship indicates that as more time passes after a breakup, people report less distress associated with the dissolution, potentially because they have had an opportunity to discuss the breakup and come to terms with it. However, if individuals feel socially constrained while they are trying to process the breakup, it is unlikely that they will report a decline in breakup distress even as more time elapses.

**Figure 1.** Visual representation of hypothesis 2 illustrating that social constraints are expected to moderate the relation between intrusive thoughts and breakup distress/depressed mood.
I also hypothesized that avoidance would mediate the relation between social constraints and breakup distress, such that individuals who report higher levels of social constraints are likely to report higher levels of avoidance, which in turn, would lead to higher levels of distress (Schnur et al., 2004; See Figure 3). In response to social constraints, people may try to avoid thinking or talking about their stressful experience in an effort to evade additional negative social reactions (Kliwer et al., 1998). In addition, avoidant coping may be utilized in an effort to preserve the relationships with the social network members. However, by avoiding talking and thinking about the breakup, people may not deal with the thoughts and feelings associated with the romantic dissolution as well as the breakup-related distress. Again, I expected to find that avoidance would also mediate the relation between social constraints and depressed mood.

Figure 2. Visual representation of hypothesis 3 illustrating that social constraints are expected to moderate the relation between time since the breakup and breakup distress/depressed mood.
Furthermore, I predicted that the relation between social constraints and the mediating variable, avoidance, would vary as a function of self-monitoring (See Figure 4). Self-monitoring is concerned with the degree to which people match their behavior to that of their interaction partners. Higher self-monitors are more likely to adjust their own behavior to match that of their social network members (Leone & Hall, 2003). On the contrary, lower self-monitors are likely to be less concerned with, or possibly less aware of the social appropriateness of their expression (Snyder, 1974). Consequently, those lower in self-monitoring may be less likely to alter their behavior in response to social
constraints emitted by social network members. Therefore, I expected individuals regardless of their level of self-monitoring to perceive social constraints, but I further hypothesized that how they react to such constraints in terms of level of avoidance would differ as a function of their tendency to self-monitor. Compared to lower self-monitors, I predicted that higher self-monitors would be more likely to respond to social constraints by trying to avoid thinking and talking about the subject matter further. Subsequently, greater avoidance is likely to correlate with higher levels of breakup distress and depressed mood. Therefore, individuals who are higher in self-monitoring are likely to experience an exaggerated avoidance response in reaction to social constraints, and, consequently, report greater distress levels. Thus, at a higher level of self-monitoring, avoidance was expected to significantly mediate the relation between social constraints and psychological distress.

Figure 4. Visual representation of hypothesis 5 illustrating that the path between social constraints and the mediating variable of avoidance is expected to vary as a function of self-monitoring.
CHAPTER 3

METHODS

Participants

One hundred and eighty-nine students attending Temple University completed the Romantic Breakups online study. Participants were recruited through the Psychology Department Research Pool or signed up to participate after viewing a study advertisement. In exchange for their participation, all participants received one hour of research credit toward a course requirement (if applicable) as well as one optional entry into a lottery to win a prize. The lottery prizes consisted of five gift cards to local retailers, all valued at $25 or less, as well as one Canon digital camera, valued at around $75. Lottery winners were selected at random following the completion of data collection.

Out of the 189 participants, 15 individuals did not meet the eligibility criteria detailed below and were subsequently excluded from all analyses, leaving a final sample of 174 (107 women, $M_{age} = 20.65$ years). Nearly 64% of the final sample reported their race/ethnicity as White/White-American, 14% as Black/African-American, 13% as Asian/Asian-American, 6% as Hispanic/Hispanic-American, 1% as Pacific Islander, and 2% as Other.

Eligibility criteria. Eligibility to participate in the study was contingent on three criteria. First, participants must have experienced a romantic breakup in the past twelve months. Several researchers have examined the psychological effects of a romantic breakup among individuals who experienced the dissolution of a relationship within the past twelve months (Chung et al, 2002, 2003; Mears, 1991; Sprecher, Felmlee, Metts,
Research has illustrated that the effects of relationship dissolution are often not short-lived, and many individuals continue to report psychological distress more than six months after the breakup (Chung et al., 2002, 2003; Mearns, 1991; Sprecher et al., 1998). Thus, I felt justified in including individuals in the sample who experienced the dissolution of a romantic relationship within the last year.

Second, participants must have felt distress following the breakup. Distress can manifest in many different ways. Thus, distress was operationalized in terms of feeling any of the following: anxious, hurt, pained, sorrowful, frustrated, depressed, lonely, insecure, rejected, empty, or experiencing a sense of loss (Chung et al., 2003; Lagrand, 1988; Sprecher, 1994).

Finally, participants must have talked about the romantic breakup at some point with friends, family members, or individuals other than their friends and relatives. As previously mentioned, most people have a desire to talk following a life stressor. Individuals who do not have a desire to talk following a stressful experience may be avoiding thoughts and feelings pertaining to the event or they may be trying to process the experience independently. Nevertheless, the current research focused on the impact of social constraints in response to disclosure about the dissolution of a romantic relationship, and, therefore, it was necessary for participants to have disclosed about their breakup experience.

Eligibility requirements were clearly presented to potential participants prior to the start of the study. In addition, eligibility was verified by examining participants’ responses to three key questions designed to parallel the eligibility criteria. In total, 15 individuals were excluded due to ineligibility. Eight participants were excluded because
they reported that their romantic breakup occurred more than 12 months ago. Four individuals’ data were omitted from the analyses because they reported feeling no distress following their breakup. One of the four participants who reported no distress following the dissolution and an additional three participants indicated that they had not talked about their romantic breakup with anyone.

**Design and Power Analysis**

This study used a cross-sectional design, incorporating tests of moderation, mediation, and moderated mediation. Although there are no previous studies that assessed the interaction between social constraints and self-monitoring, there are several articles within the social constraints literature that reported other interaction effects, including one study which reported the interaction between social constraints and a dispositional variable (emotional expressivity) other than self-monitoring (Agustsdottir et al., 2010; Kaynak et al., 2011; Lepore & Helgeson, 1998; Lewis et al., 2006). The effect sizes of these interactions were small to medium. For this design, a minimum of 101 participants were needed in order to detect an effect of $f^2 = .08$ with 80% power (G*Power 3; Faul, Erdfelder, Lang, & Buchner, 2007).

**Materials**

All measures are listed in their entirety in the Appendix. Participants were instructed to think about their most recent breakup within the past year in which they felt distressed or upset after the relationship ended, and had talked about it with others. Additionally, instructions stated that participants should respond honestly and openly, and they were assured that all of the information they provided would be kept completely confidential.
Demographics questions: All participants reported gender, race, age, and year in school.

Relationship-related questionnaire. Participants answered several classification questions about their previous relationship. For example, participants indicated how long ago they experienced their most recent breakup as well as how long that prior relationship had lasted and who initiated the breakup. Participants helped characterize their previous relationship by reporting the quality of the relationship prior to the breakup as well as their level of commitment and closeness. Perceptions of the breakup were also assessed, including whether it was sudden and unexpected and the participants’ feelings of rejection and betrayal.

Participants also reported whether they still see or talk to their ex-partner, their interest in getting back together with their ex-partner, and their current relationship status. Interestingly, research has indicated that despite moving forward with a new relationship, some of the negative effects associated with relationship dissolution appear to persist (Chung et al, 2002, 2003). Additionally, participants assessed their feelings of distress and loss since the relationship dissolution, and their interest in getting over the breakup. Finally, participants were asked whether they sought counseling following the breakup.

Self-reported amount of talking. Some of the items included in the Social Constraints Scale assume that participants have talked about their stressful experience (Lepore et al., 1996). Thus, the eligibility requirements stated that participants must have talked about their romantic breakup at some point with friends, family members, or individuals other than their friends and relatives. In an effort to verify eligibility, participants were asked Following the breakup of your romantic relationship, how often
did you actually talk with your closest friend(s) or relative(s) about the breakup and

Following the breakup of your romantic relationship, how often did you actually talk with people other than your closest friend(s) or relative(s) about the breakup. Participants’ responses ranged from not at all (1) to a great deal (5). Participants who indicated not at all \( (n = 4) \) in reference to discussing their breakup with friends, family members, or individuals other than their friends or relatives were excluded from all analyses.

**Social Constraints Scale.** The current study used the extended version of the Social Constraints Scale which consists of 15 items rated on a four-point Likert-type scale where one denotes never and four represents often (Cordova, Cunningham, Carlson, & Andrykowski, 2001; Cordova et al., 2005; Herzer, Zakowski, Flanigan, & Johnson, 2006; Lepore & Ituarte, 1999). The Social Constraints Scale assesses close others’ responses to a discloser who is dealing with a life stressor. For the purposes of the current study, the Social Constraints Scale was modified to make reference to the breakup of the romantic relationship the participants had experienced. Example items include

*How often has a friend or family member changed the subject when you tried to discuss your breakup?* and *How often did a friend or family member minimize your breakup problems?* A total score was calculated based on responses to all of the individual items \( (\alpha = .89) \).

**Self-Monitoring Scale.** The Self-Monitoring Scale (Snyder, 1974) measures the extent to which individuals consciously employ impression management strategies in social interactions. Self-monitoring is concerned with the extent to which people adjust their behavior to meet situational demands. Participants responded to 25 items by indicating True or False as to how well each item describes him/her. Items included
I find it hard to imitate the behavior of other people, my behavior is usually an expression of my true inner feelings, attitudes, and beliefs, and at parties and social gatherings, I do not attempt to do or say things that others will like. The internal consistency of the scale was low ($\alpha = .59$). Previous research has reported the internal consistency ($\alpha = .67$ to $\alpha = .69$) of the scale to be slightly better, although still not impressive (Briggs, Cheek, & Buss, 1980).

**Big Five Inventory.** The Big Five Inventory (John, Donahue, & Kentle, 1991) is a self-report measure consisting of 44 items presented as short phases. The Big Five Inventory assesses the Big Five dimensions of personality, which include extraversion ($\alpha = .85$), agreeableness ($\alpha = .77$), conscientiousness ($\alpha = .75$), neuroticism ($\alpha = .75$), and openness ($\alpha = .82$).

Although Synder (1974) contended that self-monitoring is relatively independent of other variables, including social desirability, research has demonstrated a significant positive relationship between self-monitoring and several of the Big Five personality traits, especially extraversion ($r = .34$) and openness ($r = .16$) and a significant negative relationship with conscientiousness ($r = -.18$; Avia, Sanchez-Bernadillos, Carrillo, & Rojo, 1998). Other researchers have reported a similar finding with extraversion (Briggs et al., 1980; Furnham, 1989) as well as a significant negative correlation with neuroticism (Furnham, 1989; Furnham & Capon, 1983). In the current study, self-monitoring was significantly correlated with extraversion ($r = .25, p < .01$) and openness ($r = .26, p < .01$). Self-monitoring did not correlate with agreeableness ($r = .07, p = .37$), conscientiousness ($r = -.04, p = .62$), or neuroticism ($r = -.03, p = .69$).
Despite these associations with several of the Big Five personality dimensions, self-monitoring remains an independent construct (Furnham, 1989; Snyder, 1974). Nevertheless, it is important to be able to control for such potential associations; thus participants completed the Big Five Inventory and relations between the personality dimensions and the main variables of interest in the regression models were examined to determine if any of the Big Five Inventory subscales should be included in the analyses as covariates.

**The Social Provisions Scale.** The Social Provisions Scale (Cutrona & Russell, 1987; Cutrona, Russell, & Rose, 1986) assesses perceived social support by evaluating six provisions (i.e., attachment, social integration, reassurance of worth, reliable alliance, guidance, and opportunity for nurturance) individuals typically receive from relationships with other people. Example items include *There are people I can depend on to help me if I really need it* and *I feel that I do not have close personal relationships with other people* (reverse coded). All responses were made on a four-point Likert-type scale where one represented strongly disagree and four denoted strongly agree. The Social Provisions Scale was included to provide an overall measure of social support; therefore, only a total score was calculated by summing across all of the subscales ($\alpha = .92$).

Social support was assessed to evaluate its association with social constraints as well as with both distress variables, and then subsequently decide whether it should be controlled for in all multivariate analyses (Miller & Chapman, 2001; Spector & Brannick, 2011). In addition, by assessing these relations between social support and other variables of interest, I hoped to provide further evidence of discriminant validity between social constraints and social support as well as additional information concerning the
relations that both social constraints and social support have with various psychological outcomes.

**Impact of Event Scale.** The Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979) consists of 15 items and assesses both intrusion-related items (e.g., “I had waves of strong feelings about the breakup”) as well as avoidance-related items (e.g., “I tried to remove it from memory”). All items were rated on a four-point Likert-type scale ranging from not at all to often. In the current research, participants responded to the Impact of Event Scale based on their experiences since their last romantic relationship breakup.

The avoidance-related items assessed the frequency with which participants avoided thoughts and feelings pertaining their romantic breakup ($\alpha = .72$). The intrusion-related items examined how often the participants reported experiencing persistent and uncontrollable thoughts about their relationship dissolution ($\alpha = .86$). Avoidance-related items were tallied independently from the intrusion-related items, and higher scores denoted greater avoidance of thinking about the breakup and more frequent intrusive thoughts about the romantic dissolution, respectively. No total score was computed for the Impact of Event Scale as the planned analyses were specific to the avoidance subscale or the intrusion subscale. The correlation between the avoidance subscale and the intrusion subscale was moderately strong ($r = .46, p < .001$) and was similar to that reported by Horowitz et al. (1979; $r = .42, p < .01$).

