

ABSTRACT

Social Cognitive Processing Theory of Romantic Relationship Dissolution

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Social cognitive processing (SCP) theory has been found to be predictive of significant distress and intrusive thinking following stressful life events and therefore creates a strong theoretical framework to examine how individuals cope following a breakup (Lepore, 2001). Only one study to date (i.e. Harvey & Karpinski, 2016) has examined the role of SCP theory in romantic relationship dissolution, which proposed that the relationship between negative interactions and breakup distress is mediated through avoidant coping behavior following a breakup. The current study served to expand on this research by: (a) replicating the basic model proposed by Harvey & Karpinski (2016), (b) investigating intrusive thoughts as a negative outcome, (c) examining the construct of avoidant coping behaviors within the model, and (d) exploring the distinct roles of negative and positive interactions with social supports. Participants included 319 college-age individuals who experienced a breakup within the past 12 months; they completed a one-time, online survey via the SONA recruitment system. Negative interactions demonstrated a partially mediated relationship with breakup distress through avoidant coping that was commensurate with

Harvey & Karpinski's (2016) results. Intrusive thoughts were also found to be a significant negative outcome within the proposed mediation model. Specific types of avoidant coping behaviors were found to be distinct and to play a role in mediating the relationship between negative interactions and negative outcomes (i.e. breakup distress and intrusive thoughts), while a general type of avoidant coping did not appear to predict unique variance. Positive interactions were not associated with the other variables in the study. Overall, the results suggests that SCP theory is a potential theoretical model in which to examine the effects of negative interactions on coping and negative outcomes following romantic relationship dissolution. Results also raise questions about the importance of positive interactions within SCP theory of romantic relationship dissolution.

Social Cognitive Processing Theory of Romantic Relationship Dissolution

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CHAPTER ONE

Introduction

Following romantic relationship dissolution (i.e., breakups), individuals can experience significant negative emotional outcomes; social cognitive processing theory (SCP) is a valuable approach to understanding how the quality of an individual's social support can both foster and hinder adaptive coping following a breakup. According to SCP theory, individuals who have positive interactions where they perceive they have been aptly supported by those in their social network are able to successfully integrate the information about the breakup into their existing worldview (Lepore, 2001). When individuals experience negative interactions with their social supports (i.e., unsupportive responses to people initiating conversation), however, they react by engaging in avoidant coping behaviors such as trying to avoid talking or thinking about the breakup; this avoidance may result in maintenance of intrusive thoughts and increased breakup distress (Lepore, 2001; Harvey & Karpinski, 2016). Harvey and Karpinski (2016) demonstrated how SCP theory can be applied to people experiencing recent relationship breakups and showed that negative interactions moderately predicted more breakup distress by increasing the use of avoidant coping behaviors (Harvey & Karpinski, 2016).

While Harvey and Karpinski (2016) successfully elaborate on the conceptualization of negative emotional outcomes following breakup, there are several ways in which this research can be expanded. First, this was a single study and therefore the findings need to be further investigated to provide additional support for the

understanding of SCP theory related to breakups. Second, the presence of intrusive thoughts was not included in data analyses when examining SCP theory in the context of romantic relationship dissolution, even though intrusive thoughts have been supported as an important negative outcome; therefore, they should be incorporated into the SCP theory related to romantic relationship dissolution as a negative outcome. Third, Harvey and Karpinski (2016) measured avoidance as avoiding thinking or talking about the breakup (i.e., general avoidance) and did not assess other types of avoidant coping behaviors such as behavioral disengagement, distraction, and denial; these are important factors of avoidant coping and should be included in the SCP theory of romantic relationship dissolution as potential mediators (Harvey & Karpinski, 2016). Fourth, it is possible that types of positive and negative interactions described in models of dyadic resilience will show unique relationships with the identified variables in SCP theory for breakups (Sanford, Backer-Fulghum, & Carson, 2015).

Romantic Relationship Dissolution

It is valuable to understand the experience of romantic relationship dissolution (i.e., breakup) because this is a common, yet stressful, life event that can result in individuals experiencing significant negative emotional outcomes. Romantic relationship dissolution is often considered to be a universal experience and is studied alongside other stressful or traumatic life events, such as experiencing a death or a serious illness (e.g., Lehto et al., 2018). Within the research, romantic relationship dissolution is often found in common lists of major life events believed to have a significant impact on an individual's psychological well-being (Monroe et al., 1999). For example, the Life Experiences Survey (Sarason et al., 1978) includes 57 items related to significantly

stressful life events, including “marital separation”, “divorce”, and “breaking up with boyfriend/girlfriend”; these items related to romantic relationship dissolution have been used within the survey to measure the impact of stressful life events on psychological outcomes, well-being, and quality of life in a variety of populations, including at-risk youth, cancer patients, university students, and general adult populations (Ito & Kodama, 2008; Ono et al., 2017; Wan et al., 2017; Lehto et al., 2018). Romantic relationship dissolution has been found to predict higher levels of stress and poorer mental health outcomes when measured alongside other common types of stressful life events (e.g., Wan et al., 2017; Wendt et al., 2019; Jenness et al., 2019).

Breakup distress appears as a significant negative outcome when individuals experience romantic relationship dissolution. Breakup distress has been defined as an intense and prolonged period of grief following the dissolution of a romantic relationship that is believed to parallel the symptoms and emotional outcomes in those experiencing posttraumatic stress symptoms or complicated grief after the death of a loved one (Field et al., 2009; Boelen & Reijntjes, 2009). This is an emotional outcome that is specific to the experience of romantic relationship dissolution and has been found to be analogous to other negative emotional experiences common to this population, such as depression and anger (Lepore & Greenberg, 2002; Harvey & Karpinski, 2016). The experience of high levels of breakup distress can create difficulty related to individuals’ ability to manage not only distress related to the breakup but future distress as well (Sprecher, 1994; Sprecher et al., 1998; Davis et al., 2003; Field et al., 2009; Boelen & Reijntjes, 2009; Le et al., 2010). Therefore, breakup distress presents as a significant, distinct negative

outcome that is important to consider when conceptualizing the process of romantic relationship dissolution.

Intrusive thoughts are found to be another important negative outcome within the research on romantic relationship dissolution. Research comparing romantic relationship dissolution to posttraumatic stress symptoms and complicated grief has resulted in conceptual models postulating that the varying types of intrusive thoughts individuals develop following a breakup can impact the emotional outcomes they experience (Brewin & Holmes, 2003; Dalgleish, 2004). According to cognitive processing models of posttraumatic stress symptoms, poor understanding and consolidation of information about the breakup prolongs the process of thinking about the event; this increases the occurrence of intrusive thoughts and can eventually result in the thoughts being viewed as negative and intrusive (Brewin & Holmes, 2003; Dalgleish, 2004). Research has suggested that several types of negative intrusive thoughts, ranging from self-blame about the breakup to negative views about the ways others reacted to the breakup, are associated with a number of significant negative outcomes, including the experience of complicated grief and breakup distress (Horowitz, 1986; Mearns, 1991; Janoff-Bulman, 1992; Boelen et al., 2003; Sbarra & Emery, 2005; Boelen & Reijntjes, 2009; Field et al., 2009; Mirsu-Paun & Oliver, 2017; del Palacio-Gonzalez, Clark, & O'Sullivan, 2017b). Further, it is not uncommon that the majority of individuals who have experienced a breakup will experience posttraumatic stress symptoms related to intrusive thoughts and high levels of distress; this distress can last up to two years after the breakup occurred (Chung et al., 2002; Halford & Sweeper, 2013). Thus, both distress and negative intrusive

thoughts are negative, impactful outcomes that are likely to occur following romantic relationship dissolution.

Negative emotional outcomes following romantic relationship dissolution impact college students in a similar and meaningful way as other populations, but it is reasonable to question whether the type of relationship influences the effects of the experienced distress. Although young adults often have different types of romantic relationships from older adults, effects that have been observed with breakups in older adults would also be expected with youths (Monroe et al., 1999). Adolescents and young adults are believed to experience multiple relationships during their youth that are less committal and more frequent and transitory than the relationships of their older adult counterparts; however, evidence supports the assertion that young adults will experience significant breakup distress even when their relationships are short-term (Monroe et al., 1999; Davis et al., 2003; Boelen & Reijntjes, 2009; Mirsu-Paun & Oliver, 2017). Married couples, especially those who are married or cohabitating with children, face a range of additional stressors that those who are casually dating or do not have children in the relationship will not face, such as losing financial stability, access to social networks, disrupted parenting roles, poor physical health, and custody concerns (e.g., Schneller & Arditti, 2004; Mason & Sbarra, 2013; Sanford & Rivers, 2017). Despite the differing factors, both martial and nonmarital relationship dissolution results in individuals experiencing feeling of sadness, loneliness, and depression (e.g., Sprecher, 1994; Monroe et al., 1999; Schneller & Arditti, 2004). Thus, distress that is often observed in older adults and in married dyads appears to be similar to the types of distress observed in younger adults in nonmarital relationships (Lewandowski & Radice, 2012; Dush, 2013). In sum, college-age

individuals are a population that experience negative emotional outcomes similar to their older adult counterparts and are a population worth studying in order to continue to explore how breakups impact target emotional outcomes.

Social Cognitive Processing Theory

Social cognitive processing theory (SCP) is a valuable approach to understanding how the quality of an individual's social support can both foster and hinder adaptive coping following stressful life events such as breakups. SCP theory is a conceptual means for understanding how characteristics of an individual's social network can affect their adjustment to a stressful life event by changing how the individual thinks and feels about the event and its impact on their world (Lepore, 2001). The theory was originally developed and studied within bereaved populations and individuals with cancer to understand how they were coping with the life changes that accompany these stressful events (Lepore et al., 1996; Lepore, 2001). SCP theory expands on classic cognitive processing models from trauma literature by incorporating the mechanisms of the social environment. Further, SCP theory takes on unique perspective by incorporating both the positive and negative components of social support and how these impact coping (Lepore & Revenson, 2007). In doing so, the theory posits that positive and negative interactions influence the ways in which people cope, which in turn influences negative outcomes (Lepore et al., 1996; Lepore, 2001).

When an individual experiences a stressful life event, they are likely to turn to others in their social network to express their thoughts and feelings about the event as a means of obtaining support (Lepore, 2001; Lepore & Revenson, 2007). An individual who seeks out social support is seeking out positive interactions, or interactions with

individuals they feel close to that can impact their affect, coping, and well-being (Badr, et al., 2010). SCP theory states that when others provide the desired social support individuals reached out for when seeking out positive interactions, they are able to process the thoughts and feelings about the event and reconcile how it now fits into their understanding of their world (Lepore, 2001; Lepore & Revenson, 2007). It is theorized that those in an individual's social network facilitate this by providing new perspectives on the situation, providing information about coping, or encouraging acceptance (Lepore & Revenson, 2007). There is extensive research that validates positive interaction's role in coping. Talking about one's feelings and asking for advice and opinions from supportive individuals is a common response following stressful life events (Chung et al., 2002; Carver, Schneier, & Weintrub, 1989, as cited in Lewandowski & Radice, 2012). Further, individuals are likely to look for positive interactions whether or not they choose to actively engage with it (Davis et al., 2003). SCP theory's perspective on positive interactions of social support has been tested in individuals with cancer and found to lead to psychological adjustment (Devine et al., 2003; Jacobsen et al., 2002; Roberts, et al., 2006).

SCP theory utilizes a two-dimensional conceptualization of social support by theorizing that while positive interactions can promote understanding and acceptance of the stressful event, negative interactions with one's social network can discourage this acceptance and instead promote further distress; thus, negative interactions are an important component of social support to examine. SCP theory traditionally focuses on negative social interactions that are unsupportive responses to people initiating conversations about the stressful life event (Lepore, 2001). These negative interactions

can manifest as words or actions from the supportive person that are perceived as dismissive, critical, or unhelpful by the individual seeking to disclose their thoughts and feelings about the stressful event (Lepore, 2001; Lepore & Revenson, 2007). When an individual seeks out opportunities to talk about their stressful event and they are met with negative interactions, it is theorized that this response from the social network has adverse effects on the individual's ability to cope adaptively. Specifically, they may engage in an increased amount of avoidant coping behaviors. Avoidant coping behaviors are conceptualized in the literature investigating SCP theory as avoidance of thinking and talking about the stressful event (Lepore & Revenson, 2007). When an individual engages in these general avoidant coping behaviors, or in other words, when they actively attempt to avoid thinking or talking about the stressful event, they unintentionally perpetuate the experience of the intrusive thoughts and distress they are attempting to avoid (Lepore, 2001; Lepore & Revenson, 2007). The increase in the negative experience of intrusive thoughts and distress can cause an individual to again attempt to avoid by engaging in avoidant coping behaviors; this cycle is likely to be maintained while the individual continues to experience negative interactions and is unable to adjust to the stressful event (Lepore 2001; Lepore & Revenson, 2007).

