

Attachment Insecurity and Daily Relationship Threats as Obstacles to Relational Self-
Expansion

by

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Abstract

Incorporating growth (i.e., broadening one's perspective of the self, partner, and world) is an important feature for the maintenance of satisfying and long-lasting intimate relationships. However, as relationships progress and people increasingly gain familiarity with their intimate partner, the opportunities for growth decline. According to the self-expansion model, one way that people can add growth to their relationship is by engaging in exciting (i.e., novel and arousing) couple activities. Although exciting couple activities have been associated with many relational benefits, it is unclear whether certain threat-related conditions might be related to poorer relational self-expansion and relational self-expansion outcomes, such as engagement in exciting couple activities. Through a 21-day daily diary study of community couples ($N = 122$), the present study investigated the effects of relationship threats on the occurrence of exciting couple activities and ratings of relational self-expansion. It was hypothesized that insecure attachment styles (i.e., trait-based) and daily relationship threats (i.e., state-based) would negatively predict people's overall exciting activity experiences and ratings of relational self-expansion. Data analyses were guided by the Actor-Partner Independence Model (APIM). Contrary to my hypotheses, there was inconsistent support for the association between attachment avoidance and attachment anxiety and relational self-expansion. Consistent with my hypotheses, people (and their partners) reported lower relational self-expansion, and also were significantly less likely to engage in exciting couple activities on days when relationship threats (e.g., rejection, disappointment, feeling misunderstood) were greater than usual. Furthermore, on days when people engaged in exciting couple activities and felt greater relationship threats, they reported a less successful exciting couple activity

experience. Although there was evidence that relationship threats negatively predicted people's daily activity experiences on the same day, relationship threats were not related to the occurrence of exciting couple activities on the following day. In conclusion, this study offers evidence suggesting that state-based threat concerns might be one obstacle that couples face in promoting growth within intimate relationships.

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Attachment Insecurity and Daily Relationship Threats as Obstacles to Relational Self-Expansion

New and exciting couple activities are important to intimate relationships because they help promote increased relationship satisfaction (e.g., Aron & Aron, 1986; 1997; Aron, Norman, Aron, McKenna, & Heyman, 2000; Girme, Overall, & Faingataa, 2014; Graham, 2008; Harasymchuk & Fehr, 2010; Harasymchuk, Muise, Bacev-Giles, Gere, & Impett, 2019; Mattingly & Lewandowski, 2013; Muise, Harasymchuk, Day, Bacev-Giles, Gere, & Impett, 2019; Reissman, Aron, & Bergen, 1993). However, people's quest for seeking novelty within their relationship may not always be a positive experience because of perceived threats to their relationship. Indeed, people may encounter a dilemma about whether to prioritize their concerns for self-protection and security in their relationship versus their goals to promote the relationship through new experiences (Murray, Holmes, & Collins, 2006). This is an important issue for intimate partners because people in satisfying and long-lasting relationships may at times disregard concerns for maintaining relationship security in order to increase their relational growth (e.g., Aron & Aron, 1986). Take for instance, Allie and Noah, who have been in an intimate relationship for many years—although they feel quite satisfied in their relationship, their relationship feels routine. Allie desires to try new things with Noah in the hopes of “spicing up” their relationship. Although Allie desires to seek new opportunities with Noah, perceived threats to her relationship, such as feeling rejected, hurt, or anxious, may make Allie less likely to seek new and exciting opportunities. The overarching goal of this research was to investigate how couples' trait-based as well as state-based relationship threat concerns might thwart people's growth opportunities (i.e., self-expansion).

Self-Expansion Model

The self-expansion model (Aron & Aron, 1986) states that people have a fundamental motivation to grow and expand their sense of self. People expand by incorporating new concepts into the self, including acquiring new identities, knowledge, perspectives, resources (e.g., health, wealth, status), roles, and capabilities (for reviews, see Aron, Mashek, & Aron, 2004; Aron, Lewandowski, Mashek, & Aron, 2013; Mattingly & Lewandowski, 2014). The model posits that it is a person's perception of how much (or how little) they are broadening their perspective of the self, the partner, the relationship, and the world that matters, not an objective level or specific type of activity. The process of self-expansion is a rewarding and desirable process (Mattingly, McIntyre, & Lewandowski, 2012), which is solely focused on the addition of positive content to one's self-concept (e.g., Aron, Norman, & Aron, 2001; Mattingly, Lewandowski, & McIntyre, 2014; McIntyre, Mattingly, & Lewandowski, 2015). People often expand their sense of self through their intimate relationships (Aron & Aron, 1986). Self-expansion is often felt when a person forms a new relationship (Aron & Aron, 1986; Aron, Paris, & Aron, 1995) and begins to incorporate aspects of the partner into their sense of self (Aron & Aron, 1997; Aron, Aron, Tudor, & Nelson, 1991). For instance, people may adopt aspects of their partner's characteristics, perspectives, identity, knowledge, and resources into their self-concept (e.g., taking interest in a partner's hobbies, sharing beliefs or opinions; Aron et al., 1991; Slotter & Gardner, 2009).