**Outcome measures.** The current study examined two outcome measures. The Breakup Distress Scale was administered as a measure of event-specific distress, whereas the Center for Epidemiologic Studies Depression Scale (CES-D) was included to provide
an indication of general distress. The inclusion of both an event-specific measure of distress as well as a general measure of distress is consistent with the social constraints literature (Agustsdottir et al., 2010; Cordova et al., 2001; Cordova et al., 2005; Lewis et al., 2006; Manne, 1999; Ozer & Weinstein, 2004; Schmidt & Andrykowski, 2004; Schnur et al., 2004; Ullrich et al., 2002; Zakowski et al., 2003). Previous research has reported moderate to strong correlations between event-specific distress and general measures of distress (Agustsdottir et al., 2010; Lewis et al., 2006; Manne, 1999; Ozer & Weinstein, 2004; Schmidt & Andrykowski, 2004; Ullrich et al., 2002; Zakowski et al., 2003). In the current study, the correlation between the two measures of distress was $r = .77$ ($p < .001$). The strength of this statistical relationship was considerably stronger compared to relations among similar types of measures which have been reported in prior research.

Moreover, Norton et al. (2004) reported that female cancer patients reported higher levels of cancer-specific distress than general levels of distress. Furthermore, some prior (Agustsdottir et al., 2010; Schmidt & Andrykowski, 2004) studies have reported no differences in the statistical relationships between social constraints and both general and specific measures of distress. For example, Schnur et al. (2004) reported that social constraints were related to both cancer-specific distress ($r = .33$) as well as general psychological distress ($r = .26$), and Lewis et al. (2006) reported similar relationships between social constraints and specific distress (intrusions; $r = .41$) as was found with general distress (negative mood; $r = .35$).

Other researchers have reported differences in the statistical relationships between social constraints and both general and specific measures of distress. Ullrich et al. (2002)
reported a stronger relationship between social constraints and depression \((r = .56, p < .001)\) compared to the relationship between social constraints and HIV stress \((r = .40, p < .001)\). Similarly Zakowski et al. (2003) found that social constraints from a spouse/partner were a stronger predictor of an indicator for general distress \((B = 0.38)\) than it was for cancer-specific distress \((B = 0.16)\). On the contrary, Ozer and Weinstein (2004) reported that children exposed to violence and perceived social constraints reported higher specific-distress (PTSD symptoms), but social constraints did not predict general-distress (depressive symptoms). It is apparent that there is some variability in the degree of relatedness between an event-specific measure of distress and a general measure of distress, as well as the strength of the relationships between social constraints and each of the distress measures. Therefore, it seemed appropriate to include both a breakup-specific measure of distress (Breakup Distress Scale) and a more general measure of distress (CES-D) in the current study.

**The Breakup Distress Scale.** The Breakup Distress Scale (Field et al., 2009) was adapted from the Inventory of Complicated Grief (ICG; Prigerson et al., 1995). The ICG consists of 19 items and assesses symptoms of grief that are distinct from bereavement-related depression and anxiety. The symptoms of complicated grief are associated with significant emotional distress and likely associated with long-term functional impairment (Prigerson et al., 1995). Such symptoms include preoccupation, searching and yearning, disbelief, and not coming to a level of acceptance (Prigerson et al., 1995). Items were rated on a four-point Likert-type scale ranging from never (1) to always (4). Finally, Prigerson et al. (1995) reported good psychometric properties for the ICG; the internal consistency of the ICG was found to be .94 and test-retest reliability was .80.
The Breakup Distress Scale (Field et al., 2009; Field, Diego, Pelaez, Deeds, & Delgado, 2011) was adapted from the ICG by rewording the scale items to make reference to the ex-romantic partner. For example, items include *I think about this person so much that it’s hard for me to do things I normally do* and *Memories of the person upset me*. In addition, three items from the ICG were omitted due to a lack of relevance. The Breakup Distress Scale also uses a four-point Likert-type rating scale, but one represents not at all and four denotes very much so. Responses to the 16 items were totaled to create a composite score of breakup distress ($\alpha = .90$).

**Center for Epidemiologic Studies Depression Scale.** The CES-D (Radloff, 1977) has been used to assess the epidemiology of depression in the general population, namely the presence of a depressed mood, although its purpose is not diagnostic or evaluative. The CES-D consists of 20 items (e.g., “I was bothered by things that usually don’t bother me,” “I felt depressed”) which are rated on a four-point Likert-type scale ranging from rarely or none of the time (0) to most or all of the time (3). Larger numbers represent a greater frequency of depressive symptoms in the past week. Responses to all items were summed to provide an overall measure of general distress ($\alpha = .91$).

**Procedure**

This study was conducted online, and eligibility criteria were clearly presented. Participants were provided with informed consent and they had to indicate that they had read and understood the consent by clicking a box in order to proceed. Following completion of the survey, participants received a debriefing which contained a general overview of the study and its purpose.
Although certain contact information was collected, all self-identifying information was kept in a separate file from any study-related data. The only time self-identifying information was utilized was to contact participants if they had won a prize as part of the lottery. Upon enrolling in the online study, participants were assigned a study ID number. Data for all participants were stored by ID number and not by name. No self-identifying information was linked to the data at any point. Every effort was made to preserve the confidentiality of the participants.
CHAPTER 4
RESULTS

Data Processing

Upon completion of data collection, eligibility of the participants was verified. Any participant who completed the study and was not eligible \((n = 15)\) was removed from the analyses. Following verification of eligibility, all data were examined for violations of assumptions. The distributions of all continuous variables were examined, and all were relatively normal. Their means and medians were approximately the same, and the coefficients of skewness and kurtosis were less than ±2. Histograms, normal Q-Q plots, and boxplots confirmed that the assumption of normality had been satisfied. Next, residuals of the error terms were determined to be normally distributed. Residual plots and bivariate plots were examined and confirmed that the assumption of linearity had been met. Additionally, there was no violation of the assumption of homoscedasticity, such that levels of variability were approximately equal at all levels of an independent variable.

In addition, independence of the error terms was verified using the Durbin-Watson statistic. A comparison of the Durbin-Watson statistics produced in SPSS to the critical values outlined by Savin and White (1977) provided confirmation that the error terms were, indeed, independent. A correlation matrix containing all predictors was examined and multicollinearity was not a problem. Finally, I examined Mahalanobis distances to determine if there were any bivariate outliers. After comparing all values to a minimum \(\chi^2_{\text{crit}}(3) = 16.27\) at \(p = .0001\), I was confident that no bivariate outliers were present in the data, and no cases had missing data. Since all assumptions were satisfied,
none of the variables required a transformation prior to conducting the multivariate analyses.

**Psychological Distress as a Single Outcome Measure**

The relationship between breakup distress and depressed mood was very strong. Subsequently, I decided not to conduct analyses on the individual constructs. I standardized the scores on both the Breakup Distress Scale and the CES-D before averaging the measures together to create a single index of psychological distress. All results will be presented for this combined variable indicating psychological distress. In addition, I compared the results when the analyses were conducted individually for breakup distress and depressed mood, and I found the patterns of results to be largely consistent across the two measures. When discrepancies emerged, they will be noted.

**Determination of Covariates**

Based on theoretical background, I was interested in including gender, social support, the Big-Five personality dimensions, time since the breakup, and who initiated the breakup as covariates in the multivariate analyses discussed below. A variable was determined to be a covariate if it was significantly related to the outcome variable, psychological distress, and was not significantly related to the predictors (Miller & Chapman, 2001).

The correlations between gender and psychological distress, intrusive thoughts, time since the breakup, and social constraints revealed that gender did not meet the criteria to be included as a covariate. Gender was not at all related to psychological distress ($r_{pb} = -.02, p = .84$). This is consistent with previous research (Attridge, Berscheid, & Simpson, 1995; Frazier & Cook, 1993; Simpson, 1990; Sprecher, 1994)
which demonstrated that the level of distress following a breakup was similar for men and women. Gender also was not related to intrusive thoughts \((r_{pb} = .04, p = .60)\), time since the breakup \((r_{pb} = .13, p = .08)\), or social constraints \((r_{pb} = .03, p = .66)\). Although gender differences in the social constraints literature have been only minimally researched, the results have not been particularly convincing, which is similar to the current results (Kaynak et al., 2011; Kliwer et al., 1998; Lepore & Revenson, 2007; Morris, 1996; Zakowski et al., 2003).

Next, social support was investigated as a potential covariate. Social support was moderately and negatively related to psychological distress \((r = -.35, p < .001)\). In addition, it was unrelated to intrusive thoughts \((r = .01, p = .89)\) and time since the breakup \((r = .06, p = .46)\), the two predictors used in the moderation analyses. However, social support was related to social constraints, the predictor in both hypotheses four (test of mediation) and five (test of moderated mediation). The interaction of social support and social constraints was examined to determine if it predicted psychological distress (the primary outcome measure) and avoidance (the mediator in hypotheses four and five). The interaction between social support and social constraints did not predict psychological distress \((B < -0.001, p = .77)\); however, it did predict avoidance \((B = -0.015, p = .03)\). Consequently, I included social support as a factor of interest and not as a covariate when exploring hypotheses four and five. Nevertheless, social support was included as a covariate when testing hypotheses two and three, as social constraints was included as the moderator in both sets of moderation analyses and not as the predictor.

I also examined whether the Big Five personality components qualified as covariates. In the current study, extraversion was the only personality component
significantly related to both psychological distress \((r = -0.24, p < .01)\) and self-monitoring \((r = 0.25, p < .01)\). In addition, the correlation between extraversion and social constraints was small \((r = -0.16, p = .04)\), and did not warrant further investigation into whether extraversion interacted with social constraints. However, extraversion displayed a stronger correlation with social support \((r = 0.39, p < .001)\), an additional moderator to be included along with self-monitoring in hypothesis five. I investigated potential interactions between extraversion and social support in predicting psychological distress and avoidance. The results suggested that there was no significant interaction effect between social support and extraversion in predicting psychological distress or the mediator. Thus, extraversion was determined to be a potential covariate, and it was included in the testing of hypothesis five.

Moreover, agreeableness, conscientiousness, and neuroticism were all related to psychological distress (agreeableness: \(r = -0.24, p < .01\); conscientiousness: \(r = -0.21, p < .01\); neuroticism: \(r = 0.29, p < .001\)), and showed either a non-significant or weak relationship with social constraints (agreeableness: \(r = -0.09, p = .26\); conscientiousness: \(r = -0.17, p = .03\); neuroticism: \(r = 0.19, p = .01\)). Thus, these three personality components were also included as covariates in the assessment of the fifth hypothesis to control for any possible relatedness with self-monitoring. Openness was not correlated psychological distress, which is the primary criterion (relatedness between the potential covariate and all outcome measures of interest) for determining covariates, and, therefore, was not accounted for in the model.

The current research supported previous findings that psychological distress associated with a breakup declines as more time since the dissolution passes \((r = -0.17, p < .01)\).
Time since the breakup was not significantly correlated with either of the predictors used in the following analyses (social constraints: $r = -.01$, $p = .99$; intrusive thoughts: $r = -.09$, $p = .25$); thus its inclusion as a covariate was justified.

Sprecher (1994) reported that people who are broken up with experience a greater amount of negative emotions compared to those who initiate the dissolution or were involved in a mutual separation. However, Sprecher also explained that individuals who initiated the breakup or were involved in a mutual dissolution are still likely to experience a fair amount of distress. The who initiated the breakup variable was coded as you (1; the participant) initiated the breakup, both you (the participant) and your partner (2; mutually), and your partner (3) initiated the dissolution. A one-way ANOVA using the potential covariate as the grouping variable and psychological distress as the outcome revealed that who initiated the breakup was unrelated to psychological distress, $F(2, 171) = 2.05, p = .13$, $\eta^2 = .02$. Thus, who initiated the breakup was not included as a covariate in any of the analyses that follow.

**Descriptive Analyses**

On average, participants had experienced their breakup nearly six months earlier after having dated for approximately 18 months. The majority of participants indicated that they were serious about, and committed to, their previous relationship, and had felt a considerable amount of distress and loss following the breakup. Participants reported that they did a fair amount of talking about their breakup; 82.8% reported talking to friends and relatives about their breakup at least somewhat while 55.7% acknowledged talking to individuals other than their friends and relatives at least somewhat.
More participants indicted that their partner had initiated the breakup as opposed to the breakup being mutual or self-initiated. Although slightly more than half of the participants reported no interest or only a small amount of interest in reuniting with their ex-partner, the remaining individuals expressed a fair amount of interest in the prospect of dating their ex-partner again. At the time of data collection, the majority of the sample was single, and a small percentage of the participants were involved in a committed relationship or had gotten back together with their ex-partner.

Very few (14.4%) participants sought counseling following the breakup. Seeking counseling was correlated with psychological distress ($r_{pb} = .37$, $p < .001$) and intrusive thoughts ($r_{pb} = .26$, $p < .001$), such that participants who indicated that they sought counseling following their breakup also reported higher psychological distress and more intrusive thoughts. For additional descriptive information about relationship-related characteristics, see Table 1.