Evidence supports the notion that negative interactions and general avoidant coping behaviors are related to negative emotional outcomes following stressful events, specifically distress and intrusive thoughts. Several cancer populations have demonstrated positive associations between negative interactions and how much participants avoid thinking and talking about their illness (Cordova et al., 2001; Lepore & Helgeson, 1998; Manne et al., 2005; Schmidt & Andrykowski, 2004; Widows et al.,

2000; Zakowski, et al., 2004). Positive relationships have also been identified between negative interactions and the amount of intrusive thoughts experienced by cancer patients, while avoidant responses have been associated with more intrusive thoughts and worse mental health outcomes such as distress (Cordova et al., 2001; Lepore, 1997; Lutgendorf et al., 1999; Manne, 1999; Schmidt & Andrykowski, 2004). Research has also provided evidence in support of the mediating role of avoidant coping behaviors in the relationship between negative interactions and negative outcomes. Avoidance has been found to account for the relationship between negative interactions and distress in several cancer populations (Lepore & Helgeson, 1998; Manne et al., 2005; Schnur et al., 2004). This relationship has also been supported for individuals experiencing other types of stressful life events, including mothers who had lost a child, children exposed to violence, and fire disaster survivors (Silver & Holman, 1994; Lepore et al., 1996; Kliever, et al., 1998).

While avoidance of thinking or talking about the stressful event has been well supported within the SCP theory literature, avoidant coping behaviors have been more recently been conceptualized as including a broader range of behaviors, specifically behavioral disengagement, distraction, and denial (Prado et al., 2004; Snell et al., 2011). Researchers have determined that behavioral disengagement by means of giving up on coping, distraction by distracting oneself, and denial behaviors related to refusing to acknowledge that the event happened appear to be important components of avoidant coping (Lepore, 2001; Prado et al., 2004; Snell et al., 2011; Litman, 2016; Bishop et al., 2019).

Social Cognitive Processing theory is an important area of study because it parallels other well supported theories of social support while offering the unique inclusion of a model explicitly explaining the impact of both positive and negative interactions of social support. One well-validated theory of social support is the stress-buffering model (Cohen & Wills, 1985). The stress-buffering model, in short, suggests that social support is related to psychological well-being only when there is a stressful event (Cohen & Wills, 1985; Thoits, 1986; Cohen et al., 2001). In this model, social support mediates the relationship between a stressful situation and psychological outcomes by “buffering” or protecting against the negative emotional outcomes that can occur in the face of stress (Cohen & Wills, 1985). This occurs via social support’s ability to restructure an individual’s understanding of the stressful event that may lead to negative outcomes. Social support can intervene effectively by fostering the belief that the individual has appropriate resources to cope when the individual begins to perceive the situation as harmful; this can increase the individual’s self-efficacy for coping and make them more resilient to the stressors, thereby making social support an assistive tool for effective coping (Cohen & Wills, 1985; Thoits, 1986; Cohen, et al., 2001). This parallels SCP theory’s notion that increased positive interactions allow an individual to process the thoughts and feelings about the event and reconcile how it now fits into their understanding of their world, increasing the willingness to engage in effective coping and fostering acceptance of the event (Lepore, 2001; Lepore & Revenson, 2007).

The main effect model is another common social support model that mirrors SCP theory (Cohen & Wills, 1985). The main effect model suggests that social support will have a positive impact on psychological well-being regardless of the presence of a

stressor (Cohen & Wills, 1985; Cohen et al., 2001; Lackey & Orehek, 2011). Similar to SCP theory's understanding of positive interactions, the main effect model theorizes that social support exhibits a main effect on well-being and distress because consistent positive experiences with one's social networks can provide protective factors such as a sense of predictability, recognition of self-worth, and decreased likelihood of stressful experiences (Cohen & Wills, 1985). Close, consistent connections to social support providers allows individuals greater access to information and support via tangible resources that they can use on a regular basis (Cohen et al., 2001). Additional elaborations on this theory suggest that social support exhibits main effects because it may protect against the detrimental consequences of isolation rather than providing benefit (Cohen et al., 2001). This mirrors SCP theory's belief that an increase in positive interactions encourages assimilation and acceptance of the event while negative interactions create further avoidance of processing the stressful experience (Lepore, 2001; Lepore & Revenson, 2007).

In an elaboration of the main effect model, Lakey & Orehek (2011) proposed the Relational Regulation Theory as a means of further describing perceived social support's impact on psychological well-being. This theory posits that perceived social support directly impacts mental health on a daily basis through its ability to regulate an individual's affective, behavioral, and cognitive actions in the context of ordinary activities with support providers (Lakey & Orehek, 2001). Relational Regulation Theory suggests that the regular, idiographic experiences of social integration through an individual's day-to-day activities reinforce their representations of their positive, supportive relationships and allow for better affect regulation (Lakey & Orehek, 2011).

Thus, Relational Regulation Theory provides a model where main effects between perceived social support and psychological well-being are due to ordinary but effective interactions that take into account the unique preferences individuals possess regarding who and what they view as supportive (Lakey & Orehek, 2011). Lakey & Orehek's (2011) model aligns with SCP theory's understanding that common, social conversations about stressful events impact their approach to coping (Lepore, 2001; Lepore & Revenson, 2007). The valence of the daily social interactions can influence the choice of coping style, which in turn influences emotional outcomes (Lepore, 2001; Sanford et al., 2016).

SCP theory parallels these models by suggesting adequate, positive social support impacts psychological well-being by providing a means for adaptive coping that lowers one's risk for experiencing distress about the stressful event. However, SCP theory elaborates on the existing conceptual theories of social support by providing a model for what occurs when negative experiences of social support are encountered. Other theories of social support highlight important components of the research related to how positive interactions and perceptions of support facilitate adjustment and avoidance of negative emotional outcomes, such as the ability to help facilitate understanding of the event, provide intrinsic protective factors that promote adaptive coping, and facilitate perceptions of the positive support as consistent and available (Cohen & Wills, 1985; Cohen et al., 2001; Lackey & Orehek, 2011). SCP theory adds to the literature of social support theories by highlighting that negative interactions can also have a significant impact on coping following a stressful event by facilitating engagement in maladaptive,

avoidant coping patterns that result in negative outcomes for individuals experiencing stress.

Social Cognitive Processing Theory and Romantic Relationship Dissolution

Taking previous research into account, it is likely that social cognitive processing theory can be applied to the stressful life event of romantic relationship dissolution. When individuals experience a breakup, the most common response is to seek out the support of significant others (Chung et al., 2002; Davis et al., 2003). When they encounter positive interactions within their social network that are perceived to be supportive and available, individuals are better able to cope with and fully engage in understanding the stressful event, thus lessening the occurrence of breakup distress and intrusive thoughts about the breakup. If significant people in the individual's life provide negative interactions by responding in ways that are perceived as dismissive or critical, however, these individuals are more likely to engage in avoidant coping behaviors that consist of general avoidance (i.e., not thinking or talking about the breakup), behavioral disengagement, distraction, and denial from the romantic dissolution. This avoidance of engaging with thoughts and feelings related to the breakup may discourage or inhibit individuals from seeking out the positive support they need to adjust appropriately, and this increases the amount of breakup distress and intrusive thoughts about the dissolution.

Only one study has investigated social cognitive processing theory in the context of romantic relationship dissolution in a college-age sample. Harvey and Karpinski (2016) found that negative interactions, measured as social constraints, are not only associated with breakup distress but impact adaptive coping following a breakup. Social constraints were moderately related to breakup distress through the amount of general

avoidance college-age individuals engaged in following a romantic relationship dissolution (Harvey & Karpinski, 2016). Social constraints exhibited a small direct effect with breakup distress as well (Harvey & Karpinski, 2016). Harvey & Karpinski (2016) also found that the amount of social support perceived to be available by the individual affected the experience of breakup distress. Perceived social support availability moderated the relationship between social constraints and general avoidance (Harvey & Karpinski, 2016). In other words, when individuals reported higher levels of social support, they experienced less social constraints and engaged in less general avoidance (Harvey & Karpinski, 2016).

Clarifying Questions

While Harvey & Karpinski (2016) successfully elaborated on the conceptualization of how social support impacts negative outcomes following romantic relationship dissolution, there are several important next steps that should be taken. First, this was a single study and therefore the findings need to be replicated to provide additional support for the understanding of SCP theory related to breakups. It is important to replicate seminal studies because successful replication and validation of the study helps to provide clarity regarding the theorized model. SCP theory and the specific breakup-related model proposed by Harvey & Karpinski (2016) provide a potentially useful understanding for how types of supportive interactions impact negative outcomes following a breakup and how these negative effects may be maintained. Replicating this study can help to strengthen the understanding and conceptualization of the theory; this will therefore create a foundation for additional research to expand on in order to inform investigation of SCP theory in other populations.

Second, the presence of intrusive thoughts was not included in data analyses when examining SCP theory in the context of romantic relationship dissolution, even though intrusive thoughts have been supported as an important negative outcome in individuals experiencing other types of stressful life events and have been found to be important in the literature on negative outcomes following a breakup (e.g., Horowitz, 1986; Mearns, 1991; Janoff-Bulman, 1992; Boelen et al., 2003; Brewin & Holmes, 2003; Dalgleish, 2004). The presence of intrusive thoughts is conceptualized as a significant negative outcome of engaging in avoidant coping behaviors following the experience of negative interactions because avoidance can result in an increase in intrusive thoughts that further encourages avoidance and creates a cycle of maladaptive coping (Lepore, 2001; Lepore & Revenson, 2007). Negative interactions have been found to predict increased intrusive thoughts when the relationship is mediated by avoidant coping behaviors, and intrusive thoughts have been reported at similar rates as distress in these studies of SCP theory (e.g. Silver & Holman, 1994; Lepore et al., 1996; Lepore, 1997; Kliwer et al., 1998). Within the literature of romantic relationship dissolution, the experience of intrusive thoughts about the breakup has been found to be common in this population and related to both breakup distress and engagement in avoidant coping behaviors (Chung et al., 2002; Halford & Sweeper, 2013). Therefore, intrusive thoughts should be included as a negative outcome alongside breakup distress in order to fully examine the application of SCP theory to the experience of romantic relationship dissolution.

Third, Harvey & Karpinski (2016) measured avoidant coping behaviors as avoiding thinking about and talking about the romantic relationship dissolution (i.e., general avoidance) and did not assess other types of avoidant coping that have been

found to play a significant role in predicting negative outcomes following stressful events. Previous research that has applied SCP theory to the experience of stressful life events has measured avoidant coping behaviors in a similar manner; to date, limiting the assessment of avoidant coping behaviors to avoidance of thinking and talking about the stressor yields adequate support for the proposed models (e.g., Lepore & Helgeson, 1998; Schnur et al., 2004; Manne et al., 2005). However, factor analysis studies have found that additional constructs of avoidant coping are distinct and capture unique aspects of coping, namely: (a) denial behaviors related to refusing to acknowledge that the event happened, (b) behavioral disengagement related to giving up on coping with the stressful situation, and (c) distraction behaviors related to distracting oneself (Lepore, 2001; Prado et al., 2004; Snell et al., 2011; Litman, 2016; Bishop et al., 2019). In sum, these other types of avoidant coping behaviors should demonstrate unique variance in negative outcomes and provide support for the mediating role of avoidant coping in SCP theory.