By nature, the self-expansion process is positive and rewarding for intimate relationships. Research has found that people who experience greater levels of relational self-expansion tend to reap rewards such as greater relationship quality (e.g., Aron et al.,

2000; Aron et al., 2001; Carson, Carson, Gil, & Baucom, 2004; 2007; Coulter & Malouff, 2013; Mattingly et al., 2014; Muise et al., 2019; Reissman et al., 1993), and greater individual well-being (Aron et al., 2004; Mattingly et al., 2012; Mattingly & Lewandowski, 2013). For instance, through two 21-day daily diary studies of couples, Muise and colleagues (2019) assessed relational self-expansion through a daily self-report measure and found that people reported greater relationship satisfaction as well as increased sexual desire on days when their evaluations of relational self-expansion were greater than usual. Relational self-expansion is also associated with greater romantic passion and love (Lewandowski & Aron, 2004; Mattingly et al., 2014; Sheets, 2014) and is associated with other intrapersonal benefits such as increased self-esteem and self-efficacy, compared to relationships which are less self-expanding (Aron et al., 1995). Furthermore, greater relational self-expansion may have a protective function as it has been associated with less willingness to interact with alternative partners (VanderDrift, Lewandowski, & Agnew, 2011), lower likelihood of engaging in infidelity (Lewandowski & Ackerman, 2006), and a lower likelihood that the relationship will dissolve (Le, Dove, Agnew, Korn, & Mutso, 2010). However, as time passes and people become more accustomed with their partner and the relationship, the opportunities to acquire new perspectives of the self from the relationship begin to diminish. (e.g., relational boredom may be experienced; Harasymchuk & Fehr, 2010; 2012; 2013). One other way that people may seek opportunities for relational self-expansion—at any point in the relationship—is by engaging in exciting (i.e., novel and arousing) couple activities that help to broaden their perspective of their self, relationship, and the world (Aron et al., 2001; Aron et al., 2004).

Exciting Couple Activities as a Way to Maintain Relational Self-Expansion

Activities which promote relational self-expansion (i.e., broadening of the sense of self and relationship) have often been described as exciting (Aron et al., 2000; Aron et al., 2001; Coulter & Malouff, 2013; Muise et al., 2019), novel and arousing (Aron et al., 2000; Aron et al., 2001), and challenging (Aron & Aron, 1986; Aron et al., 2000; Coulter & Malouff, 2013; Hill, 1988; Graham & Harf, 2015). Descriptors of couple activities which help to broaden one's sense of self and their relationship have also included: fun and interesting (Tomlinson, Hughes, Lewandowski, Aron & Geyer, 2018), boring (reverse-coded) and dull (reverse-coded; Aron et al., 2000; Lewandowski & Aron, 2004; Tomlinson et al., 2018), and active (Hill, 1988), as well as adventurous, playful, romantic, and spontaneous (Malouff, Mundy, Galea, & Bothma, 2015). Arousal has historically been confounded with novelty and challenge depending on the sample of participants recruited (Aron et al., 2001; Lewandowski & Aron, 2004; Tomlinson et al., 2018), though research has suggested that novelty and challenge are separate aspects of shared activities within the self-expansion process among married couples (Tomlinson et al., 2018). Research within the context of flow theory has further operationalized exciting couple activities as activating (i.e., has the capacity for self-expansion; Graham, 2008), as well as focused on the importance of activity excitement and challenge in the absence of novelty (Graham & Harf, 2015). Using mixed-samples methods consisting of married couples and friendship pairs, new research suggests that perceptions of self-expansion, not arousal, are what matters most for deriving benefits in shared activities (Tomlinson et al., 2018). Despite differences in the operationalization for exciting couple activities over the years, the basic premise has been that these activities are novel (i.e., relatively

atypical, not mundane, exciting), positive, and promote opportunities for relational self-expansion.

Putting aside the ongoing debate about the essential features of exciting couple activities, there is mounting evidence that exciting couple activities have many positive benefits for intimate relationships (Aron et al., 2000; Aron, et al., 2001; Girme et al., 2014; Harasymchuk et al., 2019; Kilbourne, Howell, & England, 1990; Muise et al., 2019; Reissman et al., 1993; Rollock, 2011). As opportunities for relational self-expansion may decrease over time (Aron & Aron, 1986; 1997; Aron et al., 2001), exciting couple activities bode well for relationship maintenance by providing intimate couples with a means to occasionally break away from routine behaviours which may lead to relational boredom (e.g., Harasymchuk & Fehr, 2010; 2012; 2013) and instead engage in new activities in order to “spice up” the relationship. People report increased relationship satisfaction when their relationships are characterized as active and challenging (Hill, 1988) and provide them with a sense of excitement (Malouff et al., 2015). Moreover, a number of studies have confirmed that engaging in exciting couple activities is associated with overall greater relationship quality (e.g., satisfaction, sexual satisfaction, sexual desire; Aron et al., 2000; Carson et al., 2004; 2007, Malouff et al., 2015; Reissman et al., 1993; Girme et al., 2014; Graham, 2008; Muise et al., 2019; Nardone, 2012).

For instance, in a 10-week relationship homework study, married couples were assigned to engage in activities which they self-defined as either exciting or pleasant (versus a no activities control group) for 1.5 hours per week (Reissman et al., 1993). When followed-up, couples who were assigned to the exciting activities condition

reported greater marital satisfaction compared to couples who engaged in pleasant activities or those who were in the control condition, suggesting the importance of activity type on relationship satisfaction. The association between relationship satisfaction and exciting couple activities was also investigated in an early laboratory paradigm by Aron and colleagues (2000) where couples were assigned to a novel-arousing, mundane (Study 3), or a no activities (control) condition (Studies 4 and 5). Intimate couples in the novel-arousing condition were brought to a room with gymnasium mats and asked to participate in an activity. For this activity, couples had one of their wrists and ankles bound with Velcro straps to their partner's and had to carry a pillow with their partner across a small obstacle course, all while remaining on their hands and knees. Couples were told they could have multiple trials to complete the obstacle, though were incentivized to complete the obstacle within one minute. Conversely, couples in the mundane condition were brought to the same room with gymnasium mats though this time, one participant was instructed to roll a ball towards the center of the room while crawling on their hands and knees, while their partner simply crawled to the center of the room to retrieve the ball. Couples in the mundane condition were instructed to repeat this process multiple times and slowly work together on the activity. These results suggested that couples who participated in the novel-arousing activity condition reported greater relationship quality following the activity compared to couples who participated in the mundane activity or no activity at all.