**Hypothesis 1: Correlations between Social Constraints and Avoidance, Intrusive Thoughts, and Psychological Distress**

I predicted that social constraints would be positively related to avoidance, intrusive thoughts, and psychological distress. The results provided support for this hypothesis and all of relationships were moderate in strength (see Table 2 for a correlation matrix of all major study variables). Social constraints were most strongly related to psychological distress, and the weakest correlation was with intrusive thoughts. Overall, as levels of social constraints increased, people were also likely to report higher levels of avoidance, intrusive thoughts, and psychological distress.
### Table 1

*Descriptives for all Relationship-Related Classification Questions*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Mean (SD)</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of months since breakup:</td>
<td>$M = 5.79$ ($SD = 3.63$)</td>
<td>$M = 5.00$</td>
<td></td>
</tr>
<tr>
<td>Length of previous relationship (in months):</td>
<td>$M = 18.38$ ($SD = 14.74$)</td>
<td>$Median = 13.50$</td>
<td></td>
</tr>
<tr>
<td>Who initiated breakup:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>You</td>
<td>33.30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both you and your partner (mutually)</td>
<td>23.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Your partner</td>
<td>43.70%</td>
<td></td>
</tr>
<tr>
<td>Considered ending the relationship if partner had not:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>23.60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>40.20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I did initiate the breakup</td>
<td>36.20%</td>
<td></td>
</tr>
<tr>
<td>Breakup was sudden/unexpected:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>48.80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>51.20%</td>
<td></td>
</tr>
<tr>
<td>Felt rejected:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>50.60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49.40%</td>
<td></td>
</tr>
<tr>
<td>Felt betrayed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>57.60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>42.40%</td>
<td></td>
</tr>
<tr>
<td>Felt upset/distress following breakup:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>44.80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quite a bit</td>
<td>24.70%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately</td>
<td>22.40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A little</td>
<td>8.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Felt a sense of loss following breakup:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Extremely</td>
<td>40.20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quite a bit</td>
<td>30.50%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately</td>
<td>19.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A little</td>
<td>9.80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all</td>
<td>0.60%</td>
<td></td>
</tr>
<tr>
<td>Measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Would like to get over breakup, but having trouble:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>14.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>21.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>22.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>21.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>19.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sought counseling following breakup:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>85.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rating of relationship prior to breakup:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>19.20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>37.20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>23.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>16.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>2.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>How serious participant was about the relationship:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>36.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>42.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>17.10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>4.10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commitment to maintaining the relationship prior to breakup:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely</td>
<td>39.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite a bit</td>
<td>36.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately</td>
<td>14.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>8.10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>2.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Closeness of relationship prior to breakup:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very close</td>
<td>36.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite close</td>
<td>38.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately close</td>
<td>15.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat close</td>
<td>7.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>2.30%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Very much so</th>
<th>Moderately so</th>
<th>Somewhat</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared activities/interests with ex-partner:</td>
<td>41.90%</td>
<td>41.30%</td>
<td>13.40%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Shared thoughts/feelings with ex-partner:</td>
<td>48.80%</td>
<td>34.30%</td>
<td>15.10%</td>
<td>1.70%</td>
</tr>
<tr>
<td>Showed affection with ex-partner:</td>
<td>51.70%</td>
<td>32.00%</td>
<td>13.40%</td>
<td>2.90%</td>
</tr>
<tr>
<td>Had a lot of disagreements with ex-partner:</td>
<td>25.60%</td>
<td>26.20%</td>
<td>33.70%</td>
<td>14.50%</td>
</tr>
<tr>
<td>See or talk to ex-partner:</td>
<td>Yes</td>
<td>52.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interested in getting back together with ex-partner:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current dating status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Length of current relationship (in months): $M = 7.03$ ($SD = 6.52$)
Median = 5.00
Table 1 (continued)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Extremely</th>
<th>Quite a bit</th>
<th>Moderately</th>
<th>A little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Happiness with breakup at that time:</strong></td>
<td>4.70%</td>
<td>15.90%</td>
<td>16.50%</td>
<td>12.40%</td>
<td>50.6%</td>
</tr>
<tr>
<td><strong>Happiness with breakup now:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Frequency of thoughts/memories of ex-partner in past month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19.40%</td>
<td>17.60%</td>
<td>27.60%</td>
<td>20.60%</td>
<td>14.70%</td>
</tr>
<tr>
<td><strong>Felt upset about breakup in past month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.20%</td>
<td>24.70%</td>
<td>18.80%</td>
<td>30.00%</td>
<td>18.20%</td>
</tr>
<tr>
<td><strong>Talked about breakup in the past month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.90%</td>
<td>12.90%</td>
<td>27.60%</td>
<td>30.60%</td>
<td>22.90%</td>
</tr>
<tr>
<td><strong>Level of comfort when talked about breakup in the past month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.60%</td>
<td>28.20%</td>
<td>26.50%</td>
<td>14.10%</td>
<td>13.50%</td>
</tr>
</tbody>
</table>

*Note. N = 174.*
### Table 2

**Correlation Matrix of Major Study Variables**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Social Constraints</th>
<th>Intrusive Thoughts</th>
<th>Avoidance</th>
<th>Psychological Distress</th>
<th>Social Support</th>
<th>Self-Monitoring</th>
<th>Time since the Breakup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Constraints</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Intrusive Thoughts</td>
<td>.31***</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Avoidance</td>
<td>.36***</td>
<td>.46***</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Psychological Distress</td>
<td>.42***</td>
<td>.70***</td>
<td>.41***</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Social Support</td>
<td>-.41***</td>
<td>.01</td>
<td>-.01</td>
<td>-.35***</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Self-Monitoring</td>
<td>-.03</td>
<td>.10</td>
<td>.002</td>
<td>-.009</td>
<td>.19*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Time since the Breakup</td>
<td>-.001</td>
<td>-.09</td>
<td>-.22**</td>
<td>-.17*</td>
<td>.06</td>
<td>.10</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. N = 174. * p < .05, ** p < .01, *** p < .001.*
Moderation Analyses

I predicted that social constraints would moderate the association between intrusive thoughts and distress, as well as the association between the amount of time that had elapsed since the breakup and distress. Procedures for testing for moderation as outlined by Baron and Kenny (1986) were followed, including centering the predictors and moderators around their means prior to their inclusion in the models, in an attempt to minimize issues with multicollinearity. Both moderation analyses were conducted using hierarchical regression with social support and time since the breakup (hypothesis 2 only) as the covariates entered on Step 1, followed by both the predictor and moderator entered on Step 2, and the interaction between the predictor and the moderator on Step 3. Social support was included as a covariate in both sets of moderation analyses, primarily because of its relatedness to the moderator, social constraints.

Hypothesis 2: Social constraints as a moderator of the relation between intrusive thoughts and psychological distress. The relationship between intrusive thoughts and psychological distress was strong and positive. Contrary to the hypothesis, the results revealed that the interaction between intrusive thoughts and social constraints did not predict psychological distress ($B < 0.001, p = .84$). Therefore, the relation between intrusive thoughts and psychological distress did not vary as a function of social constraints (See Figure 5). Although the interaction was not significant, the results revealed a significant main effect for intrusive thoughts ($B = 0.077, p < .001$). However, the main effect for social constraints was not significant ($B = 0.0077, p = .18$) in predicting psychological distress. In addition to the variance accounted for by social support and time since the breakup (Adjusted $R^2 = .14; F(2, 171) = 14.90, p < .001$), the
inclusion of intrusive thoughts and social constraints accounted for another 48.80% of the variance in psychological distress scores, $F(2, 169) = 112.32, p < .001$. Ultimately, these results suggest that intrusive thoughts are directly related to psychological distress regardless of level of social constraints.

When the two original outcome variables were examined individually, one fairly large difference was evident. The results revealed a significant main effect for social constraints in predicting breakup distress ($B = 0.14, p = .05$), but not in predicting depressed mood ($B = 0.024, p = .76$). The significant main effect for intrusive thoughts and the non-significant interaction were consistent across outcome measures.

![Graph of the non-significant interaction between intrusive thoughts and social constraints in predicting psychological distress.](image)

**Figure 5.** Graph of the non-significant interaction between intrusive thoughts and social constraints in predicting psychological distress.
Hypothesis 3: Social constraints as a moderator of the relation between time since the breakup and psychological distress. In the second moderation analysis, elapsed time since the breakup was negatively related to psychological distress, suggesting that those participants who reported more time had passed since the breakup were likely to report less psychological distress. Results revealed significant main effects for social constraints ($B = 0.035$, $p < .001$) and elapsed time since the breakup ($B = -0.041$, $p = .02$) in predicting psychological distress. Similar to the previous moderation analysis, the interaction effect between social constraints and elapsed time since the breakup in predicting psychological distress was not significant ($B = 0.003$, $p = .12$). In addition to the variance accounted for by social support (Adjusted $R^2 = .12$; $F(1,172) = 24.68$, $p < .001$), elapsed time since the breakup and social constraints accounted for another 10.5% of the variance in psychological distress scores, $F(2, 170) = 12.65$, $p < .001$. The results demonstrate that social constraints did not moderate the relation between elapsed time since the breakup and psychological distress. Unlike the previous moderation analysis, there were no major differences between the two original outcome variables when they were examined separately.

Although the results did not provide evidence in terms of significance level that social constraints moderated the relation between time since the dissolution and psychological distress, I graphed the interaction to examine the slopes of the individual lines representing lower social constraints and higher social constraints (See Figure 6). I had expected individuals who encountered a higher level of social constraints to report a consistently higher level of psychological distress that would remain fairly steady regardless of how much time had elapsed since the breakup. However, I had expected
those who perceived lower levels of social constraints to report less psychological distress if more time since the breakup had passed. This graph demonstrated a non-significant pattern of results that was consistent with the hypothesis; however, the only significant effects in this analysis were the main effects for social constraints and time since the breakup.

![Graph of the non-significant interaction between time since the breakup and social constraints in predicting psychological distress.](image)

*Figure 6. Graph of the non-significant interaction between time since the breakup and social constraints in predicting psychological distress.*
Hypothesis 4: Avoidance Mediates the Relation between Social Constraints and Psychological Distress

I had predicted that avoidance would mediate the relation between social constraints and psychological distress (See Figure 3). As previously determined, social constraints were positively related to psychological distress. Thus, I had hoped to explain and further understand this association by examining the mediating role of avoidance.

Initially, I had planned to include social support in this model as a covariate; however, upon further examination of the relation between social support and social constraints, namely the significant interaction in predicting the hypothesized mediator, avoidance, I determined that it was more appropriate to include social support as an additional factor of interest in the model, specifically, a moderator of the relation between social constraints and avoidance (Path a). Consequently, the conceptual framework of this hypothesis became more challenging than originally thought; a simple mediation model was no longer warranted, but rather the investigation into whether avoidance mediated the relation between social constraints and psychological distress was now included as part of a moderated mediation framework which also sought to account for differences in the mediating effect as a function of level of social support (See Figure 7). Within this model of moderated mediation, the conditional indirect effect of the predictor (social constraints) on the outcome (psychological distress) through the mediator (avoidance) is dependent on the level of the moderator (social support). Time since the breakup was included as a covariate.

The PROCESS macro (Hayes, 2012b, 2012c) was opened as a SPSS syntax file and executed in its entirety without any modification. Output, including unstandardized
coefficients, standard error estimates, t-statistics, significance values, and conditional indirect effects of social constraints on distress through avoidance at values of social support are presented in Table 3. The results suggested that there were both direct and conditional indirect effects of social constraints on psychological distress. There was a direct effect ($c'$) from social constraints to psychological distress when controlling for avoidance and time since the breakup. Twenty-six percent of the variance in psychological distress scores ($R^2 = .26$, $F(3, 170) = 19.82, p < .001$) was accounted for with the inclusion of social constraints and avoidance in the model, as well as time since the breakup as a covariate.

Examination of the first set of model coefficients revealed a significant interaction between social constraints and social support in predicting avoidance. This provides evidence that social support moderates the indirect effect of social constraints on psychological distress through avoidance. In other words, the indirect effect was conditional on level of social support.

These conditional indirect effects were examined further at values corresponding to the 25th (low), 50th (moderate), and 75th (high) percentiles of social support. Additionally, asymmetric bias-corrected bootstrap confidence intervals were provided for the conditional indirect effects using 5,000 bootstrap samples. Bootstrapping techniques are often among the more preferred means of probing significant interactions as they make fewer assumptions about the shape of the sampling distribution (Hayes, 2012a).

A 95% bootstrap confidence interval demonstrated that the indirect effects of social constraints on psychological distress through avoidance became stronger as social support decreased. As hypothesized, avoidance partially mediated the relation between
social constraints and psychological distress, but this mediation varied based on levels of social support, such that as social support increased, the indirect path of avoidance mediating the relation between social constraints and psychological distress decreased.