Fourth, it is possible that types of positive and negative interactions, as described in models of dyadic resilience, would serve as a good way to measure the types of social support and constraints identified in SCP theory (Sanford, Backer-Fulghum, & Carson, 2016). Models of dyadic resilience have been conceptualized around the notion that it is important to understand the ways people naturally provide and receive coping and experience resilience in their relationships. These models emphasize both positive and negative ways in which coping is both given and received, similar to that of SCP theory (Lepore, 2001). Bodenmann (1997) developed a dyadic resilience model that describes individuals' responses to stress or perceiving stress in their partner in terms of four different types of dyadic coping. Two of these types, common coping and delegated

coping, target behavioral components of providing support by describing how partners can do things together and how one partner can complete tasks the other person requests, respectively (Bodenmann 1997; 2005). The other two types of coping involve the valence of how partners respond to the stress. Supportive coping captures comforting, encouraging, and supportive behaviors while negative coping captures behaviors considered to be hostile or ambivalent (Bodenmann 1997; 2005). Additional factor analysis research that has built on this and similar models of dyadic resilience and has found that these appraisals of everyday interactions between partners undergoing stressful situations are best conceptualized as distinct positive and negative dimensions that are nearly orthogonal (Fincham & Linfield, 1997; Tuccitto et al., 2010; Mattson et al., 2013; Sanford et al., 2016). Additionally, each dimension has different patterns of associations with outcomes related to well-being and quality of life: although modest, positive interactions have been found to correlate positively with these outcomes while negative interactions correlate negatively (Coyne & Smith, 1991; Bodenmann et al., 2011; Sanford et al., 2016). Harvey & Karpinski's (2016) study measured negative interactions and perceived support availability but did not explicitly measure the role of positive interactions in SCP theory. Therefore, both positive and negative interactions should be included as predictors in SCP theory of romantic relationship dissolution in order to examine their unique roles and to fully investigate the model in the context of breakups.

Key Factors for Consideration

Based on the available research, it is logical to assume that the qualities that define the relational experience have more of an impact on the level of distress that occurs rather than factors about the age and gender of the individual or the relationship

type. Indeed, indicators such as commitment to the relationship, duration of the relationship, time since the breakup, and who initiated the breakup are commonly incorporated into research when they are featured as measured variables rather than simply inclusion criteria (e.g., Frazier & Cook, 1993; Boelen & Reijntjes, 2009; Le et al., 2010).

The amount of time that has passed since the breakup occurred is a relationship variable that has received the most support. The amount of distress individuals experience regarding the breakup has been found to decline as the elapsed time since the romantic dissolution occurred increases (Knox et al., 2000; Moller et al., 2003; Harvey & Karpinski, 2016). On the other hand, research has also suggested that time since the breakup has a small effect on emotional outcomes and coping strategies and that it does not serve to explain unique variance compared to other variables of the breakup (Davis et al., 2003; Boelen & Reijntjes, 2009).

The amount of time an individual spent in the relationship has also received consideration, but research has again been mixed. Some studies have found support for the intuitive relationship between time spent in the romantic relationship and distress; longer relationship durations predicted more distress and worse psychological symptoms, potentially because of the increased investment that comes with staying in a relationship long-term (Bermann, 1988; del-Palacio Gonzalez et al., 2017b). However, other researchers have found evidence that time spent in the previous relationship has little to no effect on the degree of negative outcomes post breakup (Davis et al, 2003; Del-Palacio Gonzalez, Clark, & O'Sullivan, 2017a).

When considering the amount of commitment and quality of the past relationship, these factors have been found to be related to increases in negative outcomes even after controlling for other variables thought to impact this relationship (Mirsu-Paun & Oliver, 2017; Love et al., 2018). Similar to the other relationship variables discussed, however, there are mixed findings with some research suggesting that the quality of and commitment to the lost relationship does not predict unique variance between these variables and negative outcomes (Boelen & Reijntjes, 2009).

Lastly, who initiated the breakup is easily assumed to be an important relationship variable impacting how much breakup distress an individual may experience. As expected, not wanting the breakup and not being the individual who initiated the breakup results in experiencing more distress and negative psychological symptoms (Bermann, 1988; Tashiro & Frazier, 2003; Safrey & Ehrenberg, 2007; Brenner & Vogel, 2015; Del-Palacio Gonzalez et al., 2017b). However, even individuals who have initiated the breakup can still express negative outcomes in relation to the event; further, initiator status' predictive role has not been found consistently in the literature (Boelen & Reijntjes, 2009; Hunt & Chung, 2012).

In sum, there is research to support that qualitative factors about the relationship and the breakup, such as time in the relationship, perceived quality of and commitment to the relationship, initiator status of the breakup, and time elapsed since the breakup occurred have a more reliable and better documented impact on an individual's experience of negative outcomes than do the demographic variables. However, the literature still presents mixed findings of the impact of these situational characteristics.

Therefore, it is important to account for these relationship variables when conducting further research.

Hypotheses

In order to expand on Harvey & Karpinski's (2016) study and to provide further validation to social cognitive processing theory (SCP) in romantic relationship dissolution using more theory-accurate measures of support and a larger construct of avoidance, I conducted a study of 319 college students who had experienced a breakup within the past 12 months recruited from the online SONA platform through Baylor University. Four hypotheses were identified and are as follows:

Hypothesis 1: Negative interactions will predict greater breakup distress via a mediated pathway involving general avoidance.

Hypothesis 2: In addition to breakup distress, intrusive thoughts will be significantly predicted by the same mediated pathway of general avoidance.

Hypothesis 3: In addition to being mediated by general avoidance, the pathways between the negative outcomes of breakup distress and intrusive thoughts and negative interactions will also be mediated by behavioral disengagement, distraction, and denial avoidant coping behaviors.

Hypothesis 4: Positive interactions will predict breakup distress and intrusive thoughts via a mediated pathway of all avoidant coping behaviors. However, negative interactions and positive interactions will predict unique and distinct relationships with avoidant coping behaviors and negative outcomes (i.e., breakup distress and intrusive thoughts).

CHAPTER TWO

Method

Participants and Procedures

Participant Demographics

The sample for all analyses included 319 participants (95 men, 223 women, 1 prefer not to say) college-age individuals recruited from the Baylor University Department of Psychology research pool, who elected to participate in the study. Participants received one hour of research credit toward research requirements or as extra credit to be applied to an eligible class of their choice. Participants' age is estimated to range from 18 to 23 years. Means and standard deviations for age were not available due to an error in data collection: the demographic question regarding age was removed during the editing phase of the survey by error. Age range was obtained from pre-screen data collected through the SONA recruitment system and serves as an estimate, as it includes the ages of all individuals who signed up to complete the survey. Years of education ranged from high school-level diploma to master's level training (5 high school graduate/GED; 164 freshmen; 92 sophomore; 35 junior; 20 senior; 1 fifth-year senior; 1 Masters-level). In terms of race and ethnicity, 185 (58%) participants identified as non-Hispanic White, 26 (8.2%) as Black or African-American, 53 (16.6%) as Hispanic or Latino(a), 47 (14.7%) as Asian American, 1 (0.3%) as American Indian/Native American, 1 (0.3%) as Pacific Islander/Native Hawaiian, and 6 as "Other" (3 biracial, 1 multiracial, 1 White and Asian, 1 White and Pacific Islander). Reported time since the

target breakup occurred ranged from one month ago to one year ago ($M = 6.5$ months, $SD = 3.6$ months). Reported length of the target relationship ranged from 1-6 months to 5-6 years. Sexual orientations included 300 (94%) heterosexual, 2 (0.6%) gay, 16 (5%) bisexual, and 1 (0.3%) prefer to self-describe (pansexual) participants. Due to the occurrence of the COVID-19 pandemic during the study, data was identified as being collected either prior to the university's spring break holiday (Pre-COVID onset) or after (Post-COVID onset). This delineation was chosen because the university did not return for on-campus classes following the declaration of COVID-19 as a national emergency on March 13, 2020. One-hundred ninety participants were collected "Pre-COVID" and 129 participants were collected "Post-COVID".

Eligibility Criteria

In order to obtain a sample of young adult, or college-age, individuals, participants were only included in the final data set if they were 18 to 28 years of age. This age range is based on the mean age of participants found in similar studies that indicated a sample population consisting of college-age individuals (e.g. Chung et al., 2002; Field et al., 2009; del-Palacio Gonzalez et al., 2017a). Eligibility to participate in the study was contingent on several factors connected to the nature of the past relationship and resulting breakup. First, individuals must have experienced the dissolution of a romantic relationship within the past twelve months. This criteria was chosen not only because it is consistent with the eligibility criteria used by Harvey & Karpinski (2016), but because previous studies that examine the negative emotional outcomes following romantic relationship dissolution have also used populations that experienced a breakup in the past 12 months (Mearns, 1991; Sprecher et al., 1998; Chung

et al., 2002). This was also chosen based on findings that suggest significant breakup distress can persist from six months to two years following a breakup (Mearns et al., 1991; Sprecher et al., 1998; Chung et al., 2002; Halford & Sweeper, 2013). Therefore, there is evidence to support that including a population who has experienced a breakup in the past twelve months will result in a representative sample population.

Second, individuals were considered eligible to participate in the study if they indicated that they could identify at least one significant adult person in their life. This significant adult person was operationalized as an adult sibling, parent, or friend that participants thought about almost every day, was important to them, that currently plays a key role in their life, and that can influence how they feel. This definition excluded individuals that the participants pay, such as therapists. These criteria were included because of the study's focus on the impact of coping interactions provided by the individual's social network, and therefore participants should be able to identify at least one individual who is capable of providing these interactions. The operational definition of a significant adult person was based on criteria included in the measure that is used to assess positive and negative coping interactions, the Interpersonal Resilience Inventory (IRI; Rivers & Sanford, 2019). This measure includes a preliminary item that defines significant adult people in this manner and asks the participant to indicate the number of significant adult people in their life; further, the IRI includes descriptions of events specific to interactions with a significant adult person in the participant's life.

Procedures

The survey was developed through the Qualtrics survey platform and completed online through Baylor University's SONA recruitment system. Participants were

recruited by posting the study on the university's SONA site. Completion of the survey awarded one credit hour for successful completion to participants. Eligibility criteria were clearly presented to the participants prior to beginning the study and were confirmed by participants' completion of single-item questions that parallel the eligibility criteria. Participants also completed items regarding demographic information, qualities about the past relationship, and all target variables (i.e., positive and negative interactions, avoidant coping behaviors, breakup distress, and intrusive thoughts). Participants were instructed to think about their most recent relationship that resulted in a breakup within the past twelve months while they completed the survey. Several questions prompted participants to reflect on their emotional and mental states in the one month immediately following the breakup. To assist in recall of the past relationship and to facilitate focused reflection on this target breakup while completing the survey, participants were prompted to write three to five words that were specific about the relationship that had ended in their most recent breakup. These responses were then provided as prompts at the top of every set of questions.

All data were collected in a de-identified manner. Data were analyzed and excluded if a participant's dataset: was unfinished ($n = 17$); contained missing data ($n = 15$); contained written responses to the prompt asking participants to describe the relationship that were not consistent with their rated breakup/relationship status ($n = 3$); if the breakup occurred more than one year ago or if participants indicated they have never been in a significant relationship ($n = 58$); and if they indicated they had no significant people in their lives ($n = 2$). A data set was considered unfinished if the participant did not complete the survey past the screening items. A data set was considered to contain

enough missing data for exclusion if more than 5% of items were incomplete (ranged from 5-25% in current study). Total scores were calculated for all measures of the primary scales for target variables. Data analyses were then completed to test all hypotheses. These specific analytic steps are described in the Results section of this paper.

Measures

The full text of informed consent and measures can be found in Appendices A and B.

Qualities About the Past Relationship

All participants were asked to answer several classification questions about their past relationship. Following identification of a past relationship that ended in the past twelve months, participants were asked to indicate how long ago the dissolution of the relationship occurred. Participants were also asked to identify the length of time they were in the relationship, their perceived quality of the relationship, and their personal commitment to the relationship at the time of the breakup. Questions related to quality and commitment to the relationship were based on the question structure utilized by Harvey & Karpinski (2016). Participants were asked to identify the initiator of the breakup (i.e., themselves, the ex-partner, or both themselves and the ex-partner together). All questions regarding the past relationship were asked using single-item questions developed by the primary investigator.