Clinical research has also drawn attention to the benefits of exciting couple activities. Supporting the self-expansion model, one study found that participation in a mindfulness-based relationship enhancement program was associated with decreased

relationship distress which was due in part to couples perceiving that they were engaging in exciting activities together (Carson et al., 2007). A recent clinical intervention also suggested that even short-term, online interventions designed to enhance relationship excitement could have beneficial effects for long-term intimate partners. Particularly, in a randomized-control trial, researchers randomly assigned couples to an online intervention versus a waitlist (control) condition (Coulter & Malouff, 2013). At the pre-intervention stage, couples individually listed potentially exciting activities as well as provided ways in which they could enhance excitement within their relationship. Participants were instructed to plan at least one exciting activity per week, for a minimum of 90 minutes per week, and regularly received emails from the researchers to check-up on their progress. Follow-up measures were conducted four months later to assess the maintenance of the intervention program. Couples in the intervention condition had higher scores for relationship excitement, positive affect, and relationship satisfaction at post-intervention than those on the wait-list condition.

More recently, researchers have investigated the effects of exciting activities as they naturally occur. Graham (2008) used a 7-day experience sampling method to investigate cohabitating couples' momentary experiences of self-expansion. At the time of each signal, participants described the activity they were participating in during that moment as well as responded to questions about the context of those activities (e.g., whether it occurred during their free versus non-free time, the people who were involved, their ratings of the activity experience). This research found that couples' ratings of activation or the capacity that the activity was self-expanding (i.e., operationalized by ratings for alertness, involved, active, and excited) was positively associated with

momentary relationship satisfaction regardless of whether the activity occurred during the person's free time or non-free time. When engaging in an activity that provided greater capacity for self-expansion than average for that person, people also reaped the benefits of increased positive affect following an activity. Furthermore, research has found that the occurrence of exciting activities over a 21-day period was associated with greater daily relationship satisfaction (Harasymchuk et al., 2019) and that engaging in exciting couple activities today can have positive carry-over effects such as greater relationship satisfaction tomorrow (Muisse et al., 2019).

Conclusion

In sum, relational self-expansion (i.e., broadening of the self) has been associated with many relational benefits, such as increased relationship quality (Aron et al., 2000; Aron et al., 2001; Carson et al., 2004; 2007; Coulter & Malouff, 2013; Harasymchuk et al., 2019; Mattingly et al., 2014; Muise et al., 2019; Reissman et al., 1993). It has also been theorized that engaging in exciting couple activities can increase self-expansion. Although scholars have conceptualized the activities that contribute to broadened perspectives of the self (i.e., self-expansion) in different ways (e.g., exciting, novel, arousing, challenging, activating), what remains constant are the positive implications that these types of activities have for intimate relationships. To date, the benefits of exciting activities on relational quality have been supported in correlational studies (e.g., Aron et al., 2000; Nardone, 2012), laboratory paradigms (Aron et al., 2000; Girme et al., 2014), at-home activity intervention programs (Carson et al., 2007; Coulter & Malouff, 2013; Reissman et al., 1993), an experience sampling study (Graham, 2008), and couples daily diary studies (Harasymchuk et al., 2019; Muise et al., 2019). However, what

remains to be understood is why self-expansion is less likely to occur in intimate relationships. In particular, are there conditions which make some people less likely to engage in exciting couple activities that promote growth? And are there conditions in which people may derive fewer relational benefits from exciting couple activities than others? The purpose of this study was to investigate whether relationship threats may negatively predict people's relational self-expansion experiences.

Relationship Threats

Faced with the dilemma between wanting to promote the relationship yet maintain one's sense of security, relationship threats are proposed to be one common obstacle to relational self-expansion. In the following section, I conceptualize relationship threats in terms of a trait (i.e., chronic, pre-existing concern) and a state (e.g., daily occurrences of rejection) threat. Within each threat section below, I discuss ways in which not only one's own relationship threats, but also their partner's threats, may influence a person's overall relationship experiences. Following this section, I will discuss the role of threats in shaping relational self-expansion.

Trait-Based Relationship Threats

Attachment theory is one of the most prominent theories for understanding individual differences in the relationship science literature, particularly when applied to understanding people's chronic concerns for security in their relationships. Theorized by Bowlby (1969; 1988), attachment theory posits that individual differences in adult attachment behaviour originate from the initial bonds and experiences a person has during their early childhood. Bowlby (1988) viewed the attachment process as one which is reactive and dynamic and is based on one's early experiences with the availability and

responsiveness of their attachment figures. He proposed that these early experiences later become the internal working models that guide people's future cognitions and behaviours in attachment-related situations (i.e., relationship experiences with an intimate partner). However, research suggests that attachment-related behaviours are not limited to only a person's early life experiences, but people's ongoing expectations, behaviours, and emotions during interpersonal interactions are also due to the residue of their various attachment histories over the life course (Bowlby, 1988; Brumbaugh & Fraley, 2006; Fraley & Shaver, 2000; Pierce & Lydon, 2001). In other words, people's attachment working models are continuously being updated with each new relationship experience (Bowlby, 1988; Collins & Read, 1994; Pierce & Lydon, 2001). For example, researchers theorized that the Attachment Security Enhancement Model (ASEM; Arriaga, Kumashiro, Simpson, & Overall, 2018) may help explain the pursuit for increased security, whereby people may use specific attachment pathways to buffer against insecurity (i.e., prevent erosion of relationship quality due to insecurity) as well as enhance security (i.e., promote long-term security) in their intimate relationships. Thus, there is great benefit in understanding the nature of people's attachment styles when investigating intimate relationship experiences.