**Conceptual Model**

![Conceptual Model Diagram](image)

**Statistical Model**

![Statistical Model Diagram](image)

**Figure 7.** Updated visual representation of hypothesis 4 illustrating that the relation between social constraints and psychological distress through avoidance varies as a function of social support. * $p < .05$, ** $p < .01$, *** $p < .001$. 
Table 3

Conditional Indirect Effects of Social Support on the Relation between Social Constraints and Psychological Distress through Avoidance

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictor: Avoidance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>24.27</td>
<td>1.04</td>
<td>23.25</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Social Constraints</td>
<td>0.37</td>
<td>0.065</td>
<td>5.70</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.13</td>
<td>0.055</td>
<td>2.38</td>
<td>.02</td>
</tr>
<tr>
<td>Social Constraints x Social Support</td>
<td>-0.013</td>
<td>0.0063</td>
<td>-2.04</td>
<td>.04</td>
</tr>
<tr>
<td>Time since the Breakup*</td>
<td>-0.46</td>
<td>0.15</td>
<td>-3.14</td>
<td>&lt; .01</td>
</tr>
<tr>
<td><strong>Predictor: Psychological Distress</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.54</td>
<td>0.25</td>
<td>-2.18</td>
<td>.03</td>
</tr>
<tr>
<td>Avoidance</td>
<td>0.032</td>
<td>0.0088</td>
<td>3.65</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Social Constraints</td>
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<td>0.0074</td>
<td>4.48</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Time since the Breakup*</td>
<td>-0.029</td>
<td>0.018</td>
<td>-1.67</td>
<td>.10</td>
</tr>
</tbody>
</table>

Conditional Indirect Effects of Social Constraints on Psychological Distress at values of Social Support

<table>
<thead>
<tr>
<th>Social Support</th>
<th>Effect</th>
<th>Bootstrapping SE</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-8.71 (25&lt;sup&gt;th&lt;/sup&gt; percentile)</td>
<td>0.015</td>
<td>0.0046</td>
<td>0.0075</td>
<td>0.026</td>
</tr>
<tr>
<td>1.29 (50&lt;sup&gt;th&lt;/sup&gt; percentile)</td>
<td>0.011</td>
<td>0.0038</td>
<td>0.0046</td>
<td>0.020</td>
</tr>
<tr>
<td>7.29 (75&lt;sup&gt;th&lt;/sup&gt; percentile)</td>
<td>0.0088</td>
<td>0.0040</td>
<td>0.0026</td>
<td>0.019</td>
</tr>
</tbody>
</table>

*Note. N = 174. * Included as a covariate.
Hypothesis 5: The Relation between Social Constraints and Psychological Distress through Avoidance Varies as a Function of Self-Monitoring

Initially, I had proposed that the relation between social constraints and the mediating variable, avoidance, would vary as a function of self-monitoring, such that those higher in self-monitoring would be more likely to experience an exaggerated avoidance response in reaction to social constraints, and consequently, report greater distress. In other words, at a higher level of self-monitoring, avoidance was expected to significantly mediate the relation between social constraints and psychological distress. In order to analyze the original hypothesis, a moderated mediation framework would be used, in which social constraints would be the predictor, psychological distress would be the primary outcome variable of interest, avoidance would be the mediator, and self-monitoring would be the moderator (See Figure 4; Muller, Judd, & Yzerbyt, 2005; Preacher, Rucker, & Hayes, 2007).

Additionally, I proposed that any of the Big Five personality components that met the criteria to be included as covariates would be controlled for. Thus, extraversion, agreeableness, conscientiousness, and neuroticism were included as covariates in this moderated mediation model. In addition to controlling for the Big Five personality factors, I had also proposed that I would investigate whether social support should be included as a covariate as well. Based on the explanation provided above concerning the significant interaction between social constraints and social support in predicting avoidance, social support was included as a second moderator of the path between social constraints and avoidance (Path a) instead of as a covariate. Time since the breakup was also included as a covariate.
Similar to hypothesis four, execution of this hypothesis became more challenging than originally conceptualized, as it examined whether the effect of social constraints on avoidance was additively moderated by both social support and self-monitoring (See Figure 8). In other words, each moderator had the potential to impact the relation between social constraints and avoidance independent of the other moderator’s influence. Consequently, the two interactions of interest were between social constraints and social support, as well as between social constraints and self-monitoring. Since the two moderators were not multiplicatively related, no three-way interaction was investigated. The mediation component of the model remained unchanged from the previous hypothesis, such that social constraints was the predictor, avoidance was the mediator, and psychological distress was the primary outcome variable of interest.

Analysis of this hypothesis used the PROCESS macro (Hayes, 2012b, 2012c), and the output, including unstandardized coefficients, standard error estimates, t-statistics, and significance values are presented in Table 4. The results revealed a significant direct effect (c’) from social constraints to psychological distress when controlling for avoidance, extraversion, agreeableness, conscientiousness, neuroticism, and time since the breakup. Examination of the first set of model coefficients revealed a significant interaction between social constraints and social support and a non-significant interaction between social constraints and self-monitoring in predicting avoidance. Subsequently, the inclusion of self-monitoring in the model did not add anything to the understanding of the relation between social constraints and psychological distress through avoidance. As a result, no additional probing of conditional indirect effects was warranted as the model would reduce to what was previously examined in hypothesis four.
Figure 8. Updated visual representation of hypothesis 5 illustrating that the relation between social constraints and psychological distress through avoidance varies as a function of social support, but not self-monitoring. *p < .05, **p < .01, ***p < .001.
**Table 4**  
**Conditional Indirect Effects of Social Support and Self-Monitoring on the Relation between Social Constraints and Psychological Distress through Avoidance**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictor: Avoidance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>37.81</td>
<td>6.74</td>
<td>5.61</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Social Constraints</td>
<td>0.39</td>
<td>0.066</td>
<td>5.90</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.17</td>
<td>0.068</td>
<td>2.55</td>
<td>.01</td>
</tr>
<tr>
<td>Social Constraints x Social Support</td>
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<td>0.0066</td>
<td>-2.23</td>
<td>.03</td>
</tr>
<tr>
<td>Self-Monitoring</td>
<td>0.11</td>
<td>0.15</td>
<td>0.69</td>
<td>.49</td>
</tr>
<tr>
<td>Social Constraints x Self-Monitoring</td>
<td>0.029</td>
<td>0.019</td>
<td>1.54</td>
<td>.13</td>
</tr>
<tr>
<td>Extraversion*</td>
<td>-0.10</td>
<td>0.099</td>
<td>-1.01</td>
<td>.31</td>
</tr>
<tr>
<td>Agreeableness*</td>
<td>-0.25</td>
<td>0.11</td>
<td>-2.30</td>
<td>.02</td>
</tr>
<tr>
<td>Conscientiousness*</td>
<td>0.062</td>
<td>0.11</td>
<td>0.55</td>
<td>.58</td>
</tr>
<tr>
<td>Neuroticism*</td>
<td>-0.16</td>
<td>0.11</td>
<td>-1.51</td>
<td>.13</td>
</tr>
<tr>
<td>Time since the Breakup*</td>
<td>-0.52</td>
<td>0.15</td>
<td>-3.51</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

| Predictor: Psychological Distress              |       |      |       |        |
| Constant                                       | 0.17  | 0.68 | 0.25  | .81    |
| Avoidance                                      | 0.037 | 0.0084| 4.35 | < .001 |
| Social Constraints                             | 0.024 | 0.0073| 3.27 | < .01  |
| Extraversion*                                  | -0.021| 0.010| -2.12 | .04   |
| Agreeableness*                                 | -0.021| 0.011| -1.90 | .06   |
| Conscientiousness*                             | -0.011| 0.012| -0.93 | .35   |
| Neuroticism*                                   | 0.031 | 0.012| 2.61  | < .01  |
| Time since the Breakup*                        | -0.021| 0.017| -1.23 | .22   |

*Note. N = 174. * Included as a covariate.*
Post-Hoc Analysis: Intrusive Thoughts Mediate the Relation between Social Constraints and Psychological Distress

Previous research has demonstrated that social constraints moderate the relation between intrusive thoughts and distress (Lepore, 2001; Lepore & Helgeson, 1998; Lepore et al., 1996; Manne, 1999). This moderation effect suggests that disclosers who encounter lower levels of social constraints compared to higher levels of social constraints are more likely to experience a decline in intrusive thoughts and a weakening of the association between intrusive thoughts and distress (Lepore & Helgeson, 1998; Lepore et al., 1996). However, this moderation hypothesis was not supported in the current study (see results for hypothesis 2). Consequently, I investigated an alternative hypothesis that predicted intrusive thoughts would mediate the relation between social constraints and psychological distress.

Previous research has suggested that intrusive thoughts may indicate incomplete cognitive processing of a major life event (Baum et al., 1993; Creamer et al., 1990; Horowitz, 1976, 1986a, 1986b; Janoff-Bulman, 1992; Silver et al., 1983). Furthermore, socially constraining interactions may interfere with cognitive processing as evidenced by an increase in intrusive thoughts, which in turn, have been shown to lead to increased distress (Cordova et al., 2001; Lepore, 2001; Lepore & Helgeson, 1998; Manne, 1999; Schmidt & Andrykowski, 2004).

In the current analysis procedures for determining mediation as outlined in Baron and Kenny (1986) were followed. Social support and time since the breakup were included as covariates in each of these regression models included to assess mediation. First, I established that social constraints were directly related to psychological distress.
(B = 0.034, p < .001). Next, I found that social constraints significantly predicted intrusive thoughts (B = 0.35, p < .001). Finally, I simultaneously regressed psychological distress on social constraints and intrusive thoughts. Intrusive thoughts significantly predicted psychological distress while controlling for social constraints (B = 0.077, p < .001). In addition, social constraints no longer predicted psychological distress once intrusive thoughts were controlled for (B = 0.008, p = .17). This analysis demonstrated that the relation between social constraints and psychological distress was completely mediated by intrusive thoughts and the indirect effect was significant (ab = 0.027, p < .05; See Figure 9).
Figure 9. Visual representation of the post-hoc analysis illustrating that intrusive thoughts mediate the relation between social constraints and psychological distress.

\[ p < .05, ** p < .01, *** p < .001. \]
CHAPTER 5
DISCUSSION

The current research marked the first time the utility of the SCP model had been investigated with regards to recovery and adjustment following the dissolution of romantic relationships. This research examined whether social constraints impact subsequent disclosure and the tendency to engage in avoidance, as well as the relation between social constraints and psychological distress. Moreover, this research included an initial attempt to examine how dispositional factors may impact the degree to which people engage in avoidance in response to social constraints. More specifically, I expected the tendency to engage in avoidance to be influenced by the degree to which an individual self-monitors, such that higher self-monitors were predicted to exhibit an exaggerated avoidance response to social constraints.

Initially, I had intended to examine the hypotheses using both breakup distress and depressed mood as the outcome measures. Although the proposed relations with these variables were identical, I anticipated the statistical relationships with breakup distress to be stronger compared to depressed mood, since the former represents event-specific distress whereas the latter denotes more general distress. However, I found that the two outcome measures were very highly correlated, which suggests that The Breakup Distress Scale and the CES-D were tapping into a similar type of distress. In addition, I identified very minimal difference between the results of the multivariate analyses predicting breakup distress and those predicting depressed mood. Given this evidence, it no longer seemed warranted to conduct separate analyses on breakup distress and depressed mood as if they were distinct constructs. Thus, I standardized and averaged together the variables.
for breakup distress and depressed mood, in turn creating a single index of psychological distress.

**Moderation Analyses**

Consistent with hypothesis one, the results suggested that social constraints were directly related to avoidance, intrusive thoughts, and psychological distress. These relationships were investigated further using moderation analyses. I examined whether social constraints moderated the relation between intrusive thoughts and psychological distress, as well as the relation between time since the breakup and psychological distress. The results indicated that social constraints did not moderate either of these relations, although main effects of both predictors were identified. In addition, social constraints significantly predicted psychological distress in the moderation analysis examining the predictive utility of elapsed time since the breakup. These results as they pertain to the SCP model are discussed below.

As participants experienced higher levels of intrusive thoughts, they reported greater distress. Although some researchers have posited that intrusive thoughts have the potential to be adaptive in that they may motivate disclosers to engage in the cognitive processing necessary to make sense of the breakup, they are nonetheless distressing and their adaptive utility is questionable. Research on romantic breakups has shown that time is one of the most helpful factors in recovering from a dissolution (Knox et al., 2000). In the current study, participants who indicated more time had passed since their breakup reported lower psychological distress compared to participants who reported a shorter amount of time since their dissolution.
A significant main effect for social constraints was found in the second moderation analysis, therefore, indicating that higher levels of social constraints predicted higher levels of psychological distress. Social constraints are likely to impede the cognitive processing of a major life event (Kliwer et al., 1998; Lepore, 2001; Lepore et al., 2000; Lepore et al., 1996), which, in turn, will help to maintain or to exacerbate feelings of distress. When disclosers seek support from their social network members and perceive social constraints, such as feeling judged or dismissed, instead, it is likely to add to the distress they already feel.

Based on the results of the interaction between intrusive thoughts and social constraints as well as the interaction between elapsed time since the breakup and social constraints, it was evident that the proposed moderation effect by social constraints was not significant. Previous studies (Lepore & Helgeson, 1998; Lepore et al., 1996) have found support for a moderation effect of social constraints on the relation between intrusive thought and distress, thus it is especially surprising that this interaction was non-significant. Prior studies that reported a significant moderation effect by social constraints focused on cancer patients whereas the current study focused on the dissolution of romantic relationships. This may suggest that the impact of social constraints on the relation between intrusive thoughts and distress differs as a function of the magnitude of the life event experienced. A cancer diagnosis poses a threat to one’s life, but the experience of relationship dissolution is not life-threatening even though it may be extremely distressing.