Positive and Negative Interactions

Positive and negative interactions demonstrated within an individual's social network were measured using the Interpersonal Resilience Inventory (IRI; Rivers & Sanford, 2019). The IRI first asked individuals to indicate how many 'significant adult people' they have in their life, identified with the following definition:

"The next question will ask about significant adult people in your life today. A significant adult person could be your spouse, partner, adult child, parent, or friend. A significant adult person is someone that you think about almost every day, that is important to you, that currently plays a key role in your life, and that can influence how you feel. Please do not include any professionals you pay, such as therapists." (Rivers & Sanford, 2019).

Participants were then asked to rate the perceived frequency of 16 different interactions over the past month as they coped with their stressful situation; eight items loaded onto a positive interactions factor and eight items loaded onto a negative interactions factor. Items were reworded so that instead of 'stressful situation' and focusing on the interactions that occurred in the last month, respondents were prompted to think about 'most recent breakup' and to focus on interactions that occurred one month after the breakup. An example of a positive interaction item is "In your relationship with a significant adult person in your life, one of you helped the other by maintaining a positive attitude and being optimistic." An example of a negative interaction item is "In your relationship with a significant adult person in your life, one of you was critical or hostile or blamed the other." Items were rated on an eight-point scale: 'This definitely did not happen' (0), 'I do not think this happened' (1), 'This happened once' (2), 'This happened a few times' (4), 'This happened once a week' (5), 'This happened a few times per week' (6), 'This happened every day' (7), 'This happened a few times a day' (8).

Good internal consistency was demonstrated for both the positive interactions scale ($\alpha = .84$) and the negative interactions scale ($\alpha = .84$) in the current study.

General Avoidance

General Avoidance was assessed using the Impact of Event Scale avoidant subscale (IES; Horowitz, Wilner, & Alvarez, 1979). The IES avoidant subscale is made up of eight items that assess the frequency with which individuals avoid experiencing thoughts and feelings about an event. Items were reworded to reference the individual's most recent breakup. Examples of items include, "I tried to remove the breakup from memory" and "I stayed away from reminders of the breakup." Items are rated on a four-point scale: (0) Not at all, (1) Rarely, (3) Sometimes, (5) Often. Fair internal consistency was demonstrated in the current study ($\alpha = .72$).

Behavioral Disengagement, Distraction, and Denial

Avoidant coping behaviors of behavioral disengagement, distraction, and denial were assessed using the Brief COPE (Carver, 1997). The Brief COPE was developed as a shortened version of the COPE Inventory and serves as a measure of meaningful aspects of coping behaviors (Carver et al., 1989; Carver, 1997). Three subscales of the Brief COPE were utilized as measures of avoidant coping behaviors: behavioral disengagement, distraction, and denial. The denial subscale consists of two items. An example of an item is, "I refused to believe that the breakup had happened." This scale demonstrated fair internal consistency ($\alpha = .72$). The behavioral disengagement subscale consists of two items. An example of an item is, "I just gave up trying to cope with the breakup." This scale demonstrated poor internal consistency ($\alpha = .41$). The distraction

subscale consists of two items. An example of an item is, “I turned to work or other substitute activities to take my mind off things.” This scale demonstrated poor internal consistency ($\alpha = .40$). Items are rated on a four-point scale, ranging from (1) I haven’t been doing this at all to (4) I’ve been doing this a lot. Items were reworded to reference the individual’s most recent breakup.

Breakup Distress

Breakup distress was measured using the Breakup Distress Scale, an event-specific measure of distress (Field et al., 2009). The scale was adapted from the Inventory of Compiled Grief questionnaire (ICG), which is a 19-item measure that assesses symptoms of grief related to bereavement related depression and anxiety (Prigerson et al., 1995). The Breakup Distress scale was adapted from the ICG by rewording items so that they reference the ex-partner from the distressing breakup; the final measure consists of 16-items, with three items from the ICG lacking relevance (Field et al., 2009). The Breakup Distress Scale demonstrated excellent internal consistency ($\alpha = .92$) in the current study. Examples of items include, “I can’t help feeling angry about the breakup” and “I feel alone a great deal of time since the breakup”. Items are rated on a four-point Likert scale, ranging from (1) Not at all to (4) Very much so.

Intrusive Thoughts

The prevalence of intrusive thoughts experienced by participants was assessed using the Impact of Event Scale intrusion subscale (Horowitz, Wilner, & Alvarez, 1979). The IES intrusion subscale is made up of seven items that assess the frequency with which individuals report experiencing persistent and uncontrollable thoughts about a

stressful situation. Items were reworded to reference the individual's most recent breakup. Examples of items include, "I thought about the breakup when I didn't mean to" and "Pictures about the breakup popped into my mind." Items are rated on a four-point scale: (0) Not at all, (1) Rarely, (3) Sometimes, (5) Often. This scale demonstrated excellent internal consistency in the current study ($\alpha = .90$).

Demographics

Demographic information was collected at baseline, including gender, race/ethnicity, sexual orientation, and years of education. As mentioned above, estimated age range for participants was determined using prescreen data through the SONA recruitment system, which provides the ages of all participants who signed up to participate; this does not provide a precise age range for actual participants.

CHAPTER THREE

Results

Preliminary Analyses

Means and Standard Deviations

Means, standard deviations, and ranges for all measures are found in Table 3.1.

Overall, participants responded evenly across the range of responses.

Table 3.1 *Scale Frequencies*

Variable	Mean	Standard Deviation	Possible Range	Actual Range
Negative Interactions	23.0	11.5	0-72	2-57
Positive Interactions	40.5	11.1	0-72	3-63
Breakup Distress	39.3	11.8	16-64	16-64
Intrusive Thoughts	20.3	9.4	0-35	0-35
General Avoidance	20.7	8.1	0-40	0-40
Behavioral Disengagement	4.2	1.6	2-10	2-8
Distraction	6.1	1.5	2-10	2-8
Denial	3.2	1.6	2-10	2-8

Correlations

Associations between variables included in the study were examined by reviewing bivariate correlations between all measures. Results are reported in Table 3.2. Negative interactions demonstrated moderate correlations with breakup distress and intrusive thoughts ($r = 0.34$; $r = 0.30$) and small to moderate correlations with all measures of avoidant coping behavior ($r = 0.20 - 0.32$). Positive interactions showed no significant

Table 3.2 *Variable Correlations*

Variable	Negative Interactions	Positive Interactions	Breakup Distress	Intrusive Thoughts	General Avoidance	Behavioral Disengagement	Distraction	Denial
Negative Interactions	-							
Positive Interactions	.10	-						
Breakup Distress	.34**	.03	-					
Intrusive Thoughts	.30**	.06	.81**	-				
General Avoidance	.20**	.08	.34**	.32**	-			
Behavioral Disengagement	.32**	> -.01	.51**	.45**	.43**	-		
Distraction	.22**	.18**	.40**	.40**	.37**	.27**	-	
Denial	.25**	> .01	.48**	.46**	.28**	.39**	.16**	-

** $p < .01$

correlation with breakup distress or intrusive thoughts ($r = 0.03 - 0.10$). It demonstrated no significant correlations with the behavioral disengagement, denial, or general avoidance coping behaviors ($r = 0.00 - 0.08$). Positive interactions did demonstrate a small positive correlation with the distraction avoidant coping behavior ($r = 0.18$), which was an unexpected finding given that it was hypothesized positive interactions would decrease engagement in avoidant coping behavior. Negative and positive interactions did not correlate with one another, as expected. These results suggest that it is unlikely positive interactions will produce any expected effects in mediation models. All avoidant coping behaviors showed small to moderate correlations ($r = 0.16 - 0.43$).

Associations between key variables and covariates were also examined and can be found in Table 3.3. Initiator status showed small positive correlations with negative interactions ($r = 0.15$), breakup distress ($r = 0.24$), intrusive thoughts ($r = 0.17$), behavioral disengagement ($r = 0.18$), distraction ($r = 0.12$), and denial ($r = 0.17$). It did not show a significant relationship with positive interactions or general avoidance. The amount of time since the breakup occurred showed no significant relationship with any of the key variables. The length of the target relationship showed small positive correlations with breakup distress ($r = 0.17$) and intrusive thoughts ($r = 0.19$), suggesting that participants who experienced longer relationships experienced more negative outcomes following the breakup. The perceived quality of the relationship showed no significant relationship with any of the key variables except for a small positive correlation with denial ($r = 0.22$). The level of commitment demonstrated moderate positive correlations with breakup distress ($r = 0.40$) and intrusive thoughts ($r = 0.41$), indicating individuals with an increased level of commitment also experienced greater negative outcomes.

Commitment was not related to negative interactions. Lastly, the time at which a participant took the survey in relation to the onset of the COVID-19 pandemic did not demonstrate a significant relationship with any of the key variables for the present study.

Table 3.3 Key *Variable Correlations with Covariates*

Variable	Initiator Status	Time Since Breakup	Relationship Length	Quality	Commitment	COVID
Negative Interactions	.15**	.10	-.01	.03	.11	.08
Positive Interactions	-.02	<-.01	-.06	.02	.16**	<-.01
Breakup Distress	.24**	.02	.17**	.09	.40**	-.03
Intrusive Thoughts	.17**	-.01	.19**	.09	.41**	-.04
General Avoidance	-.07	-.03	.16**	-.10	.15**	<-.01
Behavioral Disengagement	.18**	.01	.02	<.01	.15**	.04
Distraction	.12*	-.06	.07	-.03	.18**	<.01
Denial	.17**	-.04	.12*	.22**	.18**	.04

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

Distinctiveness of Coping Scales

The extent to which the avoidant coping scales function as separate variables was examined due to the fact that all hypotheses utilized these coping scales. Individual avoidant coping scales were determined to be distinct if they did not correlate excessively (i.e., not consistently moderate to large correlations) and if they each explained unique variance in negative outcomes. Correlations between the avoidant coping scales can be found in Table 3.2; the scales were evaluated and ranged from small to moderate ($r = 0.16-0.43$). Linear regressions were then completed where each negative outcome was predicted by all 4 coping scales in order to determine how much variance was explained

by each avoidant coping behavior while controlling for the other coping behaviors. Standardized beta weights can be located in Table 3.4. Scales measuring behavioral disengagement, distraction, and denial were significant in predicting unique variance despite behavioral disengagement and distraction demonstrating poor reliability. Thus, these measures of avoidant coping behaviors of behavioral disengagement, distraction, and denial were unique from one another and can be utilized as independent mediators. General avoidance did not demonstrate significant beta weights. This raises the question about the extent to which the general avoidance scale is capturing avoidant coping behaviors distinct from those captured in the other 3 scales.

Table 3.4 *Standardized Beta Weights – Linear Regression*

Variable	Behavioral Disengagement	Distraction	Denial	General Avoidance
Breakup Distress	.30***	.26***	.32***	.07
Intrusive Thoughts	.23***	.27***	.32***	.06

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

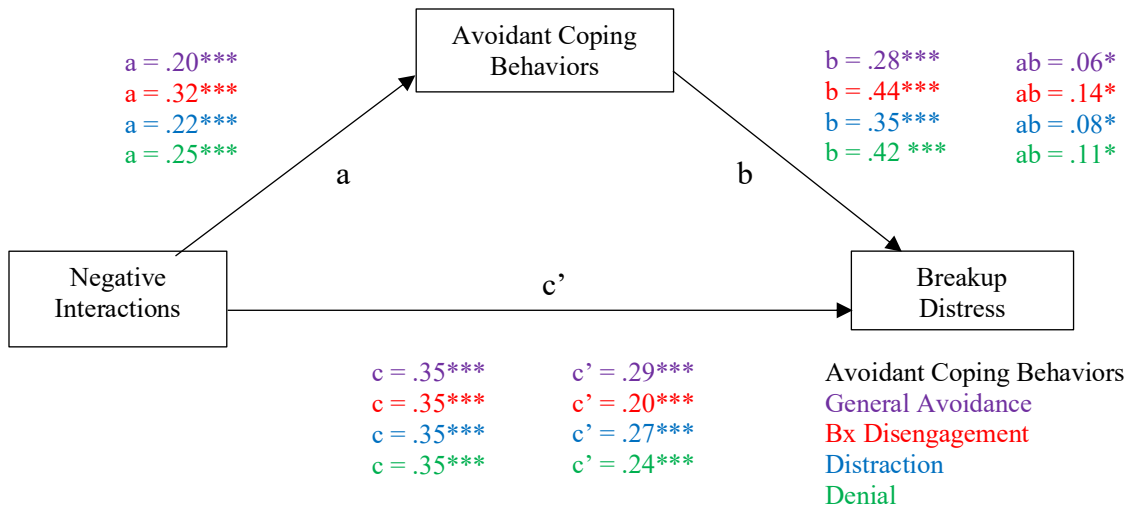
Hypothesis Testing

Hypothesis 1: Mediation of Negative Interactions and Breakup Distress

In order to further investigate the theoretical model posited by Harvey and Karpinski (2016), the first key hypothesis predicted that negative interactions, as measured by the IRI Negative Interactions subscale, would predict greater breakup distress via a mediated pathway involving general avoidance, as measured by the Impact of Event Scale general avoidance subscale. Simple mediations using Model 4 of Andrew Hayes's PROCESS macro for SPSS were run. (Hayes, 2012). The significance of indirect

effects was tested using bootstrapping procedures with a 5,000 bootstrapping sample and 95% confidence intervals.