Attachment style has been explained by the measurement of two dimensions: avoidance (i.e., discomfort of closeness or dependence on others) and anxiety (i.e., fear of abandonment or rejection; Fraley, Waller, & Brennan, 2000). Historically, attachment style was classified into three (Hazan & Shaver, 1987) or four (Bartholomew & Horowitz, 1991) quadrants based on people's low versus high scores for both attachment avoidance and attachment anxiety, though recent practice suggests that attachment

avoidance and attachment anxiety are most appropriately classified as continuous measures, whereby people are classified based on their low versus high scores on each of the two dimensions (Brennan, Clark, & Shaver, 1998; Fraley, Waller, & Brennan, 2000). This method is also accredited with having high temporal stability (Fraley & Shaver, 2000; Heffernan, Fraley, Vicary, & Brumbaugh, 2012). People who score high in attachment avoidance tend to be overly uncomfortable with intimacy, often reluctant to rely on others, and they emotionally distance themselves from others (for a review, see Pietromonaco & Beck, 2015; also see Mikulincer & Shaver, 2007). People with high attachment avoidance often anticipate that their attachment figure will be unavailable or unresponsive to their needs. When faced with threats, people with attachment avoidance show patterns of attachment deactivation; they respond in behaviourally independent ways and rely on themselves in order to minimize distress. On the other hand, people high in attachment anxiety desire extreme closeness, are fearful about abandonment, and are frustrated when their attachment figure is not responsive or available to them. People with high attachment anxiety expect that their attachment figures will insufficiently respond to their needs and they respond to threats in hyperactive ways to alleviate their distress, such as requiring a great deal of reassurance that they are loved and accepted by the attachment figure. What is common to both attachment avoidance and attachment anxiety is that higher scores on either dimension represent situations where a person has an insecure attachment style. In contrast, people with secure attachment styles (i.e., low attachment avoidance and/or low attachment anxiety) are confident in their attachment figure's capacity to be available and responsive when needed, and as such, are apt to turn to their attachment figure during times of distress. Naturally, people's pre-existing

attachment styles—whether secure or insecure—have implications for their intimate relationship outcomes.

Insecure attachment styles in intimate relationships. Research suggests that people's relationship experiences tend to differ as a function of their attachment styles (see Pietromonaco & Beck, 2015), which is a more stable predictor of relationship quality than the Big Five personality traits (for a review, see Nofle & Shaver, 2006). Compared to people with secure attachment styles, people with more avoidant attachment styles are less likely to seek proximity and closeness to their intimate partner during times of distress (e.g., Fraley & Shaver, 1998), they solicit less support from their partner (e.g., Collins & Feeney, 2000), and they report (as well as desire) less intimacy (Mikulincer & Erev, 1991). They also tend to underestimate their partner's levels of intimacy (Mikulincer & Erev, 1991) and perceive their partner to be less responsive to their needs (Beck, Pietromonaco, DeVito, Powers, & Boyle, 2014). On the other hand, people with anxious attachment styles seek intense intimacy with their partner and often desire greater closeness and intimacy than they perceive the relationship to have (Mikulincer & Erev, 1991; Slotter & Gardner, 2012). Research investigating self-concept malleability has also found that people with high (versus low) attachment anxiety often desire greater integration between their own and their partner's self-concept than they currently perceive (Slotter & Gardner, 2012). Surprisingly, they also seek less support from their partners (Collins & Feeney, 2000) compared to people with secure attachment styles. Although there are some variations in people's responses to their intimate relationships, depending on whether they score higher (versus lower) on attachment avoidance or

attachment anxiety, the relationship outcomes for both insecure attachment styles are often similar.

Attachment research has often found that people with insecure attachment styles (i.e., people characterized by high scores of attachment avoidance and/or high attachment anxiety) report poorer relationship outcomes compared to people with secure attachment styles (i.e., people characterized by low scores of attachment avoidance and/or high attachment anxiety). Overall, people with insecure attachment styles demonstrate greater obstacles when navigating their intimate relationships, compared to people who score lower on either of these dimensions (i.e., secure attachments). Relative to people with secure attachments, people characterized by chronically insecure attachments cannot fulfil the same basic relationship needs (e.g., Milyavskaya & Lydon, 2012) and tend to have less trusting and less supportive relationships, as well as possess more unrealistic expectations for their relationships (Hazan & Shaver, 1987; Kane, Jaremka, Guichard, Ford, Collins, & Feeney, 2007). People with insecure attachments also tend to report lower relationship satisfaction, lower relationship quality, as well as report less closeness to their partner (Banse, 2014; Kane et al., 2007). They also tend to report lower basic psychological need fulfillment within their relationships (i.e., autonomy, competence, and relatedness; Hadden, Rodriguez, Knee, DiBello, & Baker, 2016), greater uncertainty in their relationship (Bacev-Giles & Harasymchuk, 2015), greater difficulty resolving relationship conflict (Simpson, Rholes, & Phillips, 1996), less enduring relationships, and encounter difficulties maintaining their interpersonal relationships (Feeney & Noller, 1991), compared to people with more secure attachment styles. Furthermore, attachment insecurity predicts relationship dissolution in both dating (Duemmler & Kobak, 2001)

and married couples (Crowell & Treboux, 2001), as well as less effective affect regulation when coping with relationship dissolution (Birnbaum, Orr, Mikulincer, & Florian, 1997). Taken together, attachment insecurity predicts a wide array of responses and behaviours which can be detrimental to the maintenance of long-lasting and satisfying intimate relationships.