This discrepancy in results indicates that the study of relationship dissolution may be inherently different from the study of a potentially traumatic event (i.e., cancer
diagnosis). There could be utility in examining this discrepancy further to determine why the impact of social constraints may differ as a function of the life event. Also, a better understanding of the relation among intrusive thoughts, social constraints, and psychological distress may be gained by using a different analytic framework. An alternative framework in which intrusive thoughts are treated as the mediator of the relation between social constraints and psychological distress is discussed in the next section.

A graph of the interaction between elapsed time since the breakup and social constraints illustrated that the slopes of the lines representing higher and lower social constraints were in the hypothesized direction. Despite this, the interaction effect did not reach statistical significance, and, therefore, I conclude that social constraints did not moderate the relation between time since the breakup and psychological distress. A future study should re-examine this non-significant interaction to determine whether there is truly no moderating effect of social constraints on the relation between elapsed time since the breakup and psychological distress or if the effect was simply too small to be detected as a result of having insufficient power. When I conducted the power analysis for the current study, I anticipated finding a small to medium effect size for the interactions, which would have been consistent with previous research on social constraints (Agustsdottir et al., 2010; Kaynak et al., 2011; Lepore & Helgeson, 1998; Lewis et al., 2006). However, the effect sizes found were smaller than what had been predicted. Thus, it is possible that the predicted interaction between time since the breakup and social constraints was accurate yet underpowered, and, therefore, would require a larger sample size in a future study to disentangle this issue as to whether there is really no effect of
social constraints on the relation between time since the breakup and psychological distress or if the effect was simply smaller than expected and too underpowered to be detected. Since this study was the first time the impact of social constraints had been investigated as it pertains to relationship dissolution, I do not feel I have enough evidence to conclude with certainty that social constraints had no effect on this relation.

**The Mediating Effect of Intrusive Thoughts on the Relation between Social Constraints and Psychological Distress**

The results confirmed that intrusive thoughts fully mediated the relation between social constraints and psychological distress. Based on this analysis, differences in the participants’ psychological distress appeared to be driven by the intrusive thoughts they experienced about their relationship breakup as opposed to the social constraints they perceived. A more comprehensive understanding of what this mediation effect entails can be derived from previous research (Cordova et al., 2001; Roberts et al., 2006; Sheridan, Sherman, Pierce, & Compas, 2010).

Researchers have speculated that the presence of intrusive thoughts is an indication of incomplete cognitive processing. Although intrusive thoughts are often regarded as adaptive in terms of traditional Cognitive Processing Theories, they are nonetheless distressing and troublesome (Baum et al., 1993; Creamer et al., 1990; Cordova et al., 2001; Horowitz, 1976, 1986a, 1986b; Janoff-Bulman, 1992; Lepore & Revenson, 2007; Silver et al., 1983). As people try to assimilate or accommodate schema-inconsistent information through cognitive processing, they are likely to seek opportunities to disclose with social network members. Opportunities to disclose to social network members may be helpful as they engage in the cognitive processing necessary to recover from their
experience (Fagundes et al., 2012; Harber & Pennebaker, 1992; Horowitz, 1986a; Horowitz et al., 1993; Janoff-Bulman, 1992; Pennebaker, 1989; Rachman, 1980; van der Kolk & van der Hart, 1991). However, research suggests that socially constraining interactions may hinder cognitive processing, resulting in a maintenance of the intrusive thoughts, and subsequently worse adjustment (Cordova et al., 2001; Lepore, 2001; Roberts et al., 2006; Sheridan et al., 2010). Thus, it does not appear that social constraints directly impact psychological distress, but instead social constraints are likely to be positively associated with intrusive thoughts, which, in turn, are directly related to psychological distress. In other words, social constraints are only distressing to the extent that they are associated with intrusive thoughts.

The Relation between Social Constraints and Psychological Distress through Avoidance Differs as a Function of Social Support

Initially, I had intended to include social support as a covariate in the analysis examining whether avoidance mediated the relation between social constraints and psychological distress. However, upon examination of the correlation between social support and social constraints and the determination that the two constructs interacted, I included social support as a potential moderator of the relation between social constraints and psychological distress through avoidance. In other words, I examined whether the relation between social constraints and psychological distress through avoidance differed depending on the level of social support.

Results of this moderated mediation analysis suggested that avoidance partially mediated the relation between social constraints and psychological distress, but this mediating effect varied based on levels of social support, such that as social support
increased, the indirect path of avoidance mediating the relation between social constraints and the outcome variables decreased. Social constraints were associated with higher levels of avoidance and avoidance was associated with higher levels of distress, and this effect was found to be most salient as levels of social support declined considerably. Thus, support was found for the hypothesis that avoidance mediated the relation between social constraints and psychological distress, but the mediating role of avoidance was found to be contingent on the level of perceived social support, which was unexpected, yet unique as it pertains to the social constraints literature. Although I had not planned to investigate the relation between social support and social constraints in this manner, it proved to be warranted in this sample and helped elucidate the relation between social support and social constraints.

The relation between social constraints and social support. Researchers investigating the utility of the SCP model have long contended that social constraints and social support are distinct constructs and that social constraints are not the same as negative social support or a small amount of social support (Lepore & Revenson, 2007). Furthermore, SCP researchers have reported that the correlation between social constraints and social support is fairly weak, and the two constructs relate differently to psychological outcomes, such as negative affect, depression, anxiety, intrusions, and avoidance (Harper et al., 2007; Kaynak et al., 2011; Kratz et al., 2010; Lepore & Ituarte, 1999; Schmidt & Andrykowski, 2004). The current research provides additional support for the independence of social support and social constraints as unique constructs by highlighting the moderating effect of social support and the fact that the relation between social constraints and psychological distress through avoidance is not constant across all levels
of social support. Furthermore, although the correlation between social support and social constraints was moderately strong ($r = -0.41, p < 0.01$), the two constructs shared only 16% of their variance in common.

The relation between social constraints and psychological distress through avoidance. Results from the current study suggest that increased psychological distress associated with higher levels of social constraints is related to higher levels of avoidance. Similar results have been demonstrated in cancer-related samples (Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Manne & Glassman, 2000; Manne et al., 2005; Schnur et al., 2004), but this is the first time avoidance has been shown to mediate the relation between social constraints and distress as it pertains to relationship dissolution. Previous research has suggested that social constraints may serve as a risk factor, in part because of their association with an increased tendency to employ avoidant behaviors, which, in turn, reduces opportunities to engage in the cognitive processing necessary to make sense of a stressful experience (Kaynak et al., 2011; Kliewer et al., 1998; Lepore, 1997; Lepore & Helgeson, 1998; Lepore et al., 2000; Lepore & Revenson, 2007; Lepore et al., 1996; Manne & Glassman, 2000; Manne et al., 2005; Tait & Silver, 1989). Disclosers who encounter social constraints are more likely to engage in avoidance in an attempt to evade additional social constraints, from either those social network members they already disclosed to or from other friends or relatives with whom they interact (Lepore & Revenson, 2007). One of the motivating factors underlying the tendency to engage in avoidance is thought to be a desire to preserve existing social relationships (Lepore & Revenson, 2007). Despite this, when disclosers actively try to avoid or suppress thoughts and feelings pertaining to a stressor, they tend to think about those topics more often, and,
in turn, experience greater emotional distress (Lepore, 2001; Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Lepore et al., 1996; Wegner, 1994).

**Understanding the moderating role of social support.** Evidence of partial mediation by avoidance of the relation between social constraints and psychological distress was less likely to be found as levels of social support increased. Individuals who perceived higher levels of social support were less likely to engage in avoidance to the same degree after encountering social constraints. Higher levels of social support may offer a buffer against the negative effects associated with social constraints. Moreover, social support may provide an opportunity to reduce distress and facilitate the cognitive processing of the breakup (Lepore, 2001; Lepore & Helgeson, 1998; Lepore et al., 1996).

Subsequently, disclosers who perceive very high levels of social support are less likely to employ avoidant coping strategies out of concern that they might encounter additional social constraints or erode their existing social relationships. This possible buffering effect or protective aspect of social support is consistent with previous research that has reported that social support can offer considerable benefit to those experiencing a major life event (Brewin et al., 2000; Dagan et al., 2011; Guay et al., 2006; Helgeson & Cohen, 1996; Lepore, 2001; Roberts et al., 2006; Uchino, 2004; Uchino et al., 1996). For instance, it has been found that social support may help buffer against stress while also fostering better emotional adjustment (Kessler et al., 1985; Lepore, 1992; Thoits, 1982; Zakowski et al., 2003).

Even when disclosers encounter social constraints, they are less likely to engage in avoidance and experience increased psychological distress if they have other social network members available to them who provide social support in a non-constraining
manner. It is probable that the disclosers will seek to avoid the particular social network members who constrained them, but their adjustment and cognitive processing of their life experience is likely to be less affected by any social constraints as long as they have other social support available to them. This speculation could not be assessed in the current study.

In addition to social network members providing a buffer of social support against the impact of social constraints, the attributions disclosers make about social network members who act in a socially constraining manner may provide insight into this interaction effect. Disclosers who are able to attribute a social network member’s socially constraining behavior to something external (e.g., stress at job, bad mood) may retain a greater sense of security and support, and experience less distress compared to disclosers who consistently perceive constraints. For instance, Manne (1999) found that cancer patients who attribute their spouses’ socially constraining behavior to their partners being uncomfortable or unsure of what to say, are more likely to continue to disclose as opposed to engaging in avoidant coping strategies. Thus, by making constructive attributions that are influenced by previous interpersonal interactions, disclosers may be more likely to continue to engage in disclosure, which in turn, might help facilitate the cognitive processing of the event.

There was an important difference in the social network reference included in the Social Constraints Scale and the Social Provisions Scale. The items in the Social Constraints Scale referred to a friend or family member and the instructions directed participants to consider the frequency that they had experienced different constraining behaviors. The Social Provisions Scale referred more to the people comprising the
participants’ social networks, and the scale’s instructions requested that participants think about their relationships with various social networks. Thus, the wording of the Social Constraints Scale allowed for reports of high social constraints, even if only one friend or relative exhibited such behaviors. However, the Social Provisions Scale provided an index of support offered by a variety of social networks. Given such differences in the scales, it may prove advantageous in future research to assess individually the frequency of socially constraining behavior exhibited by multiple social network members. By administering the Social Constraints Scale multiple times with specific reference to a different social network member each one of those times, it may provide a more encompassing understanding of the relation between social constraints and social support, as well as the potential buffering role social support may offer.

It is particularly interesting that it takes a very high level of social support to ameliorate the mediating impact of avoidance on the relation between social constraints and psychological distress. This appears consistent with previous research showing that negative social interactions have a much stronger impact compared to positive social interactions (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Fiore, Becker, & Coppel, 1983; Lepore & Ituarte, 1999; Pagel et al., 1987; Rook, 1984; Rozin & Royzman, 2001). Thus, the disclosers are likely to need very high levels of social support to counteract the negative impact of social constraints.

**The Moderating Effect of Self-Monitoring on the Relation between Social Constraints and Psychological Distress through Avoidance**

In the final model, self-monitoring was included as a moderator of the relation between social constraints and psychological distress through avoidance. In addition,
social support was included as a second independent moderator given its interactive effect with social constraints in predicting avoidance. The results pertaining to the role of self-monitoring failed to elucidate the mediating role of avoidance on the relation between social constraints and psychological distress. Contrary to the hypothesis, whether individuals were lower or higher self-monitors had no apparent influence on the degree to which they engaged in avoidance in response to social constraints.

**The Self-Monitoring Scale.** One of the biggest limitations to the examination of self-monitoring as a moderator of the mediating role of avoidance on the relation between social constraints and psychological distress was likely the low reliability of the Self-Monitoring Scale. The internal consistency of the Self-Monitoring Scale was only 0.59, which is lower than expected for explicit measures and lower than what has been previously reported for this measure (Briggs et al., 1980). With such a low internal consistency to contend with, there is increased difficulty in being able to detect statistically significant relationships involving the particular variable.

The low reliability of the Self-Monitoring Scale was puzzling, and further examination of the poor internal consistency did not offer a resolution. Using the three-factor structure proposed by Briggs et al. (1980) for the entire Self-Monitoring Scale (25 items), the internal consistencies for the individual factors remained lower than desired: Acting: \( \alpha = .55 \), Extraversion: \( \alpha = .64 \), and Other-directedness: \( \alpha = .52 \). Thus, it did not appear that the low reliability of the entire scale was being driven by an issue with one particular factor of the Self-Monitoring Scale. Comparisons of the internal consistency of the 18-item Self-Monitoring Scale (Gangestad & Snyder, 1985) to the original 25-item scale may suggest that the former is more reliable overall, although there has been a great
deal of variability in the internal consistencies reported (18-item scale range: $\alpha = .60$ to $\alpha = .80$; 25-item scale range: $\alpha = .59$ to $\alpha = .82$; Biais, Hilton, Mazurier, & Pouget, 2004; Briggs & Cheek, 1988; Briggs et al., 1980; Büyükşahin, 2009; Guarino et al., 1998; John, Cheek, & Klohnen, 1996; Kilduff & Day, 1994; Leone & Hall, 2003; Mehra, Kilduff, & Brass, 2001; Miller & Thayer, 1989, Öner, 2002; Rowatt, DeLue, Strickhouser, & Gonzalez, 2001; Schoenrock, Bell, Sun, & Avery, 1999; Snyder & Gangestad, 1986). In the current study, the internal consistency of the 18 items that comprise the revised Self-Monitoring Scale (Gangestad & Snyder, 1985) was $\alpha = .61$ compared to $\alpha = .59$ when all 25 items were included.