Scores of negative interactions were included as the independent variable, scores for general avoidance coping behavior were included as the mediating variable, and scores from the Breakup Distress Scale were included as the outcome variable. Results of this simple mediation can be found in Figure 3.1 in purple font and are reported with standardized beta weights. As expected, analyses demonstrated a significant indirect effect of negative interactions on breakup distress through general avoidance ($b = 0.06, p < .001$). Significant direct effects were also found between negative interactions and breakup distress, indicating the relationship is partially mediated by general avoidance. Covariates were entered into individual mediation equations to determine if they account for additional variance in the model. Separate models were run for each covariate with the covariate predicting both the mediator and the outcome. Indirect effects for covariates are located in the righthand column of Table 3.5. The mediated relationship between negative interactions and breakup distress remained significant after controlling for initiator status of the breakup, time since the breakup occurred, length of the relationship, perceived quality of the relationship, participant's commitment to maintaining the relationship, and whether data was collected pre- or post-COVID. These results are consistent with the mediated relationship supported in Harvey and Karpinski's (2016) model.



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

Figure 3.1. Simple mediation models for the relationship between negative interactions and breakup distress

Table 3.5 Standardized Indirect Effects for Covariates in Relationship Between Negative Interactions and Breakup Distress

Avoidant Coping Behavior	Covariate	Standardized Direct Effects	Standardized Indirect Effects
General Avoidance	Initiator Status	.25***	.07*
	Time Since Breakup	.29***	.06*
	Relationship Length	.30***	.05*
	Quality	.29***	.06*
	Commitment	.26***	.05*
	Pre-/Post-COVID	.30***	.06*
Behavioral Disengagement	Initiator Status	.19***	.13*
	Time Since Breakup	.20***	.14*
	Relationship Length	.21***	.14*
	Quality	.20***	.14*
	Commitment	.18***	.12*
	Pre-/Post-COVID	.21***	.14*
Distraction	Initiator Status	.25***	.07*
	Time Since Breakup	.27***	.08*
	Relationship Length	.28***	.07*
	Quality	.27***	.08*
	Commitment	.25***	.06*
	Pre-/Post-COVID	.28***	.08*
Denial	Initiator Status	.23***	.09*
	Time Since Breakup	.24***	.11*
	Relationship Length	.25***	.10*

Continued

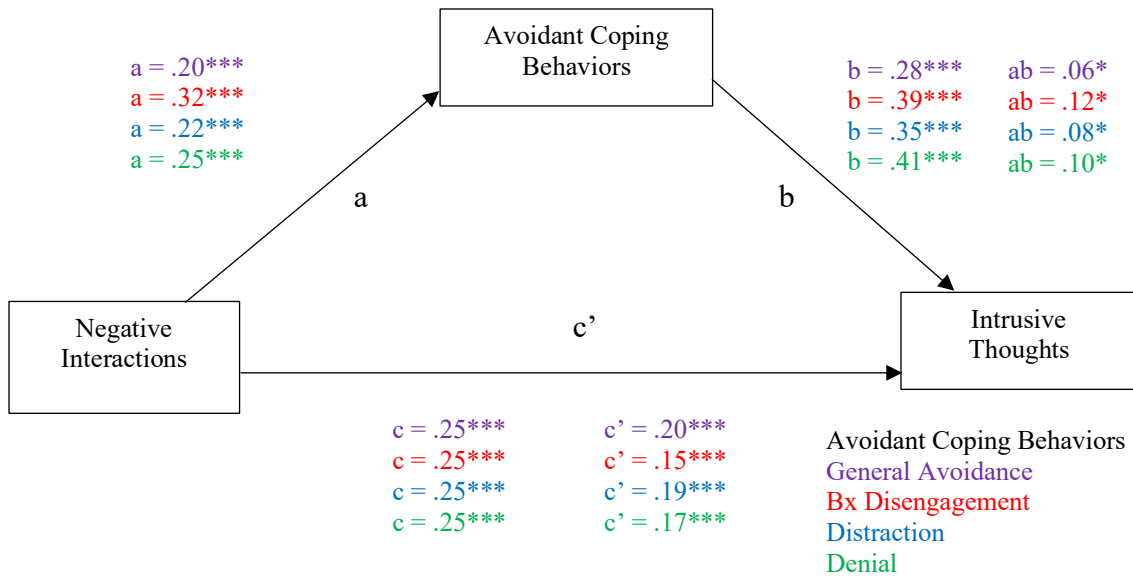
Avoidant Coping Behavior	Covariate	Standardized Direct Effects	Standardized Indirect Effects
Denial	Quality	.24***	.10*
	Commitment	.22***	.09*
	Pre-/Post-COVID	.25***	.11*

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

Hypothesis 2: Intrusive Thoughts Predicted by Negative Interactions When Mediated by General Avoidance

Hypothesis 2 posited that intrusive thoughts would be a valuable negative outcome within the social cognitive processing theory model. This would be evidenced by intrusive thoughts being predicted by negative interactions via the mediated pathway of general avoidance. Simple mediations were run to test this hypothesis.

In contrast to the previous model, scores from the Impact of Event Scale intrusive thoughts subscale were included as the outcome variable. Results of this simple mediation can be found in Figure 3.2 in purple font and are reported with standardized beta weights. Analyses demonstrated a significant indirect effect of negative interactions on intrusive thoughts through general avoidance, similar to that demonstrated with breakup distress ($b = 0.06, p < .001$). A significant direct effect was also demonstrated for the relationship between negative interactions and intrusive thoughts. Indirect effects for covariates are located in the right hand column of Table 3.6. The mediated relationship between negative interactions and intrusive thoughts remained significant after controlling for all covariates.



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

Figure 3.2. Simple mediation models for the relationship between negative interactions and intrusive thoughts

Table 3.6 *Standardized Indirect Effects for Covariates in Relationship Between Negative Interactions and Intrusive Thoughts*

Avoidant Coping Behavior	Covariate	Standardized Direct Effects	Standardized Indirect Effects
General Avoidance	Initiator Status	.18***	0.06*
	Time Since Breakup	.21***	0.06*
	Relationship Length	.21***	0.05*
	Quality	.20***	0.06*
	Commitment	.18***	0.04*
	Pre-/Post-COVID	.21***	0.06*
Behavioral Disengagement	Initiator Status	.14***	0.11*
	Time Since Breakup	.15***	0.13*
	Relationship Length	.15***	0.12*
	Quality	.15***	0.12*
	Commitment	.13***	0.11*
	Pre-/Post-COVID	.15***	0.12*
Distraction	Initiator Status	.18***	0.07*
	Time Since Breakup	.19***	0.08*
	Relationship Length	.19***	0.07*
	Quality	.18***	0.08*
	Commitment	.17***	0.06*
	Pre-/Post-COVID	.19***	0.08*
Denial	Initiator Status	.16***	0.09*

Continued

Avoidant Coping Behavior	Covariate	Standardized Direct Effects	Standardized Indirect Effects
Denial	Time Since Breakup	.17***	0.10*
	Relationship Length	.17***	0.10*
	Quality	.17***	0.10*
	Commitment	.15***	0.08*
	Pre-/Post-COVID	.17***	0.10*

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

Hypothesis 3: Avoidant Coping Behaviors Will Mediate the Relationship Between Negative Interactions and Negative Outcomes

Hypothesis 3 predicted that the additional types of avoidant coping behaviors, measured by behavioral disengagement, distraction, and denial subscales of the Brief COPE measure, would act as mediators in the relationship between coping interactions and negative outcomes. To test this, simple mediations were run.

To test the role of each of the avoidant coping behaviors as a mediating variable, scores of negative interactions were included as the independent variable and scores of breakup distress were included as the outcome variable. Results of this simple mediation can be found in Figure 3.1 and are reported with standardized beta weights; behavioral disengagement scores appear in red font, distraction scores appear in blue font, and denial scores appear in green font. Analyses demonstrated a significant indirect effect of negative interactions on breakup distress through all 3 coping variables (behavioral disengagement, distraction, and denial). Direct effects were also demonstrated for all 3 variables. Indirect effects for covariates are included in the righthand column of Table 3.5. The mediated relationship between negative interactions and breakup distress remained significant after controlling for all covariates. Simple mediation was also run to test the role of each avoidant coping behavior in the relationship between negative interactions and intrusive thoughts. Results of this simple mediation can be found in Figure 3.2 and are reported with standardized beta weights. Analyses demonstrated a

significant indirect effect of negative interactions on intrusive thoughts through behavioral disengagement, distraction, and denial. Direct effects were also demonstrated for all 3 variables. Indirect effects for covariates are included in Table 3.6. The mediated relationship remained significant after controlling for all covariates.

Hypothesis 4: Negative and Positive Interactions Will Predict Unique Relationships with Avoidant Coping Behaviors and Negative Outcomes

The fourth key hypothesis predicted that negative interactions and positive interactions would demonstrate unique and distinct relationships with avoidant coping behaviors and negative outcomes. Positive interactions were predicted to demonstrate a negative mediated pathway with negative outcomes via avoidant coping behaviors. Additionally, negative interactions were expected to continue to demonstrate a mediated pathway after controlling for positive interactions; positive interactions were also expected to continue to demonstrate a mediated relationship after controlling for negative interactions. Simple mediations were run in order to test the components of the hypothesis.

Results for simple mediation of positive interactions effect on negative outcomes through avoidant coping behaviors can be found in Figure 3.3 (for breakup distress) and Figure 3.4 (for intrusive thoughts) and are reported with standardized beta weights. Results were unlikely to be significant because positive interactions mostly had non-significant bivariate associations with all other variables. Analyses demonstrated no significant indirect effect of positive interactions on breakup distress or on intrusive thoughts through behavioral disengagement, denial, or general avoidance. A significant indirect effect was demonstrated for positive interactions on both breakup distress ($b =$

0.07, $p < .001$) and intrusive thoughts ($b = 0.07$, $p < .001$) through distraction; no significant total or direct effects were found. This effect is unexpected given that positive interactions was not expected to have a positive relationship with avoidant coping.