Relationship experiences are often affected by not only one's own attachment style, but also their partner's attachment style (e.g., Bpanse, 2014; Feeney & Noller, 1991; Kane et al., 2007). For instance, people with secure attachment styles promote not only more loving and supporting environments for oneself (i.e., intrapersonal effects) but also for their intimate partners (i.e., interpersonal effects; Kane et al., 2007). People with anxious partners tend to benefit from feeling that there is higher relatedness within their relationship (i.e., feeling loved and cared about), though experience less autonomy and competence as a result of their partner's need for extreme closeness and lack of trust (Hadden et al., 2016). Conversely, people with avoidant partners experience greater autonomy (as their partner is likely to allow more space and freedom), though at the cost of decreased relatedness (Hadden et al., 2016). There is also evidence that having one or more insecure attachment relationships is associated with lower subjective well-being (Milyavskaya & Lydon, 2012) and that having an insecure partner is associated with lower marital satisfaction (Bpanse, 2004). As well, women tend to be less satisfied when their male partners are higher in attachment avoidance, whereas men tend to be less satisfied when their female partners are higher in attachment anxiety (Kane et al., 2007). Together, this research suggests that dyadic experiences may shape partners' working models of the relationship in a similar way. In general, people tend to have more optimal

relationship satisfaction when their partners possess at least moderately similar attachment (in)security (Hudson & Fraley, 2014). Given the difference in relationship experiences that may arise for people who possess insecure attachment styles, I assessed attachment insecurity (i.e., high scores of attachment avoidance and/or attachment anxiety) to better understand its role as a trait-based relationship threat. In doing so, it was possible to understand not only how Allie's pre-existing threat concerns may predict her relational self-expansion experiences, but also simultaneously understand how Noah's pre-existing threat concerns may predict Allie's relational self-expansion experiences.

State-Based Relationship Threats

People also experience relationship threat antecedents even when they do not possess dispositional vulnerabilities that make them question the security of the relationship. Given the interdependent nature of intimate relationships, there are a myriad of instances when people may perceive threats to their relationships—each of which may fluctuate from day-to-day. Past research has conceptualized the experience of relationship threats in a number of ways, including: perceived regard (Cavallo, Fitzsimons, & Holmes, 2009; 2010; Derrick, Leonard, & Homish, 2012; Overall & Sibley, 2009), perceived rejection (Downey, Freitas, Michaelis, & Khouri, 1998; Norona & Welsh, 2016), perceived threats of negative evaluation (Spielmann, MacDonald, & Tackett, 2012; Spielmann, Maxwell, MacDonald, & Baratta, 2012), responsiveness to needs (Feeney & Lemay, 2012; Kane et al., 2007; Laurenceau, Barrett, & Rovine, 2005; Reis, 2014), and perceived availability of support (Fivecoat, Tomlinson, Aron, & Caprariello, 2015; Kane et al., 2007). It is important to understand how state-based relationship

threats are innately related as they may cause feelings of doubt and uncertainty about one's relationship, which can be experienced at any time (and may never truly disappear), and also have the potential to cause detrimental experiences within the relationship (Baxter & Montgomery, 1996; Honeycutt, 1993; Planalp & Honeycutt, 1985; Planalp, Rutherford, & Honeycutt, 1988). For these reasons, it is important to understand how state-based relationship threats may be associated with couples' broader relationship experiences.

People have a fundamental need to belong (Baumeister & Leary, 1995); however, the mere dependence on an intimate partner is innately associated with increased risks of becoming hurt or rejected. When people fail to find reassurance of trust and belongingness in their intimate relationships, there are often negative implications for the relationship. In a 21-day diary study of couples, Murray, Bellavia, Rose, and Griffin (2003) investigated the association between people's perceptions of how valued they were to their partner and their daily marital interactions. Across days, people felt less loved, more rejected, and more anxious when they felt their partner valued them less. Researchers also investigated how yesterday's relationship conflicts affected today's feelings of vulnerability among people who felt less (versus more) valued by their partner. They found that following a day with greater threats, people felt less vulnerable when they perceived that they were more valued by their partner. Following days of vulnerability (i.e., when people felt rejected or anxious about acceptance), the effects of feeling less valued by a partner were also exacerbated as people were more likely to respond to their partner in an ill-tempered way (e.g., cold, critical, hurtful), compared to days when they felt less vulnerable. One consequence of the occurrence of relationship

threats is that people's responses to vulnerability of rejection may lead them to behave in ways which could elicit further rejection from their partners, and thus support a self-fulfilling prophecy (Downey et al., 1998). Importantly, rejection experiences can negatively impact one's future expectations of rejection from an intimate partner (Downey & Feldman, 1996; Downey, Khouri, & Feldman, 1997; Feldman & Downey, 1994). Together, this research suggests that daily relationship threats can be debilitating for people's sense of security in the relationship, and consequently, are likely to be associated with poorer relationship outcomes.