Some researchers have measured self-monitoring using a Likert-type scale as opposed to the traditional dichotomous scale of true and false (Miller & Thayer, 1988, 1989; Barrick, Parks, & Mount, 2005). Similar to the traditional dichotomous response scale, a fair amount of variability has been found concerning the internal consistency of the 18-item Self-Monitoring Scale and the 25-item Self-Monitoring Scale when a Likert-type scale is presented (18-item scale range: $\alpha = .68$ to $\alpha = .85$; 25-item scale range: $\alpha = .64$ to $\alpha = .70$).

Given the amount of research that exists on the construct of self-monitoring, there remains a fair amount of controversy about how to best assess this variable. In general, there is a great deal of variability concerning the internal consistencies of the both the 18-item Self-Monitoring Scale and the 25-item Self-Monitoring Scale, regardless of whether a true/false dichotomous scale or a Likert-type scale is used. To that end, research continues to be conducted on the construct of self-monitoring using both the 18-item scale.
and the 25-item scale, employing either a true/false dichotomy or a Likert-type response scale.

Another limitation of the Self-Monitoring Scale is its circular nature, such that the likelihood of the behaviors assessed in the Self-Monitoring Scale are potentially embedded in the definition of the construct. Self-monitoring pertains to the degree to which people monitor the behavior of others to provide cues as to how they should behave (Snyder, 1974). However, many of the items on the Self-Monitoring Scale appear to assess consequences or outcomes of being defined as a high versus low self-monitor. For example, if a participant is a high self-monitor, then it makes sense for that individual to respond true to *I would probably make a good actor* and *At parties, I usually try to behave in a manner that makes me fit in* as these characterizations are used to define a high self-monitor. Subsequently, it may prove advantageous to assess self-monitoring in a way that focuses on the core of the construct rather than on its consequences and associated characterizations. For instance, more general questions, such as *do you tend to be observant about your context, and adjust you behavior according to the observations you make*, may provide a greater understanding of what the construct of self-monitoring entails as well as provide an improved measure of self-monitoring.

**Dispositional factors.** One of the primary purposes of the current research was to investigate whether self-monitoring impacted how people respond to social constraints. I had hypothesized that avoidance would mediate the relation between social constraints and psychological distress, such that people who encounter social constraints when they try to talk about a romantic breakup are likely to avoid talking about the dissolution going forward, which in turn will be related to higher levels of distress. Furthermore, I predicted
that the degree to which people engage in avoidant behaviors in response to social constraints would vary as a function of level of self-monitoring, specifically that higher self-monitors were likely to employ avoidance strategies to a greater extent than lower self-monitors. Although the current research provided support for the SCP model, the results did not offer evidence that self-monitoring moderated the relation between social constraints and psychological distress through avoidance.

Up until this point, the role of personality had been investigated as it pertained to individual differences in the perception of social constraints as well as the extent to which personality differences in the disclosers could influence whether social network members respond in a socially constraining manner (Lepore & Ituarte, 1999; Lepore and Revenson, 2007; Quartana et al., 2005). Unique to this study, the current research attempted to examine the impact of personality at a different step in the SCP model by determining whether differences in the dispositional factor of self-monitoring could account for differences in the degree to which disclosers engage in avoidance in response to social constraints. In other words, I conjectured that people were likely to engage in avoidant coping in an attempt to minimize the impact of social constraints, and I expected this relation to be more exaggerated for those who were higher self-monitors.

The results did not support a moderating effect of self-monitoring, such that the indirect relation between social constraints and psychological distress through avoidance did not differ as a function of level of self-monitoring. Although the examination of self-monitoring may have been hampered by its low reliability and possibly by the ambiguity of its wording, I believe the relation between dispositional factors and the use of avoidance following socially constraining interactions should be investigated further.
First, the impact of self-monitoring should be re-examined if a more reliable measure of the dispositional factor is used. For reasons cited above, there may be utility in administering either the 18-item Self-Monitoring Scale or the 25-item Self-Monitoring Scale using a multipoint response scale in a future study on social constraints and romantic breakups. Reliabilities are sample-specific; thus, the low reliability of the Self-Monitoring Scale may not be an issue when assessed in another sample, either from the same population of Temple University students or from a different population.

Similar to my explanation above concerning the interaction effects in the moderation analyses (hypotheses 2 and 3), it is also possible that the interaction between social constraints and self-monitoring failed to reach significance because it was underpowered. This interaction effect was small and non-significant, yet the power analysis was conducted based on the expectation of finding a small to medium effect size. This concern that the current study was underpowered can be explored further in a follow-up study. Ideally, both issues pertaining to the low reliability of the Self-Monitoring Scale and the potential that the analysis was underpowered would be rectified prior to conducting another study.

I also recommend additional dispositional factors be investigated as potential moderators of the mediating relation involving avoidance. For example, optimism may be a dispositional variable that impacts the relation between social constraints and the degree to which people engage in avoidance. Lepore and Ituarte (1999) reported that the level of social constraints on disclosure was likely related to whether the discloser had an optimistic or pessimistic outlook. Lepore and Ituarte focused on how optimism may impact the social responses of social network members. Moreover, they commented on
possible coping limitations for disclosers who are primarily pessimistic and how disclosers’ reactions can further shape the ways in which friends and family members respond. By investigating optimism in the proposed framework of moderated mediation, I hypothesize that disclosers who are higher on pessimism compared to optimism would be more likely to engage in avoidance in response to social constraints, in large part because individuals higher in pessimism are more likely to be limited in their use of adaptive coping (Lepore & Ituarte, 1999; Lepore & Revenson, 2007; Silver et al., 1990).

**Intrusive Thoughts**

According to Cognitive Processing Theories, intrusive thoughts are often adaptive as they help facilitate the assimilation or accommodation of schema-inconsistent information (Creamer, Burgess, & Pattison, 1992; Ehlers & Clark, 2000; Horowitz, 1986a; Lepore, 1997, 2001; Lepore et al., 1996). However, these theories still acknowledge that the intrusive thoughts people experience in the interim are distressing and a challenge to handle (Anagnostopoulos, Slater, & Fitzsimmons, 2010; Brewin, Watson, McCarthy, Hyman, & Dayson, 1998). As a result, many people who experience intrusive thinking employ avoidant coping strategies, which, in turn, may sustain intrusive thoughts and interfere with cognitive processing (Creamer et al., 1990; Foa, Steketee, & Rothbaum, 1989; Gold & Wegner, 1995; Horowitz et al., 1979; Wegner, 1994). Consequently, the alteration between intrusive thinking and avoidant coping may continue for an extended period of time without resolution or assimilation of the incompatible information (Baum et al., 1993; Silver et al., 1983). Also, the content of the intrusive thoughts may be so anxiety provoking and threatening that it is impossible for individuals to habituate and
make sense of their experience (Janoff-Bulman, 1992). In cases such as these, it is difficult to view intrusive thinking as adaptive.

In general, the trajectory of intrusive thinking in terms of adaptation is difficult to predict. Intrusive thoughts have been shown to lead to adaptive outcomes (Creamer et al., 1992) as well as maladaptive results (Anagnostopoulos et al., 2010; McFarlane, 1992). In the current study, intrusive thoughts were positively and strongly related to psychological distress. The average time since the dissolution was six months and all relationships had ended within the past year. However, given the cross-sectional nature of this study, participants were likely in different stages of coping with the breakup. Investigating the relation between intrusive thoughts and psychological distress over time may help clarify the function of intrusive thoughts in terms of the cognitive processing of a romantic breakup. In addition, using a longitudinal approach would provide an opportunity to tease apart the short-term and long-term effects of intrusive thinking.

**Association between intrusive thoughts and rumination.** Intrusive thinking is likely recurrent, uncontrolled, and persistent, and may emerge following a traumatic experience or major life event (Anagnostopoulos et al., 2010; Horowitz, 1986a, 1986b; Segerstrom, Tsao, Alden, & Craske, 2000; Stockton, Hunt, & Joseph, 2011). Intrusive thoughts are often regarded as an indicator of incomplete cognitive processing and an individual’s effort to assimilate or accommodate incompatible information or experiences with pre-existing schemas (Greenberg, 1995; Horowitz, 1986a; Janoff-Bulman, 1992; Stockton et al., 2011). Nevertheless, the experience of intrusive thoughts is frequently distressing and aversive (Anagnostopoulos et al., 2010; Brewin et al., 1998; Cordova et al., 1995; Magee and Teachman, 2012). Similar to intrusive thinking, rumination is also
repetitive, recurrent, past-oriented, and distressing (Michael, Halligan, Clark, & Ehlers, 2007; Nolen-Hoeksema, 1991; Papageorgiou & Wells, 2003; Teasdale, 1999; Ward, Lyubomirsky, Sousa, & Nolen-Hoeksema, 2003). While ruminating, the focus is often placed on the problem and associated feelings, but frequently no actions are taken to remedy the issue and reconcile the negative emotions (Nolen-Hoeksema, 1991; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008; Smith & Alloy, 2009; Ward et al., 2003).

Both intrusive thoughts and rumination may be distressing, as thinking about an unpleasant experience may lead to a great deal of discomfort, arousal, uncertainty, or frustration (Lepore, 1997; Lepore et al., 1996). Compared to intrusive thinking which is often episodic in relevance, rumination is more likely to be chronic and associated with negative affect, although it may also initiate in response to a stressful event (Horowitz, 1979; Smith & Alloy, 2009). Rumination is likely to be persistent, and lead to additional rumination (Michael et al., 2007; Ward et al., 2003). In other words, contemplating one what if is likely to lead to thoughts about a second what if (Ehlers & Clark, 2000). In addition, rumination is self-reflective (Morrows & Nolen-Hoeksema, 1990), and attention is repeatedly directed toward one’s negative emotions (Nolen-Hoeksema, 1991; Ward et al., 2003). Rumination has been regarded as more unproductive and less adaptive compared to intrusive thinking in that the repetitive thoughts characteristic of rumination often lead to the maintenance of negative emotions (Ehlers & Clark, 2000; Nolen-Hoeksema, 1998; Segerstrom et al., 2000).

More recently, researchers have conceptualized rumination as a composite of brooding and reflective pondering (Treynor et al., 2003). The brooding component contains an element of passivity in which the focus is placed on dwelling on what could
have been (Ehlers & Clark, 2000; Michael et al., 2007). People who brood following a breakup are likely to think about how the relationship could have gone differently, examine why the breakup occurred from numerous angles, and entertain their hopes that the relationship could resume itself. On the contrary, the reflective pondering component of rumination favors an inward approach to problem solving, such that people who recently experienced a breakup may work towards coming to terms with the breakup, accepting it, and moving forward (Stockton et al., 2011; Treynor et al., 2003).

Researchers have proposed that reflective pondering is likely to facilitate cognitive processing, whereas brooding is more likely to impede cognitive processing and be maladaptive (Michael et al., 2007; Treynor et al., 2003). Thus, individuals who are brooding while trying to recover from a romantic breakup may not truly want to deal with the dissolution and their related feelings in hopes of moving forward. Instead, these individuals who are brooding may be motivated to remain in a state of wallowing, whereas individuals engaging in reflective pondering or experiencing intrusive thoughts are more likely to recover and adjust to the breakup.

People recovering from a major life event, such as a romantic breakup, may experience both intrusive thoughts and rumination (Ehlers & Clark, 2000; Michael et al., 2007). Research has suggested that there is a bidirectional, or cyclical, association between intrusive thoughts and rumination (Ehlers & Clark, 2000; Michael et al., 2007). Ruminating, in particular the negative feelings associated with ruminative thoughts, is likely to trigger intrusive thoughts, which, in turn, are likely to lead to additional rumination. This research demonstrating an alternating effect between intrusive thoughts and rumination was not examined for particular types of rumination, such as brooding and
reflective pondering. Nevertheless, Stockton et al. (2011) recently reported that the intrusion subscale of the Impact of Event Scale correlated moderately with both the reflection component of rumination \((r = 0.32, p < 0.01)\) as well as the brooding component of rumination \((r = 0.43, p < 0.01)\). Intrusive thoughts were positively related to both types of rumination, brooding and reflective pondering. These relationships between intrusive thoughts and both brooding and reflective pondering may attest to the potential adaptive and maladaptive effects of intrusive thinking.