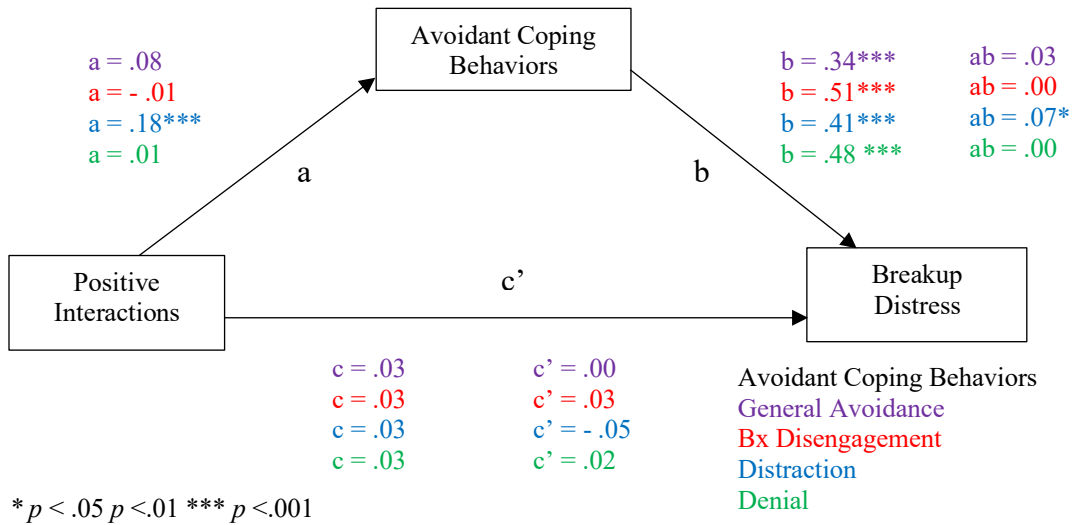


Figure 3.3. Simple mediation models for the relationship between positive interactions and breakup distress

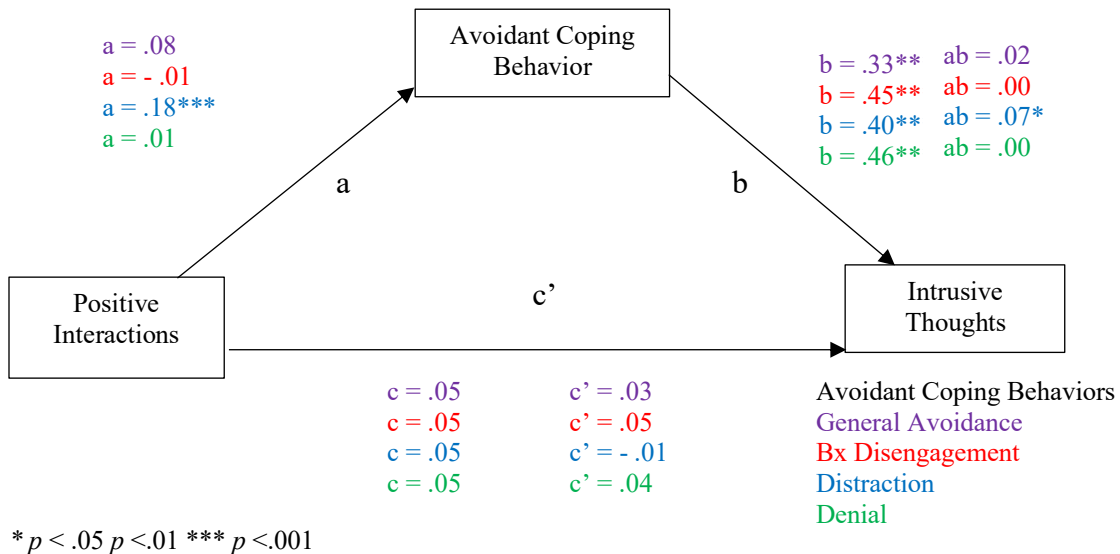


Figure 3.4. Simple mediation models for the relationship between positive interactions and intrusive thoughts

Indirect effects for the relationship between negative interactions and negative outcomes through the avoidant coping behaviors when controlling for positive interactions are included in Table 3.7. The mediated relationship of negative interactions and negative outcomes remained significant for all 4 avoidant coping behaviors after controlling for positive interactions.

Table 3.7 *Standardized Indirect Effects in Relationship Between Negative Interactions and Negative Outcomes When Controlling for Positive Interactions*

Negative Outcome	Avoidant Coping Behavior	Standardized Direct Effects	Standardized Indirect Effects
Breakup Distress	General Avoidance	.29***	.06*
	Behavioral Disengagement	.20***	.14*
	Distraction	.28***	.07*
	Denial	.24***	.11*
Intrusive Thoughts	General Avoidance	.20***	.05*
	Behavioral Disengagement	.14***	.13*
	Distraction	.19***	.07*
	Denial	.16***	.10*

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

Indirect effects for the relationship between positive interactions and negative outcomes through the avoidant coping behaviors when controlling for negative interactions are included in Table 3.8. Notably, these relationships were mostly non-significant to begin with and were not expected to demonstrate mediated effects with the rest of the results in mind. The mediated relationship of positive interactions and negative outcomes through general avoidance, behavioral disengagement, and denial remained not significant after controlling for negative interactions. The mediated relationship of positive interactions and negative outcomes through distraction remained significant with no significant total or direct effects.

Table 3.8 *Standardized Indirect Effects in Relationship Between Positive Interactions and Negative Outcomes When Controlling for Negative Interactions*

Negative Outcome	Avoidant Coping Behavior	Standardized Direct Effects	Standardized Indirect Effects
Breakup Distress	General Avoidance	-.03	.02
	Behavioral Disengagement	.01	-.02
	Distraction	-.07	.06*
	Denial	.00	-.01
Intrusive Thoughts	General Avoidance	.01	.02
	Behavioral Disengagement	.04	-.02
	Distraction	-.03	.06*
	Denial	.03	-.01

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

CHAPTER FOUR

Discussion

The goal of the current study was to examine the role of social cognitive processing theory (SCP) in romantic relationship dissolution. This was examined utilizing components of the theoretical framework proposed by Harvey and Karpinski (2016). Results were in line with the previous findings of Harvey and Karpinski (2016), providing support to the proposed model. Simple mediations revealed that negative interactions predicted breakup distress via a mediated pathway involving general avoidance. Current results also expanded on Harvey & Karpinski's (2016) model in several ways. First, negative interactions predicted intrusive thoughts through general avoidance, suggesting that intrusive thoughts can serve as an important negative outcome when studying romantic relationship dissolution. Second, additional constructs of avoidant coping behaviors (i.e., behavioral disengagement, distraction, and denial) explained unique variance in the negative outcomes of breakup distress and intrusive thoughts. Negative interactions predicted both breakup distress and intrusive thoughts through behavioral disengagement, distraction, and denial, respectively. This suggests that additional constructs of avoidant coping are valuable within the model. Not all hypotheses were supported in the current study. Negative interactions and positive interactions did demonstrate unique results within simple mediation models. However, positive interactions did not demonstrate significant total effects or direct effects on breakup distress or intrusive thoughts when mediated by any of the avoidant coping

behaviors. No significant indirect effects were found for general avoidance, behavioral disengagement, or denial; indirect effects were demonstrated when distraction was used as the mediator between positive interactions and breakup distress. This was also true for the relationship between positive interactions and intrusive thoughts.

The Effect of Negative Interactions on Breakup Distress

The primary finding in this study was the role of negative interactions on breakup distress as an outcome of romantic relationship dissolution in college-age individuals who experienced a breakup in the past twelve months. As hypothesized, negative interactions predicted breakup distress through avoidant coping behaviors (i.e., general avoidance, behavioral disengagement, distraction, and denial). That is, individuals who experienced the dissolution of a romantic relationship and engaged in social support interactions that were viewed as dismissive or critical were more likely to experience breakup distress due to increased engagement in avoidant coping behaviors. This remained true after controlling for initiator status of the breakup, time since the breakup occurred, length of the relationship, perceived quality of the relationship, and participant's commitment to maintaining the relationship, which the literature suggested might be influential in the relationship between social support and negative outcomes (e.g., Frazier & Cook, 1993; Boelen & Reijntjes, 2009; Le et al., 2010). Negative interactions also demonstrated a slightly smaller direct relationship with breakup distress; this is not surprising given their moderate correlation and similar direct effects found in past studies (Harvey & Karpinski, 2016). This tells us that, despite the direct relationship between negative interactions and breakup distress, engagement in avoidant coping

behaviors predicted unique variance beyond this relationship and plays an important role in understanding coping with negative outcomes following a breakup.

Overall, these results provide support for the application of SCP theory to romantic relationship dissolution that was proposed by Harvey & Karpinski (2016). The current mediation models demonstrated similar results to those found in the original study, thus suggesting that the theoretical model of SCP theory is applicable to the experience of breakups in college age individuals. This is important because Harvey & Karpinski (2016) were the first to empirically investigate SCP theory in the context of romantic relationship dissolution; successful replication and validation of a study helps to provide clarity regarding the theorized model and is often a standard in empirically-based investigation of psychological theory and intervention (Chambless & Ollendick, 2001).

It is notable that the construct of negative interactions used in this study performed similarly to the construct of social constraints used in the seminal research because it provides evidence that negative interactions, as measured in models of dyadic resilience, is a valid way to measure social support within the proposed model. The current data suggests that assessing for additional types of negative interactions outside of those found within communication plays a significant role within SCP theory. This finding provides researchers with support for measuring negative appraisals of support and allows for additional avenues of investigation of this model in future research. This helps to broaden the model and may create new iterations of SCP theory that can be applied to romantic relationship dissolution and potentially other types of relational stressful events.

The Role of Intrusive Thoughts

As hypothesized, negative interactions predicted an increase in intrusive thoughts through all avoidant coping behaviors. An indirect effect was also found for positive interaction's impact on intrusive thoughts through the avoidant coping behavior of distraction. Therefore, it can be concluded that intrusive thoughts acted as a meaningful negative outcome within the present study. This is important because these results are in line with previous research that individuals who have gone through a breakup will experience intrusive thoughts long after the breakup had occurred (Chung et al., 2002; Halford & Sweeper, 2013). Additionally, these results support the notion that intrusive thoughts are applicable as a meaningful negative outcome within SCP theory for romantic relationship dissolution. This is important because, to date, previous research has not included intrusive thoughts as an outcome within the experience of romantic relationship dissolution, despite its inclusion in research of SCP theory for other stressful life events (Lepore, 2001; Harvey & Karpinski, 2016). This data provides initial evidence that expanding the model of SCP theory for romantic relationship dissolution to include intrusive thoughts is a logical next step within the research.

Conceptualization of Avoidant Coping Behaviors

All target avoidant coping behaviors (i.e., general avoidance, behavioral disengagement, distraction, and denial) played a significant role in the analysis of SCP theory's application to romantic relationship dissolution in the present study. As explained above, general avoidance, behavioral disengagement, distraction, and denial all acted as mediators in the relationship between negative interactions and negative outcomes (i.e., breakup distress and intrusive thoughts); distraction showed a significant

indirect effect in the relationship between positive interactions and negative outcomes. This data provides support to the conceptualization within SCP theory that avoidant coping is a major factor in the occurrence of negative outcomes following stressful life events, specifically related to romantic relationship dissolution (Harvey & Karpinski, 2016).

The current results also provide additional information on the hypothesis that various types of avoidant coping would play an important role within the model. All types of coping showed a significant role in the model. Of note, distraction was the only behavior that showed a significant relationship with positive interactions. To find such an isolated finding, particularly in a direction that does not align with the theoretical direction of the model, suggests that this result could be due to sampling error. Additionally, distraction showed poor internal consistency, which raises the question about how much of null findings are due to poor reliability. Therefore, replication of the study is necessary to determine the nature of this finding.

Results did show that 3 of the avoidant coping behavior scales (i.e., behavioral disengagement, distraction, and denial) explained unique variance in negative outcomes after controlling for the other scales. Additionally, the correlations between these avoidant coping behavior scales were not excessive; this suggests these scales are distinct and that it was reasonable to utilize them as individual measures in the current study. However, these results could also be indicators that the avoidant coping scales actually measure a unidimensional construct. Completing a factor analysis of a 4-factor model using these scales would be an effective means of determining if a model of avoidant coping with fewer factors is sufficient. This was not completed in the current study

because utilization of the BriefCOPE only allows for 2 items per factor, which is not ideal for completing confirmatory factor analysis. Overall, the results of the current study are consistent with the possibility that behavioral disengagement, distraction, and denial are each distinct factors of avoidant coping behaviors and that it would be valuable to investigate this further in future iterations of research on SCP theory in romantic relationship dissolution.