Indeed, there is evidence that relationship threats predict poorer relationship outcomes. Research has found that feeling less valued by a partner is associated with lower trust, greater conflict, and more ambivalence among both partners (Murray, Holmes, & Griffin, 2000). As well, married couples who report feeling less valued tend to report lower relationship satisfaction (Murray et al., 2000). The negative effects of relationship threat antecedents have also been studied in a longitudinal sample. In this research, scholars assessed how people's perceptions of perceived regard (i.e., threats to one's emotional security in the relationship, such as the partner's acceptance, availability and responsiveness) was related to relationship interdependence over the first nine years of marriage (Derrick et al., 2012). Researchers found that when people experienced lower perceived regard at one point, relative to their average, they felt less satisfied, reported lower disclosure and intimacy with their partner, as well as valued their partner to a lesser degree over time (i.e., one to three years later). Furthermore, people also had a greater likelihood of divorce when these relationship threats were higher. Overall, these results suggest that when people perceive that their partner is not caring or responsive to their

needs (i.e., their feelings of security are compromised by threats), they are much more susceptible to experiencing negative (or at least deteriorating) relationship outcomes over time. That is, greater relationship threats experienced by either Allie or Noah may have implications for their relational self-expansion experiences. Given these consequences and the fleeting nature of relationship security, it was valuable to investigate whether state-based relationship threats may interfere with couple's relational self-expansion experiences.

Conclusion

In summary, relationship threats are experienced as both a trait and a state. Trait-based, chronic and insecure dispositions can affect people's responses to threats in one of two ways: a) minimize their closeness to and dependence on their partner (i.e., high attachment avoidance), or b) seek extreme closeness to their partner to alleviate their fears about becoming abandoned (i.e., high attachment anxiety). People who have higher scores for either attachment avoidance or attachment anxiety tend to encounter greater challenges within their intimate relationships, as well as report poorer relationship experiences (see Pietromonaco & Beck, 2015). However, relationship threats also extend beyond one's pre-existing traits, as people may also encounter threat antecedents in their day-to-day relationship experiences. Indeed, perceptions of threats have negative implications on people's daily relationship responses and experiences (e.g., Murray et al., 2003) as well as have lasting negative relationship implications (e.g., Derrick et al., 2012). Although trait- and state-based relationship threats each portray a unique set of challenges and experiences to intimate relationships, they are similar in that higher scores for either form of threats have the potential to be deleterious to intimate relationships.

Currently, it is unknown whether relationship threat circumstances may interfere with couples' relational self-expansion experiences. The current research investigated whether *both* chronic trait-based threats, as well as daily state-based threats may have negative implications for relational self-expansion, and whether threats may predict a lower likelihood of engaging in exciting couple activities and lesser activity benefits, therein.

Relational Self-Expansion and Related Threat Concepts (Trait and State)

In the following sections, I provide evidence from existing literature to help delineate ways in which threats may affect couple's specific self-expanding experiences. Specifically, I begin by discussing ways in which threats may interfere with relational self-expansion according to suppositions from the self-expansion model, followed by research from the attachment literature on secure base exploration. Then, I present literature from the risk regulation system as well as from other threat-related research to help understand how threats may negatively interfere with relational self-expansion and the occurrence of exciting couple activities.

Threats and Relationship De-Expansion

The self-expansion model suggests that people seek engagement in exciting couple activities as often as possible, though their capacity to engage in these activities may have some constraints. The self-expansion model theorizes that too much self-expansion (or experiencing self-expansion at a rapid rate) may have implications for engaging in exciting couple activities and may be perceived as a loss of control and stability (Aron & Aron, 1986). Researchers suggest that engaging in exciting couple activities may also add to existing stressors and, thus, undermine couples' relationship quality, sending couples down a path of de-expansion (i.e., experiencing a loss or

reduction (rather than addition) of some knowledge, resource, or skill; Aron & Aron, 1986; Aron et al., 2001). Research has also pointed to the implications of engaging in exciting activities (i.e., activities which are typically assumed to promote growth). For instance, researchers investigated whether shared couple activities sustained relationship satisfaction six months later and found that activities which were initiated for self-expanding reasons (as rated by coders), did not promote satisfaction nor relationship quality, but were associated with lower activity-related closeness to their partner and greater stress (especially for women; Girme et al., 2014).

In other research, novelty has been associated with relationship uncertainty (Baxter & Montgomery, 1986; Baxter, 2011; Witt, 2009). In an interview of couples, researchers found that when couples described experiences of excess novelty (and less predictability), they expressed feelings of greater relationship uncertainty (Baxter & Montgomery, 1996). People also report greater relationship conflict when engaging in leisure activities with their partner on days where they are more stressed than usual, especially if they had a predisposition to respond in ways that would avoid negative outcomes in their relationship (i.e., avoidance motivation; Buck & Neff, 2016). Finally, in other research, researchers found that the association between activity challenge and relationship quality was mediated by affect, suggesting that partner skill may complicate people's experiences within the activity (Graham & Harf, 2015). Although this research provided fruitful evidence for how self-expansion (via couple activities) may not always be a positive experience and how self-expansion may be threatening, it is unclear *why* self-expansion may be unlikely to occur in intimate relationships in the first place. For instance, do relationship threats predict whether people decide to pursue versus not

pursue exciting couple activities? One possibility is that relationship threats may interfere with people's relational self-expansion experiences. Although self-expansion is purported to increase relationship satisfaction, there is some evidence to suggest that self-expansion may be associated with risks to the self. In particular, people may experience relationship threats—whether trait- or state-based—which may compromise not only their overall relational self-expansion evaluations, but also their engagement in exciting couple activities and their activity experiences therein.