Recovering from a breakup, like many other life events, is likely to be a dynamic process that can take a long time (Chung et al., 2002, 2003). Thus, it may be insightful to examine the use of both adaptive and maladaptive means of processing a romantic breakup, as well as the relation (e.g., cyclical) between intrusive thoughts and specific types of rumination. The current research only assessed the experience of intrusive thinking and did not examine the presence of rumination. Intrusive thinking was assessed using the intrusion subscale of the Impact of Event Scale (Horowitz et al., 1979). The intrusion subscale is event-focused; in the current study, the emphasis was placed on the romantic breakup. For example, participants indicated the extent to which they thought about the breakup when they didn’t mean to and the incidence of dreaming about the dissolution or having pictures about the breakup pop into their head. Ruminative thinking is often assessed using the Ruminative Responses Scale, a subscale of the Response Styles Questionnaire (Nolen-Hoeksema & Morrow, 1991). The brooding (e.g., What am I doing to deserve this?, Why can’t I handle things better?) and reflective pondering (e.g., Go someplace along to think about your feelings) items are more self-focused, and hone in on the repetition of thoughts and the experience of negative emotions.
The average participant in the current study experienced at least some intrusive thinking following their romantic dissolution. The average score on the intrusion subscale ($M = 21.17$) corresponded with a frequency of *sometimes*. In addition, intrusive thoughts significantly predicted psychological distress in the first moderation analysis (hypothesis two). However, I believe there could also be utility in examining participants’ ruminative tendencies, especially pertaining to brooding, as this might provide greater insight into their motivation for handling a breakup in a particular way.

Furthermore, based on how Cognitive Processing Theories have traditionally conceptualized intrusive thinking, it would be interesting to examine the utility and adaptive nature of intrusive thinking and rumination over time. Previous research has demonstrated that intrusive thoughts are often associated with increased distress, at least initially (Creamer et al., 1992; Ehlers & Clark, 2000; Horowitz, 1986a; Lepore, 1997, 2001; Lepore et al., 1996). However, if intrusive thinking is truly adaptive to the cognitive processing of an experience, the long-term consequences should be more positive. On the contrary, if the brooding component of rumination is truly maladaptive, both its short-term and long-term consequences should be consistently negative.

**Future Directions & Limitations**

**Subjective nature of social constraints.** The study of social constraints relies heavily on self-report measures (Lepore & Revenson, 2007). In addition, social constraints are largely subjective, and therefore, what one discloser perceives as socially constraining may be perceived as socially supportive by another individual. Furthermore, researchers have explained that in an attempt for social network members to provide social support, they may unintentionally act in a socially constraining manner and not be aware of it.
Therefore, it may prove beneficial to assess perceptions of social constraints from the perspectives of the social network members. Many times, disclosers may perceive social constraints while the social network members are largely unaware that their own actions constrained their friend or relative. By including the social network members as co-participants, they may be able to provide validation for the subjective nature of social constraints, as well as greater insight into the dynamic process of social interaction. In addition, evaluating the discrepancy in report of social constraints between the participants and the co-participants may be important to helping the social network members (the co-participants) become more aware of how and when their behavior could be perceived as constraining. In other words, it may provide an opportunity to intervene on behalf of the discloser and to encourage the social network members to engage in conversation in a less socially constraining manner.

By examining the discrepancy between disclosers perceiving social constraints and the social network members being unaware that they are acting in a constraining manner, a greater understanding of the how and why of social constraints may be gained. Moreover, the timing of the interaction may influence the extent of the discrepancy between the discloser perceiving constraints and the social network member being unaware of exhibiting social constraints. Such research may also demonstrate the impact of subjectivity in the construal process of social constraints. For example, a social network member’s response may be consistent across time, but depending on the timing of the interaction, a discloser may perceive the interaction as constraining at one point but not during a subsequent interaction.
Examination of general versus specific distress. Consistent with previous research assessing social constraints, I included a more general measure of distress, the CES-D, as well as an event-related measure of distress, the Breakup Distress Scale. Similar to what has been found in other studies on social constraints, the current study found that the two outcome measures of distress were highly correlated. In fact, the correlation was so strong that I standardized and averaged the two outcome variables to form an overall outcome measure of psychological distress. Nevertheless, social constraints were generally related to, and predictive of, both breakup distress and depressed mood. Given the similar strengths in the relations involving breakup distress and depressed mood, this suggests that the impact of social constraints expands beyond event-specific distress (Ullrich et al., 2002).

However, the social constraints literature has not speculated about the trajectory of development of event-specific versus general distress. Ullrich et al. (2002) suggested that people coping with HIV-related stress and who subsequently encounter social constraints might experience an interference with cognitive processing, which, in turn, may increase the risk of developing depression as well. Moreover, Field et al. (2009) reported that college students who indicated higher levels of breakup distress also had a tendency to exhibit higher levels of depression and anxiety as well. This is consistent with research suggesting that a romantic breakup is a risk factor for the future onset of depression (Monroe et al., 1999). Thus, an area for future research would be the longitudinal prospective examination of the progression of distress as it coincides with social constraints.
Limitations. Despite the contributions this study makes, there are some additional limitations that need to be recognized. First, this study used a cross-sectional correlational design, and, therefore, speculation about the causal direction of the relations should be done with caution. As suggested above, a longitudinal prospective research design should be employed in the future. Prospective participants should be recruited within one week of their breakup, and then followed up monthly until they are one year post-breakup. This type of research design would allow researchers to examine the trajectory of recovery and adjustment following the dissolution of a romantic relationship. In addition, the longitudinal design could provide valuable information concerning the importance and influence of social interactions and whether these social interactions remain static or change over time.

Another limitation to the current study was that all of the data were collected through self-report measures that were reliant on the memories of the participants. Moreover, only one partner from each previous relationship was presumably interviewed. Thus, none of the participants’ responses (e.g., Who initiated the breakup) could be verified. Finally, the results of this study may not generalize beyond this population of college students, and it remains unknown whether the results from the current study would apply to individuals dealing with a marital divorce. Researchers (Arnett, 2000; Collins, 2003; Hill, Rubin, & Peplau, 1976; Levesque, 1993) have reported a great deal of similarity in terms of commitment, companionship, intimacy, and seriousness when comparing college students’ dating relationships to marital relationships, which may suggest potential overlap concerning the dissolution of these romantic relationships.
However, research on general comparisons of the impact of premarital relationship dissolution versus martial relationship dissolution is minimal.

Cupach and Metts (1986) reported that the dissolution of dating relationships is not representative of all terminated relationships, including marital relationships in which the partners are often more interdependent than dating partners. Hill et al. (1976) highlighted key differences in the social context surrounding the breakup of a dating relationship compared to the dissolution of a marriage. The individuals involved in the breakup of a marital relationship often have to consider issues such as where will they live, will they have enough financial security, and who will get custody of the children. Furthermore, Hill et al. found evidence that the breakup of a premarital relationship is likely to be less stressful in comparison to the breakup of a marital relationship. Given these differences in terms of the dissolution of premarital and marital relationships, the incidence and impact of social constraints may vary as well depending on the type of romantic relationship. Thus, the results of the present study are best interpreted as they pertain to the current population. However, this provides another opportunity for future research by examining the application of the SCP model to understanding the recovery from the dissolution of marital relationships.

Another limitation to the generalizability of this study was my deliberate focus on only a subset of university students who experienced distress in association with their breakup. The purpose of this study was to examine the impact of social constraints on adjustment and recovery from a romantic breakup. Subsequently, my hypotheses drove my sampling procedure; thus, these results do not apply to all university breakups. In order to examine the impact of social constraints, I needed participants who had
experienced distress following their breakup and had talked about their dissolution with friends, relatives, or other individuals. By using these selection criteria, I believed participants would have at least had the opportunity to encounter social constraints. Nevertheless, by excluding individuals who reported no distress associated with their breakup or indicated that they did not speak to any social network member about their dissolution, there was a slightly restricted range which suggests the results pertaining to distress may be slightly underestimated. On the contrary, if I had randomly selected my sample, I would have included university students who had experienced no distress, and, therefore, would have had no opportunity to perceive unwanted social constraints.

Lastly, it is not clear from the current study whether adverse effects of social constraints would apply to clinical and counseling situations. The purpose of the current study was to examine the potential impact of social constraints that are perceived during interpersonal interactions. The type of relationship between a discloser and a friend or relative is likely to be different from the type of relationship between discloser and clinician. Thus, a follow-up study could evaluate the perceptions of social constraints and their subsequent effects as they pertain to a professional environment.

**Contributions of the Current Research**

The current research attempted to merge the literature and theory pertaining to the SCP model and the impact of social constraints on disclosure and psychological adjustment with those findings concerning the dissolution of romantic relationships. The current research also provided an opportunity to investigate whether avoidance completely mediated or partially mediated the relation between social constraints and psychological distress. Up until now, the mediating role of avoidance in relation to social constraints
and psychological distress has only been evaluated in cancer-related samples (Lepore & Helgeson, 1998; Lepore & Revenson, 2007; Manne & Glassman, 2000; Manne et al., 2005; Schnur et al., 2004).

Moreover, examination of the interaction between social constraints and social support provided further understanding of the mediating effect of avoidance on the relation between social constraints and psychological distress as well as additional evidence that the constructs of social support and social constraints are indeed independent of each other. This research marked the first time a dispositional variable (self-monitoring) was examined as a potential moderator in helping to elucidate the mediating role of avoidance on the relation between social constraints and distress. To my knowledge, no publication pertaining to social constraints has employed a moderated mediation analytic framework. One of the key benefits of this type of analytic approach is its ability to jointly examine when (as social support decreases) and how (through avoidance) social constraints are related to psychological distress.

Conclusion

The current research provided support for the utility of the Social-Cognitive Processing model as it pertains to the dissolution of romantic relationships. The results indicated that social constraints are associated with psychological distress and are likely to impact recovery from a breakup. Also, avoidance was found to partially mediate the relation between social constraints and psychological distress, except at very high levels of social support. Thus, after perceiving social constraints when attempting to converse with a social network member, disclosers are likely to try to avoid thinking or talking about the breakup further, and this is more likely to occur as perceptions of social support decline.
Oftentimes the avoidance prevents the disclosers from engaging in the cognitive processing necessary to recover from the breakup and more forward, and, consequently, they end up experiencing higher levels of distress.

Although no support was found for the moderating effect of self-monitoring, the results did suggest that higher levels of social support could help buffer against engaging in avoidance in response to social constraints. Ultimately, there appears to be utility in examining further the mechanism underlying the relation between social constraints and psychological distress. There is little question that avoidance plays a significant role in this relation, but the continued investigation of additional factors that may moderate the extent to which disclosers engage in avoidance seems warranted.
REFERENCES


APPENDIX

MEASURES

Demographics questionnaire

1. Please check the box that describes your gender.
   
   Response options:
   
   Female (1)
   Male (2)

2. Please check the box that describes your year in school.
   
   Response options:
   
   First-year student (1)
   Sophomore (2)
   Junior (3)
   Senior (4)
   Graduate student (5)

3. Please check the box that best describes your race/ethnicity.
   
   Response options:
   
   White / White-American (1)
   Black / African-American (2)
   Hispanic / Hispanic American (3)
   Asian / Asian-American (4)
   Native-American (5)
   Pacific Islander (6)
   Other (7)

4. If you answered “Other” to describe your race/ethnicity in the previous question, please enter your race/ethnicity below. For all other participants, enter "N/A" for not applicable.
   
   Response options:
   
   Open-ended
   For all other participants, enter N/A for not applicable.

5. Please check the box that describes whether you live on campus or off campus.
   
   Response options:
   
   I live on campus (1)
   I live off campus (2)

6. Please indicate your current age
   
   Response options:
   
   Open-ended
Relationship-related questionnaire, part 1

**INSTRUCTIONS:** Please answer the following questions which relate to your previous romantic relationship as well as your current relationship status. Please provide a response for every question.

1. How many months ago was your most recent romantic breakup? ________ months

   *Please report your answer in months (12 months = 1 year).*

   *(Note: If you experienced more than one breakup in the past year in which you felt distressed or upset after the relationship ended, and also had talked about it with others, please report how many months ago the most recent relationship ended.)*

2. How long did this relationship last? ________ months

   *Please report your answer in months (12 months = 1 year).*

   **Response options:**
   - Open-ended

3. Who initiated the breakup?

   **Response options:**
   - You (1)
   - Both you and your partner (mutually) (2)
   - Your partner (3)

4. [If your partner initiated the breakup] Were you considering ending the relationship if your partner had not?