It is notable that the general avoidance became non-significant after controlling for the other types of avoidant coping. There are a number of reasons why this may have occurred. One reason general avoidance may have not predicted unique variance in the current study is because the additional types of avoidant coping behaviors were actually unidimensional. Factor analysis studies have found that common types of coping behavior (i.e., behavioral disengagement, distraction, and denial) are potentially facets of a larger concept of avoidant coping (Lepore, 2001; Prado et al., 2004; Snell et al., 2011; Litman, 2016; Bishop et al., 2019). Thus, the performance of general avoidance in the current study may be because the other avoidant coping scales are actually all indicators of general avoidance. However, this is unlikely because, in addition to not predicting unique variance, general avoidance tended to produce lower correlations with all variables and small indirect effects in the proposed pathways. Another reason general avoidance may have failed to predict unique variance is because the general avoidance scale is assessing a type of avoidance that is less important than the other types of avoidance. General avoidance, as measured by the IES in the current study and in Harvey & Karpinski's (2016) study, encompasses efforts to not think or talk about the breakup (Horowitz, Wilner, & Alvarez, 1979). The current results suggest that it can be valuable

to capture types of avoidant coping that are outside of avoidance of talking or thinking about stressors, as it has been studied in past research (Lepore & Helgeson, 1998; Schnur et al., 2004; Manne et al., 2005). Including several types of avoidant coping behaviors may allow researchers to capture more instances of avoidant coping or to more effectively measure the types of avoidant coping important in SCP theory of breakups.

Unique Relationships of Negative and Positive Interactions

Negative and positive interactions did demonstrate unique results within simple mediation models and did not demonstrate a significant relationship with one another. This supports previous research on measures of dyadic resilience that posited positive and negative interactions are nearly orthogonal and demonstrate unique relationships with outcome measures important to coping following stressful life events (Coyne & Smith, 1991; Fincham & Linfield, 1997; Tuccitto et al., 2010; Bodenmann et al., 2011; Mattson et al., 2013; Sanford et al., 2016). Measures that capture both constructs of social support, such as the Interpersonal Resilience Inventory utilized in this study, are likely to provide a more comprehensive picture of the types of interactions individuals experience following a breakup, which can lead to a more comprehensive conceptualization of SCP theory in an efficient manner; this is in line with past research using dichotomous measures of social support interactions (e.g. Fincham & Linfield, 1997; Bodenmann et al., 2011; Sanford et al., 2016).

It is notable that positive interactions did not demonstrate significant relationships with negative outcomes through the avoidant coping behaviors as expected. It was hypothesized that positive interactions would demonstrate significant relationships with breakup distress and intrusive thoughts through all target avoidant coping behaviors.

Current results showed that positive interactions did not possess a meaningful total or direct relationship with the proposed outcomes. Positive interactions also did not demonstrate meaningful indirect relationships through general avoidance, behavioral disengagement, or denial. However, positive interactions did demonstrate significant indirect effect with distraction. Baron & Kenny's (1986) method of interpreting mediation would argue that you need a significant total effect to interpret a significant indirect effect as demonstrating a meaningful mediated relationship between variables. However, additional investigation of mediation analysis has suggested that the presence of a significant indirect effect has validity for interpretation as a mediation without a total effect being demonstrated (MacKinnon et al., 2002; Rucker et al., 2011). According to this logic, there is reason to summarize that positive interactions did demonstrate a mediated relationship with breakup distress and intrusive thoughts via distraction. However, any interpretation of this result should be done so cautiously. Positive interactions showed almost no significant correlations with mediating and outcome variables. Although it did correlate with distraction, it was small and in the opposite hypothesized direction; this is also true for the indirect effect found in the present study. Replication of this finding is needed to determine if this effect is meaningful or the result of additional factors not identified in the current study.

Implications of the COVID-19 Pandemic

It is important to consider the role of the COVID-19 pandemic on the availability and receipt of social support. Preliminary research on the impact that the COVID-19 pandemic had on psychological adjustment and well-being shows that individuals both had limited access to social support during the lockdown and that access and perception

of social support was important for promoting adjustment for individuals undergoing stressful life events, such as pregnancy or bariatric surgery (Felix et al., 2021; Harrison et al., 2021; Park et al., 2021). Due to the important role of both availability and valence of social support interactions in SCP theory, this makes it a good theory in which to examine the impact of the COVID-19. Data collection from the present study occurred during the onset of the pandemic's lockdown, resulting in a qualitative divide in participants (i.e., participants who responded to the survey prior to the onset of the lockdown and those who responded after). The time at which the participant completed the survey in relation to the identified onset of COVID-19 did not correlate with any of the predictor, mediating, or negative outcomes. All mediation results remained significant after controlling for whether the participant completed the survey pre- or post-COVID onset, thus implying that the time at which a participant completed the study did not predict unique variance in the mediation models.

The experience of the lockdown during the COVID-19 pandemic did not appear to affect engagement in positive and negative interactions, engagement in avoidant coping behaviors, or the experience of negative outcomes following a breakup in the present study. However, the current data does not provide information as to why this is the case, particularly when recent research on the experience of the pandemic suggests that engagement and quality of social support has been significantly impacted (Felix et al., 2021; Harrison et al., 2021; Park et al., 2021). One potential reason is because the sample included those who had experienced a breakup in the past twelve months and were asked to reflect on the month following the breakup when completing the survey; therefore, several participants were not experiencing a recent breakup and might have

been reflecting on social support interactions that occurred before the lockdown. Future research that recruits participants who sought out positive and negative interactions during the lockdown would provide better insight into the impact of COVID-19 on SCP theory of breakups.

Limitations

There are several limitations in the current study that are worth noting. First, all data were collected from an online, self-report survey. Utilizing an online, self-report format that does not involve collateral information to validate responses can inherently create the opportunity for dishonest or inaccurate responding due to bias factors such as participants bias. This may be particularly important when measuring constructs of social support due to support's bidirectional nature. However, screening criteria and procedures were utilized in this study in order to determine genuine responding that met the eligibility criteria. Research has also posited that the utilization of online samples for empirical research serves as a reliable, cost efficient, and time effective modality for assessment (Arch & Carr, 2016; Schluter et al., 2018).

Second, the current sample presents with limited generalizability. First, all participants were recruited from Baylor University students who were utilizing the SONA system to gain extra credit in college courses. Recruiting from a participant pool that originates from a specific university or degree path can contain specific cultural factors that may not apply to other individuals within the larger sample of college-age individuals. Further, this specific sample was made up of predominantly White, female, straight, freshman-level college students, which limits the generalizability of the results to more diverse populations. Future research may benefit from intentional recruiting of

samples that include frequently neglected populations, such as minority populations and non-heterosexual individuals. This will assist in expanding the understanding of SCP theory for romantic relationship dissolution that is more representative of an American population sample.

Third, the utilization of the Brief COPE measure presents as a limitation to fully understanding the conceptualization of avoidant coping behaviors within the current study. Two of the avoidant coping behavior scales utilized from the Brief COPE showed poor reliability, suggesting that effect sizes were likely underestimated. Further, additional analyses to determine if a more parsimonious model with few factors would fit in the current study were not completed due to the facet scales only including two items. The Brief COPE's parent scale, the COPE Inventory, is a well-validated measure of coping behaviors that includes longer scales for the target facets of avoidant coping; however, this scale was not used due to concern with length of the survey (Carver et al., 1989). Future research may benefit from including the target scales from the COPE Inventory to better examine the effect of avoidant coping behaviors in SCP theory for romantic relationship dissolution.

Future Directions

Replication of the current study is a necessary first step for future research on the application of SCP theory to the experience of romantic relationship dissolution. The present study can be improved and expanded upon to better inform the literature in several ways that were previously mentioned. Intrusive thoughts should continue to be included as a negative outcome in models of SCP theory in order to further validate its role as a significant outcome of romantic relationship dissolution. Further investigation

should also be done to determine if the predictor variable should continue to utilize measures that capture both negative and positive interactions, as positive interactions were found to not demonstrate significant mediated relationships with breakup distress and intrusive thoughts. Access, provision, and appraisal of social support as measured in the current study does not appear to have been impacted by the COVID-19 pandemic; additional research on the experience of breakups during the lockdown is needed to better understand COVID-19's effect on SCP theory. Additional populations should also be investigated in order to broaden the applicability of SCP theory. For example, there is limited research on negative outcomes following romantic relationship dissolution in gay, lesbian, and bisexual individuals; applying the current study's model of SCP theory to these populations can help to expand both the research on often neglected minority groups and provide information about the generalizability of SCP theory (Kurdek, 1991; Gottman et al., 2003; Goldberg & Garcia, 2015).

An important role future research can play is to expand the understanding of how positive interactions perform within SCP theory for romantic relationship dissolution. The current study failed to show that positive interactions had any meaningful impact on negative outcomes following a breakup. To date, there are no studies on the application of SCP theory to romantic relationship dissolution that have measured positive interactions as a predictor. Thus, continued investigation on how positive interactions with social support networks impacts individuals' experience of negative outcomes is an important next step for the body of literature on SCP theory.

Another important area for further expansion and exploration of the model provided in the current study is the role of avoidant coping behaviors. The results found

in this present research suggest that avoidant coping behaviors play unique roles in the relationships between types of interactions (i.e., negative and positive) and negative outcomes following a breakup. Further, specific types of avoidant coping, namely behavioral disengagement, distraction, and denial, demonstrated unique roles beyond that of general avoidance. However, the data in the current study provides weak support. Therefore, additional investigation, such as completing confirmatory factor analysis with larger scales (i.e., COPE Inventory) is a logical next step to better understand how specific facets of avoidant coping function within SCP theory of romantic relationship dissolution.

Conclusion

The current study investigated the role of SCP theory as a valuable approach to understanding how the quality of an individual's social support can both foster and hinder adaptive coping following romantic relationship dissolution. According to SCP theory, individuals who perceive they have been aptly supported by those in their social network are able to successfully integrate the information about the breakup into their existing worldview; when individuals experience negative interactions, however, they react by engaging in avoidant coping behaviors, which may result in maintenance of intrusive thoughts and increased breakup distress (Lepore, 2001; Harvey & Karpinski, 2016). Harvey and Karpinski (2016) demonstrated how SCP theory can be applied to people experiencing recent relationship breakups and showed that negative interactions moderately predicted more breakup distress by increasing the use of avoidant coping behaviors (Harvey & Karpinski, 2016). The current study provides support for Harvey and Karpinski's (2016) model of SCP theory for romantic relationship dissolution.

Additionally, the model was expanded by demonstrating that (a) specific types of avoidant coping behaviors can play unique mediating roles in the relationship between types of supportive interactions and outcomes and (b) intrusive thoughts act as a negative outcome in SCP theory of romantic relationship dissolution.

The results of this study provide further support to the notion that SCP theory is applicable to the experience of romantic relationship dissolution in college-age individuals, thus allowing for several avenues for future research to expand and improve on the model. The current study also provides information that is valuable to the clinical application of SCP theory following a breakup. Romantic relationship dissolution is a highly distressing life event and is often a catalyst for individuals seeking out therapeutic intervention (Chung et al., 2002; Hunt & Chung, 2002; Lewandowski & Radice, 2012). Unfortunately, negative outcomes following a breakup are typically considered difficult to address and treat (Brenner & Vogel, 2015). The present study suggests that, when an individual is experiencing significant distress that requires clinical intervention following a breakup, focusing treatment on efforts to reduce engagement with negative interactions may be an effectual means of reducing that distress. SCP theory can provide important information on how social support can be utilized within a therapeutic context to mitigate negative outcomes and to hopefully improve individuals' mental health and overall well-being.

APPENDICES

APPENDIX A

Informed Consent

Informed Consent

The purpose of this form is to provide you with important information about taking part in a research study. If any of the statements or words in this form are unclear, please let us know. We would be happy to answer any questions. You have the right to discuss this study with another person who is not part of the research team before making your decision whether or not to be in the study. Taking part in this study is up to you. If you decide to take part in this research study, you will have the opportunity to click the button at the bottom of this page stating that you choose to complete this survey. The people conducting this study include Kiley Schneider, M.S.C.P., a doctoral candidate in the department of Psychology and Neuroscience at Baylor University, and Keith Sanford, Ph.D., a Professor in the department of Psychology and Neuroscience at Baylor University. We will refer to these people as the “researchers” throughout this form.

Why is this study being done?

This study is part of a project that examines the effects of social support on the experience of romantic relationship dissolutions (i.e. breakups). This study involves asking questions about types of social support with important people in people’s lives, the types of behaviors people may engage in after a breakup, and the negative experiences people may have after a breakup. The goal is to understand how social support affects these experiences and behaviors.