Threats and Secure Base Exploration

Another theory which can help provide insight for the role of relationship threats on relational self-expansion is that of secure base exploration—a component of attachment theory. In particular, Bowlby (1969; 1988) proposed that in addition to people's attachment securities, exploration in one's environment (e.g., work, play, pursuit of personal goals) is a complementary and essential component of attachment theory. He conceptualized that the exploratory system as a system is rooted in discovery and allows people to experience novel situations and obtain new information from the environment within the presence of an attachment figure. It is also stated that the attachment security and exploratory systems work in tandem, such that the process of exploration normally requires engagement from both the explorer and their support system and is thus both an intrapersonal and interpersonal process (Bowlby, 1988; Feeney, 2004). Furthermore, people are most likely to explore new environments when their feelings of security and protection from an attachment figure are satisfied (i.e., when attachment needs are met; Bowlby, 1988). Recent literature has expanded on this feature of the exploration system, suggesting that people are more likely to explore and grow when their partner provides a

secure base for exploration (i.e., partner is available, encouraging, nonintrusive to their needs; Collins & Feeney, 2010; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010).

Adult attachment style is one major predictor of exploration and growth within intimate relationships and is innately linked to attachment style (Carnelley & Ruscher, 2000; Elliot & Reis, 2003; Feeney, 2004; Feeney, Collins, Van Vleet, & Tomlinson, 2013; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010; Green & Campbell, 2000; Luke, Sedikides, & Carnelley, 2012; Mikulincer, 1997). In a study examining exploration and attachment security, Green and Campbell (2000) found that people with chronic, insecure attachment styles were less likely to endorse solitary exploratory behaviours compared to those with secure attachment styles. When primed with an insecure (versus secure) attachment style, people tend to show less interest in not only solitary exploratory behaviours, as well as demonstrate reduced interest in novel stimuli (Green & Campbell, 2000). There is evidence that people with higher attachment avoidance also tend to be less curious (Hazan & Shaver, 1990; Mikulincer, 1997) and are more likely to engage in exploration when the activity is important to their relationship (Carnelley & Ruscher, 2000), compared to securely attached individuals.

On the other hand, people categorized by higher attachment anxiety often have a greater desire to seek exploration and engage in new pursuits, though tend to avoid thrill and adventure seeking in their explorations (Carnelley & Ruscher, 2000). These individuals also tend to view their personal explorations as more important than their relationships (Carnelley & Ruscher, 2000) and are especially likely to engage in exploratory behaviours when it can lead to social approval (Hazan & Shaver, 1990) or is likely to relieve negative affect (Carnelley & Ruscher, 2000). Conversely, individuals

with secure attachment styles are more likely to seek as well as engage in exploratory behaviours (Feeney et al., 2013), compared to individuals with insecure attachment styles, because they tend to possess a higher need for achievement and they tend to perceive lower risk of failure (i.e., threats; Carnelley & Ruscher, 2000; Hazan & Shaver, 1990). When looking at the role of partners in one's exploration, it is also known that people with higher attachment avoidance or higher attachment anxiety tend to provide secure base support to their partners for egoistically-motivated reasons (e.g., to avoid negative consequences; Feeney et al., 2013). To date, the majority of the exploration research has focused on the role of attachment insecurity on exploratory behaviours related to one's own physical, social, and intellectual environments. What is currently unknown is how trait-based attachment insecurity, for a person and their partner, may affect people's explorations within the domain of self-expansion and exciting couple activities.

Threats and the Risk Regulation System

According to the risk regulation system (Murray et al., 2006) people are motivated to find a balance between two fundamental competing relationship goals: to seek closeness to one's partner (i.e., promote the relationship) versus minimize the risk of rejection and social pain (i.e., maintain security in the relationship). The theory stipulates that people regularly make evaluations about how risky relationship experiences may be to the self and react to these experiences in one of two ways. First, when experiences are perceived to have lower risks, people engage in relationship-promotion behaviours; they increase their level of dependence on the partner and seek closeness, which facilitates positive relationship outcomes like trust and commitment (Murray et al., 2006). Second,

when experiences are perceived to have greater risks, people engage in self-protection behaviours; they minimize their level of dependence and withdraw (or distance) themselves from their relationship, thus reducing the likelihood of getting hurt. This is important to research on relationship threats as people may need to relinquish control of their need for personal security for the sake of adding growth to their relationship—thus increasing one's susceptibility of feeling vulnerability to rejection (e.g., Downey & Feldman, 1996; Downey et al., 1998; Downey, Mougouis, Ayduk, London, & Shoda, 2004).

Following research on the risk regulation system, researchers studying self-esteem and risk-taking investigated how people respond to risks following rejection in their intimate relationships (Cavallo et al., 2009). In this study, people were randomly assigned to either a secret selves condition which was meant to heighten their concerns for rejections (i.e., they selected and responded to aspects of themselves that they wish their partner does not discover) or assigned to a control condition, then reported how likely they were to engage in several risk-taking recreational activities (e.g., white water rafting, bungee jumping; Study 3). When rejection threats were heightened, people with lower self-esteem reported lower likelihood of engaging in risk-taking recreational activities, compared to people with higher self-esteem. That is, people with heightened relationship threats and lower self-esteem appear to be more attuned to threats (i.e., need for self-protection), whereas people with higher self-esteem seem to disregard risks (i.e., need for relationship-promotion). These findings are important to the current research as people strive to maintain a comfortable balance between their needs for self-protection versus relationship promotion (Murray et al., 2006). In particular, it is suggestive that people

may, at times, feel conflicted as to whether engage in activities which are self-expanding and will benefit their relationship versus withdraw from the opportunity to add excitement to their relationship (via relational self-expansion) in order to protect the self.