   **Response options:**
   - Yes (1)
   - No (2)
   - I did initiate the breakup (3)

5. How happy were you with the breakup at the time it occurred?

   **Response options:**
   - Extremely (5)
   - Quite a bit (4)
   - Moderately (3)
   - A little (2)
   - Not at all (1)

6. Was the breakup sudden and unexpected?

   **Response options:**
   - Yes (1)
   - No (2)
7. Did you feel totally rejected by this breakup?
   *Response options:*
   - Yes (1)
   - No (2)

8. Did you feel betrayed by the breakup?
   *Response options:*
   - Yes (1)
   - No (2)

[Questions pertaining to the relationship prior to the breakup]

9. How would you rate this relationship prior to the breakup?
   *Response options:*
   - Very good (5)
   - Good (4)
   - Average (3)
   - Poor (2)
   - Very poor (1)

10. How serious were you about the relationship?
    *Response options:*
    - Extremely (4)
    - Quite a bit (3)
    - Moderately (2)
    - A little (1)
    - Not at all (0)

11. Prior to the relationship ending, how committed were you to maintaining the relationship in the future?
    *Response options:*
    - Extremely (4)
    - Quite a bit (3)
    - Moderately (2)
    - A little (1)
    - Not at all (0)

12. How close was your relationship prior to the breakup?
    *Response options:*
    - Very close (5)
    - Quite close (4)
    - Moderately close (3)
    - Somewhat close (2)
    - Not at all close (1)
13. Did you and your ex-partner share a lot of activities/interests together?
   *Response options:*
   - Very much so (4)
   - Moderately so (3)
   - Somewhat (2)
   - Not at all (1)

14. Did you and your ex-partner share a lot of your thoughts and feelings together?
   *Response options:*
   - Very much so (4)
   - Moderately so (3)
   - Somewhat (2)
   - Not at all (1)

15. Did you and your ex-partner show a lot of affection toward each other?
   *Response options:*
   - Very much so (4)
   - Moderately so (3)
   - Somewhat (2)
   - Not at all (1)

16. Did you and your ex-partner have a lot of disagreements?  (Reverse scored)
   *Response options:*
   - Very much so (4)
   - Moderately so (3)
   - Somewhat (2)
   - Not at all (1)

[Questions pertaining to current relationship status]

17. Do you still see or talk with your ex-partner?
   *Response options:*
   - Yes (1)
   - No (2)

18. Are you interested in getting back together with your ex-partner?
   *Response options:*
   - Extremely (4)
   - Quite a bit (3)
   - Moderately (2)
   - A little (1)
   - Not at all (0)
19. Are you dating anyone at the present time?
   
   **Response options:**
   - I am currently single (1)
   - I am currently in a committed relationship (2)
   - I am currently dating one person, but with no specified commitment (3)
   - I am currently dating multiple people at the same time (4)
   - I got back together with my ex-partner (5)

20. If you are currently dating (in a committed relationship, dating one person or multiple people with no specified commitment), how many months have you been involved with this individual(s)? _________ months

   Please report your answer in months (12 months = 1 year).
   
   **Response options:**
   - Open-ended

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**Relationship-related questionnaire, part 2**

1. I felt distressed or upset at some point following the breakup.

   **(Note:** Distressed can be defined by feeling *any* of the following: anxious, hurt, pain, sorrow, frustrated, depressed, lonely, insecure, rejected, empty, or sad)

   **Response options:**
   - Extremely (5)
   - Quite a bit (4)
   - Moderately (3)
   - A little (2)
   - Not at all (1)

2. I felt a sense of loss at some point following the breakup

   **Response options:**
   - Extremely (5)
   - Quite a bit (4)
   - Moderately (3)
   - A little (2)
   - Not at all (1)

3. I would like to get over the breakup, but I have been having trouble doing so

   **Response options:**
   - Extremely (5)
   - Quite a bit (4)
   - Moderately (3)
   - A little (2)
   - Not at all (1)
4. Did you seek any counseling from a professional following your most recent breakup?
   Response options:
   Yes (1)
   No (2)

5. How happy are you with the breakup now?
   Response options:
   Extremely (5)
   Quite a bit (4)
   Moderately (3)
   A little (2)
   Not at all (1)

6. How often in the past month did you find yourself having thoughts or memories about your ex-partner?
   Response options:
   Often (3)
   Sometimes (2)
   Rarely (1)
   Never (0)

7. How upset did you feel about your breakup in the past month?
   Response options:
   Extremely (5)
   Quite a bit (4)
   Moderately (3)
   A little (2)
   Not at all (1)

8. In the past month, how often did you talk to someone about the breakup?
   Response options:
   A great deal (5)
   A lot (4)
   Somewhat (3)
   A little (2)
   Not at all (1)

9. In the past month, how comfortable did you feel when you talked about the breakup?
   Response options:
   Extremely (5)
   Quite a bit (4)
   Moderately (3)
   A little (2)
   Not at all (1)
Self-Reported Amount of Talking

INSTRUCTIONS: I would like you to think about your reaction after your romantic relationship breakup. Please provide a response for each question.

1. Following the breakup of your romantic relationship, how often did you actually talk with your closest friend(s) or relatives(s) about the breakup?
   
   Response options:
   - A great deal (5)
   - A lot (4)
   - Somewhat (3)
   - A little (2)
   - Not at all (1)

2. Following the breakup of your last romantic relationship, how often did you actually talk with people other than your closest friend(s) or relative(s) about the breakup?

   Response options:
   - A great deal (5)
   - A lot (4)
   - Somewhat (3)
   - A little (2)
   - Not at all (1)
Social Constraints Scale

INSTRUCTIONS: Sometimes even when friends and family members have good intentions, they may say or do things that upset you. Please respond to the following items as they pertain to your romantic relationship breakup and indicate how frequently you have experienced each of the following. Please provide a response for every question.

Rating scale:
- Often (4)
- Sometimes (3)
- Rarely (2)
- Never (1)

1. How often has a friend or family member changed the subject when you tried to discuss your breakup?
2. How often did it seem that a friend or family member did not understand your situation?
3. How often did a friend or family member avoid you?
4. How often did a friend or family member minimize your breakup problems?
5. How often did a friend or family member seem to be hiding his/her feelings?
6. How often did a friend or family member act uncomfortable when you talked about your breakup?
7. How often did a friend or family member trivialize your breakup problems?
8. How often did a friend or family member complain about his/her own problems when you wanted to share yours?
9. How often did a friend or family member act cheerful around you to hide his/her true feelings and concerns?
10. How often did a friend or family member tell you not to worry so much about your breakup?
11. How often did a friend or family member tell you to try not to think about the breakup?
12. How often did a friend or family member give you the idea that he/she didn’t want to hear about your breakup?
13. How often did a friend or family member make you feel as though you had to keep your feelings about your breakup to yourself because they made him/her uncomfortable?
14. How often did a friend or family member make you feel as though you had to keep your feelings about your breakup to yourself because they made him/her upset?
15. How often did a friend or family member let you down by not showing you as much love and concern as you would have liked?
Self-Monitoring Scale

INSTRUCTIONS: The statements below concern your personal reactions to a number of situations. No two statements are exactly alike, so consider each statement carefully before answering.

If a statement is true or mostly true as applied to you, mark True as your answer. If a statement is false or not usually true as applied to you, mark False as your answer. It is important that you answer as frankly and as honestly as you can. Please provide a response for every question.

1. I find it hard to imitate the behavior of other people.
2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.
3. At parties and social gatherings, I do not attempt to do or say things that others will like.
4. I can only argue for ideas I already believe.
5. I can make impromptu speeches even on topics about which I have almost no information.
6. I guess I put on a show to impress or entertain people.
7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.
8. I would probably make a good actor.
9. I rarely need the advice of my friends to choose movies, books, or music.
10. I sometimes appear to others to be experiencing deeper emotions than I actually am.
11. I laugh more when I watch a comedy with others than when alone.
12. In a group of people I am rarely the center of attention.
13. In different situations and with different people, I often act like very different persons.
14. I am not particularly good at making other people like me.
15. Even if I am not enjoying myself, I often pretend to be having a good time.
16. I'm not always the person I appear to be.
17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor.
18. I have considered being an entertainer.
19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.
20. I have never been good at games like charades or improvisational acting.
21. I have trouble changing my behavior to suit different people and different situations.
22. At a party, I let others keep the jokes and stories going.
23. I feel a bit awkward in company and do not show up quite so well as I should.
24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
25. I may deceive people by being friendly when I really dislike them.

Scoring: 1 point for every response corresponding to the key.
True: 5, 6, 7, 8, 10, 11, 13, 15, 16, 18, 19, 24, 25
False: 1, 2, 3, 4, 9, 12, 14, 17, 20, 21, 22, 23
The Big Five Inventory

**INSTRUCTIONS:** Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. Please provide a response for every question.

**Rating scale:**
- Agree strongly (5)
- Agree a little (4)
- Neither agree nor disagree (3)
- Disagree a little (2)
- Disagree strongly (1)

I see Myself as Someone Who...

___1. Is talkative
___2. Tends to find fault with others*
___3. Does a thorough job
___4. Is depressed, blue
___5. Is original, comes up with new ideas
___6. Is reserved*
___7. Is helpful and unselfish with others
___8. Can be somewhat careless*
___9. Is relaxed, handles stress well*
___10. Is curious about many different things
___11. Is full of energy
___12. Starts quarrels with others*
___13. Is a reliable worker
___14. Can be tense
___15. Is ingenious, a deep thinker
___16. Generates a lot of enthusiasm
___17. Has a forgiving nature
___18. Tends to be disorganized*
___19. Worries a lot
___20. Has an active imagination
___21. Tends to be quiet*
___22. Is generally trusting
___23. Tends to be quiet*
___24. Is emotionally stable, not easily upset*
___25. Is inventive
___26. Has an assertive personality
___27. Can be cold and aloof*
___28. Perseveres until the task is finished
___29. Can be moody
___30. Values artistic, aesthetic experiences
__31. Is sometimes shy, inhibited*
__32. Is considerate and kind to almost everyone
__33. Does things efficiently
__34. Remains calm in tense situations*
__35. Prefers work that is routine*
__36. Is outgoing, sociable
__37. Is sometimes rude to others*
__38. Makes plans and follows through with them
__39. Gets nervous easily
__40. Likes to reflect, play with ideas
__41. Has few artistic interests*
__42. Likes to cooperate with others
__43. Is easily distracted*
__44. Is sophisticated in art, music, or literature

*Item is reverse coded.

Extraversion subscale: 1, 6, 11, 16, 21, 26, 31, 36
Agreeableness subscale: 2, 7, 12, 17, 22, 27, 32, 37, 42
Conscientiousness subscale: 3, 8, 13, 18, 23, 28, 33, 38, 43
Neuroticism subscale: 4, 9, 14, 19, 24, 29, 34, 39
Openness subscale: 5, 10, 15, 20, 25, 30, 35, 40, 41, 44
The Social Provisions Scale

INSTRUCTIONS: In answering the next set of questions, I want you to think about your current relationship with friends, family members, coworkers, community members, and so on. Please tell me to what extent you agree that each statement describes your current relationships with other people. Please provide a response for every question.

Rating scale:
- Strongly agree (4)
- Agree (3)
- Disagree (2)
- Strongly disagree (1)

1. There are people I can depend on to help me if I really need it.
2. I feel that I do not have close personal relationships with other people.*
3. There is no one I can turn to for guidance in times of stress.*
4. There are people who depend on me for help.
5. There are people who enjoy the same social activities I do.
6. Other people do not view me as competent.*
7. I feel personally responsible for the well-being of another person.
8. I feel part of a group of people who share my attitudes and beliefs.
9. I do not think other people respect my skills and abilities.*
10. If something went wrong, no one would come to my assistance.*
11. I have close relationships that provide me with a sense of emotional security and well-being.
12. There is someone I could talk to about important decisions in my life.
13. I have relationships where my competence and skills are recognized.
14. There is no one who shares my interests and concerns.*
15. There is no one who really relies on me for their well-being.*
16. There is a trustworthy person I could turn to for advice if I were having problems.
17. I feel a strong emotional bond with at least one other person.
18. There is no one I can depend on for aid if I really need it.*
19. There is no one I feel comfortable talking about problems with.*
20. There are people who admire my talents and abilities.
21. I lack a feeling of intimacy with another person.*
22. There is no one who likes to do the things I do.*
23. There are people I can count on in an emergency.
24. No one needs me to care for them.*

* Item is reverse coded
Impact of Event Scale

INSTRUCTIONS: Please indicate how frequently these items were true for you since your romantic relationship breakup. Please provide a response for every question.

Rating scale:
Often (5)  Sometimes (3)  Rarely (1)  Not at all (0)

1. I thought about the breakup when I didn’t mean to.
2. I avoided letting myself get upset when I thought about the breakup or was reminded of it.
3. I tried to remove the breakup from memory.
4. I had trouble falling asleep or staying asleep, because of pictures or thoughts about the breakup that came into my mind.
5. I had waves of strong feelings about the breakup.
6. I had dreams about the breakup.
7. I stayed away from reminders of the breakup.
8. I felt as if the breakup hadn’t happened or it wasn’t real.
9. I tried not to talk about the breakup.
10. Pictures about the breakup popped into my mind.
11. Other things kept making me think about the breakup.
12. I was aware that I still had a lot of feelings about the breakup, but I didn’t deal with them.
13. I tried not to think about the breakup.
14. Any reminder of the breakup brought back feelings about it.
15. My feelings about the breakup were kind of numb.

Intrusion subscale: Items 1, 4, 5, 6, 10, 11, 14
Avoidance subscale: Items 2, 3, 7, 8, 9, 12, 13, 15
The Breakup Distress Scale

*INSTRUCTIONS:* Think about your relationship breakup as you respond to the following items. Please provide a response for every question.

**Rating scale:**
- Very much so (4)
- Moderately so (3)
- Somewhat (2)
- Not at all (1)

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

**INSTRUCTIONS:** Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week. Please provide a response for every question.

**Rating scale:**
Most or All of the Time (3)
Occasionally or a Moderate Amount of Time (2)
Some or a Little of the Time (1)
Rarely or None of the Time (0)

1. I was bothered by things that usually don’t bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues even with help from my family or friends.
4. I felt that I was just as good as other people.*
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.*
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.*
13. I talked less than usual.
15. People were unfriendly.
16. I enjoyed life.*
17. I had crying spells.
18. I felt sad.
19. I felt that people disliked me.
20. I could not get “going.”

*Item is reverse coded.