How long will I take part in this research study?

Completion of this survey is expected to take approximately 20 to 30 minutes.

What will happen if I take part in this research study?

If you agree to take part in this study, you will complete a survey that includes questions about your most recent breakup in the past 12 months, interactions with significant adult people in your life after the breakup, behaviors you engaged in after the breakup, and emotional experiences after the breakup.

What are the risks and benefits of taking part in this research study?

This questionnaire includes several questions about your most recent breakup and about your interpersonal relationships. If you are experiencing life difficulties in these areas, you may find it unpleasant or stressful to think about them as you complete this questionnaire. If you do not want to answer questions about these topics, you should not participate in this research. Confidentiality will be maintained to the degree permitted by the technology used. Your participation in this online survey involves risks similar to a person's everyday use of the Internet, which could include illegal interception of the data by another party. If you are concerned about your data security, you should not participate in this research. You may or may not benefit from taking part in this study. It is possible that you may find this survey beneficial because the process of answering questions may help you clarify your own personal perspectives and priorities. The results of this study will be used to help researchers and clinicians better understand how to assess people's needs and improve interpersonal relationships. Thus, others may benefit in the future from the information that is learned in this study.

How will you keep my study records confidential?

The only identifying information we collect in this study will be a computer address and Qualtrics ID number. We will keep this identifying information confidential by ensuring it is stored using password protection. We will make every effort to keep your records confidential. The results of this study may also be used for teaching, publications, or presentations at professional meetings; however, your individual results will not be discussed.

Study participation and early withdrawal

Taking part in this study is your choice. You are free not to take part or to withdraw at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you decide to withdraw from this study, the information that you have already provided will be kept confidential. You cannot withdraw information collected prior to your withdrawal.

Will I be compensated for taking part in this research study?

Upon completion of the survey, the browser will direct you back to your SONA page and 1 credit will be awarded to the class of your choice.

What will it cost me to take part in this research study?

There are no costs to you for taking part in this research study.

What if I have any questions or concerns about this research study?

If you have any questions or concerns about the study or any problems that result from participation you may contact Kiley Schneider, M.S.C.P, at Baylor University Psychology Clinic, One Bear Place #97242, Waco, TX 76798-7334, email Kiley_Hiett@baylor.edu or Dr. Keith Sanford at Baylor University, Department of Psychology and Neuroscience, One Bear Place #97334, Waco, TX 76798-7334, phone

number 254-710-2256. If you want to speak with someone not directly involved in this research study, you may contact the Baylor University IRB through the Office of the Vice Provost for Research at 254-710-1438. You can contact this office to talk about your rights as a research subject, your concerns about the research, or a complaint about the research.

APPENDIX B

Survey

Relationship Characteristics Questionnaire

Instructions: Please indicate whether or not the following things have been true for you within the last year.

Response scale:

Yes

No

1. I have been single for the entire year, and I have not been in any committed romantic relationship during this time.
2. I have been in a committed romantic relationship for the entire year, and I have not been single during this time.
3. I am currently in a committed romantic relationship, but there was a point within the last year when I was single.
4. I am currently single, but there was a point within the last year when I was in a committed romantic relationship.
5. How long has it been since you last experienced the breakup of a committed romantic relationship?
 - a. I have never experienced the breakup of a committee romantic relationship. (99)
 - b. 1 month ago (2)
 - c. 2 months ago (3)
 - d. 3 months ago (4)
 - e. 4 months ago (5)
 - f. 5 months ago (6)
 - g. 6 months ago (7)
 - h. 7 months ago (8)
 - i. 8 months ago (9)
 - j. 9 months ago (10)
 - k. 10 months ago (11)
 - l. 11 months ago (12)

- m. 1 year ago (13)
- n. 2 – 3 years ago (14)
- o. 4 – 5 years ago (15)
- p. 6 – 7 years ago (16)
- q. More than 7 years ago (17)

This survey is intended for people that have experienced a recent breakup of a committed romantic relationship. This survey will ask you to describe and reflect on the recent breakup of a committed romantic relationship. You indicated that you have never experienced the breakup of a committed romantic relationship. If you choose to continue with this survey, it will be difficult to answer questions.

1. You stated that your most recent breakup was [embedded answer to #5]. Please write a few words that describe something about this former relationship.
 - a. _____
2. How long did this relationship last?
 - a. 1 – 6 months (1)
 - b. 1 year – 2 years (2)
 - c. 2 years – 3 years (3)
 - d. 3 years – 4 years (4)
 - e. 4 years – 5 years (5)
 - f. 5 years – 6 years (6)
 - g. 6 years – 7 years (7)
 - h. 7 years – 8 years (8)
 - i. 8 years – 9 years (9)
 - j. 9 years – 10 years (10)
 - k. More than 10 years (11)
3. How would you rate the quality of this relationship prior to the breakup?
 - a. Very good (5)
 - b. Good (4)
 - c. Average (3)
 - d. Poor (2)
 - e. Very poor (1)
4. How committed were you to maintaining the relationship prior to the breakup?
 - a. Extremely (4)
 - b. Quite a bit (3)
 - c. Moderately (2)
 - d. A little (1)
 - e. Not at all (0)
5. Who initiated the breakup?

- a. You (1)
- b. Both you and your ex-partner (2)
- c. Your ex-partner (3)

When asked to think about your most recent breakup, you wrote the following description of your former relationship: [embedded answer to #6]. This survey will ask your experience during the month after your most recent breakup.

- 6. Please write about 5 to 10 words that describe one thing about your life during the month after your breakup. Choose anything that describes your life at that time.

The Breakup Distress Scale

When asked about your most recent breakup, you wrote the following description of your former relationship: [embedded answer to #11].

Instructions: In the month after your breakup, how were you thinking and feeling about the breakup and about the person who was your former partner?

Rating scale:

- Very much so (4)
- Moderately so (3)
- Somewhat (2)
- Not at all (1)

- 7. I thought about this person so much that it was hard for me to do things I normally do.
- 8. During the month after the breakup, memories of the person upset me.
- 9. I felt I could not accept the breakup I've experienced.
- 10. I felt drawn to places and things associated with the person.
- 11. I couldn't help feeling angry about the breakup.
- 12. I felt disbelief over what happened.
- 13. I felt stunned or dazed over what happened.
- 14. During the month after the breakup it was hard for me to trust people.
- 15. During the month after the breakup I felt like I had lost the ability to care about other people or I felt distant from people I cared about.
- 16. During the month after the breakup, I was experiencing pain.
- 17. I went out of my way to avoid reminders of the person.
- 18. I felt that life was empty without the person.
- 19. I felt bitter over this breakup.
- 20. I felt envious of others who had not experienced a breakup like this.
- 21. I felt lonely a great deal of the time during the month after the breakup.
- 22. I felt like crying when I thought about the person.

The Impact of Event Intrusion Subscale

When asked about your most recent breakup, you wrote the following description of your former relationship: [embedded answer to #11].

Instructions: In the month after the breakup, how often did you experience the following?

Rating scale:

Often (5)

Sometimes (3)

Rarely (1)

Not at all (0)

- 23. I thought about the breakup when I didn't mean to.
- 24. I had trouble falling asleep or staying asleep, because of pictures or thoughts about the breakup that came into my mind.
- 25. I had waves of strong feelings about the breakup.
- 26. I had dreams about the breakup.
- 27. Pictures about the breakup popped into my mind.
- 28. Other things kept making me think about the breakup.
- 29. Any reminder of the breakup brought back feelings about it.

The Impact of Event Avoidant Subscale

When asked about your most recent breakup, you wrote the following description of your former relationship: [embedded answer to #11].

Instructions: Rate how much you did the following things during the month after your breakup.

Rating scale:

Often (5)

Sometimes (3)

Rarely (1)

Not at all (0)

- 30. I avoided letting myself get upset when I thought about the breakup or was reminded of it.
- 31. I tried to remove the breakup from memory.
- 32. I stayed away from reminders of the breakup.
- 33. I felt as if the breakup hadn't happened or it wasn't real.
- 34. I tried not to talk about the breakup.
- 35. I was aware that I still had a lot of feelings about the breakup, but I didn't deal with them.

- 36. I tried not to think about the breakup.
- 37. My feelings about the breakup were kind of numb.

Brief COPE

When asked about your most recent breakup, you wrote the following description of your former relationship: [embedded answer to #11].

Instructions: Rate how much you did the following things during the month after your breakup.

Behavioral Disengagement Subscale

- 38. I gave up the attempt to get what I wanted.
- 39. I just gave up trying to cope with the breakup.

Distraction Subscale

- 40. I turned to work or other substitute activities to take my mind off things.
- 41. I went to movies or watch TV, to think about the breakup less.

Denial Subscale

- 42. I refused to believe that the breakup happened.
- 43. I said to myself, "this isn't real."

Interpersonal Resilience Inventory

Instructions: Please think about significant adult people in your life that were present following your most recent breakup. A significant adult person could be an adult sibling, parent, or friend. A significant adult person is someone that you think about almost every day, is important to you, that played a key role in your life, and that can influence how you feel. This definition will exclude individuals that the participants pay, such as therapists. For these questions, please do NOT include any professionals you pay, such as therapists.

- 44. How many significant adult people can you think of in your life following the breakup? _____

In the next section you will be given descriptions of events that you may have experienced with significant adult people in your life as you coped with your most recent breakup.

Instruction: "How many times did this event occur for you in the past month?"

Rating scale:

This definitely did not happen (0)

I do not think this happened (1)

This happened once (2)

This happened twice (3)

This happened three times (4)

This happened once a week (5)

This happened a few times per week (6)

This happened every day (7)

This happened a few times per day (8)

This happened several times per day (9)

Positive Coping Interactions Subscale

- 45. You laughed together or enjoyed humor with a significant adult person in your life.
- 46. You and a significant adult person in your life discussed the breakup using communication that was clear and accurate.
- 47. In your relationship with a significant adult person in your life, one of you helped the other by maintaining a positive attitude and being optimistic.
- 48. In your relationship with a significant adult person in your life, one of you was attentive to the other's needs.
- 49. You and a significant adult person in your life worked together like a team.
- 50. In your relationship with a significant adult person in your life, one of you helped the other by remaining calm, stable, and strong.
- 51. You and a significant adult person in your life spent time together doing things as a pair.
- 52. In your relationship with a significant adult person in your life, one of you helped the other by using special skills or abilities to manage the breakup.

Negative Coping Interactions Subscale

- 53. In your relationship with a significant adult person in your life, one of you felt frustrated about something the other did.
- 54. In your relationship with a significant adult person in your life, there was a situation where one of you did not listen to something the other said.
- 55. In your relationship with a significant adult person in your life, one of you made it more difficult for the other by having a negative attitude and being pessimistic.
- 56. In your relationship with a significant adult person in your life, one of you decided it was best to avoid discussing the breakup with the other.
- 57. In your relationship with a significant adult person in your life, one of you was critical or hostile or blamed the other.
- 58. In your relationship with a significant adult person in your life, one of you made it difficult for the other by being overly emotional, unstable, or weak.

59. In your relationship with a significant adult person in your life, one of you had a clear opportunity to notice the other's needs, but failed to do so.
60. In your relationship with a significant adult person in your life, there was an interaction involving a miscommunication or misunderstanding.

Demographics Questionnaire

61. What is your gender?
- a. Male
 - b. Female
 - c. Transgender
 - d. Prefer to self-describe _____
 - e. Prefer not to say
62. Select the response that best represents your race and ethnicity
- a. Asian
 - b. Black or African American
 - c. American Indian, Native American
 - d. Hispanic or Latino(a)
 - e. Pacific Islander or Native Hawaiian
 - f. White (Non-Hispanic)
 - g. Other _____
63. What is your sexual orientation?
- a. Heterosexual
 - b. Gay
 - c. Lesbian
 - d. Bisexual
 - e. Prefer to self-describe _____
64. Select the response that best represents your education level.
- a. Some high school
 - b. High school graduate/GED
 - c. Freshman
 - d. Sophomore
 - e. Junior
 - f. Senior
 - g. Fifth year senior
 - h. Masters-level
 - i. Doctoral-level

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