Effects of Threats on Self-Expansion-Related Behaviours in Other Research

Preliminary evidence for the link between relationship threats and relational self-expansion has been established in other research (Bacev-Giles & Harasymchuk, 2015; 2016; 2018). In a qualitative study of exciting couple activity experiences, participants listed past exciting activities that they engaged in with their partner as well as listed any challenges they encountered during their implementation of new and exciting activities (Bacev-Giles & Harasymchuk, 2018). Responses to coded activity challenges suggested that the third most common challenge to engaging in exciting couple activities (following time and energy, as well as financial concerns) were people's relationship insecurities and perceived risks to the self. For example, people reported feeling fearful, anxious, embarrassed, and uncomfortable about the self (in front of their partner), or unsure of what their partner may think of them or how their partner would react if they were to engage in a novel activity with their partner. In order to better understand the association between relationship threats and relational self-expansion, an experimental study was also conducted where participants were randomly assigned to describe a novel or familiar activity that they wanted to engage in with their partner in the near future (Bacev-Giles & Harasymchuk, 2015). Confirming hypotheses, people assigned to plan an exciting couple activity reported significantly lower intentions for initiating the activity, as well as were more fearful and anxious about engaging in this activity (marginally significant), compared to those who planned a familiar couple activity. Regardless of the activity

condition, there was a moderately positive association between activity novelty (for both the participant and perceptions for the partner) and how fearful or anxious people anticipated they (and their partner) would be about engaging in this activity, as well as how worried they were about their partner enjoying the activity. It was also found that attachment avoidance and attachment anxiety were negatively correlated with people's intentions to engage in their planned activity. Similarly, research has found that relational uncertainty was negatively associated with people's intentions for engaging in novel couple activities (Lebreton & Harasymchuk, 2015).

Results from these studies suggest that relationship threats—including both pre-existing threat concerns and everyday experiences—may interfere with the occurrence of relational self-expansion. That is, there may be times when people seek security (e.g., from relationship threats) rather than relationship promotion (e.g., relational self-expansion opportunities). Together, there is evidence from experimental and correlational designs that threat concerns are associated with reduced intentions for exciting couple activities, and qualitative data also suggests that threat concerns may be one common obstacle to why people report lower relational self-expansion or why they do not engage in exciting couple activities as often as they wish to.

Conclusion

In summary, research suggests that threats may be negatively associated with relational self-expansion in a few different ways. Relationship threats may reduce people's perceptions of relational self-expansion, including the occurrence of exciting couple activities, and they may even diminish the positive experiences which are typically associated with relational self-expansion. It is also known that people's various

exploration behaviours are innately linked with attachment style (Carnelley & Ruscher, 2000; Elliot & Reis, 2003; Feeney, 2004; Feeney et al., 2013; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010; Green & Campbell, 2000; Luke et al., 2012; Mikulincer, 1997). In particular, people who possess insecure attachment styles (i.e., high attachment avoidance and/or attachment anxiety) tend to respond poorly to explorations, especially when it involves an element of novelty (e.g., Carnelley & Ruscher, 2000; Green & Campbell, 2000). Together, the risk regulation system may also help explain the dilemma people face when seeking needs for personal security (e.g., avoiding the risk of rejection and feeling hurt by relationship threats) versus promoting their intimate relationship (e.g., incorporating relational self-expansion). Building on this, preliminary evidence suggests that threats may be one obstacle which reduces people's engagement in exciting couple activities. Consequently, when people encounter relationship threats, they may act accordingly about whether or not to engage in relational self-expanding opportunities (e.g., Bacev-Giles & Harasymchuk, 2015; 2016; 2018). The association between relationship threats and self-expansion has not been investigated beyond this point. Furthermore, it is currently unknown whether trait- and state-based relationship threats are associated with relational self-expansion, and whether relationship threats experienced by both a person and his or her partner may predict one's relational self-expansion experiences. The current research will enter uncharted territory to understand whether relationship threats predict not only a couple's overall perceptions of relational self-expansion, but also their intentions for and the occurrence of exciting couple activities, as well as the experiences derived from exciting couple activities.

**Current Study: The Role of Threats and Self-Expansion from a Dyadic Daily Diary
Perspective**

The objective of this study was to investigate the intersection between relationship threats and relational self-expansion outcomes. This research is unique in that it was the first to assess how relationship threats may shape not only couple's overall evaluations of relational self-expansion, but also their engagement in exciting couple activities, and their experiences therein. What was also novel about this study was that relationship threats were assessed as both a trait and a state. I also examined the role of threats for *both* members of the couple. Moreover, this research was one of only few studies to investigate relational self-expansion as it naturally unfolds in couples' daily lives.

Relational self-expansion is a dynamic and nuanced process, where an examination of daily-level antecedents as well as both partners' experiences are required in order to obtain a true picture of how relational self-expansion unfolds. One fruitful tool which allows the researcher to assess one's daily, naturally-occurring experiences, is daily diary sampling methodology. To date, there has been limited use of daily diary sampling methodology within the self-expansion literature (with exception, Harasymchuk et al., 2019; Muise et al., 2019; and Graham (2008) who conducted an experiential sampling study), with the majority of the literature reporting laboratory-based designs which are only capable of gathering data for a snap shot in time. The use of daily diary surveys also allows the researcher to capture data within close proximity, thus reducing the risk of retrospective bias (Algoe, Gable, & Maisel, 2010; Bolger, Davis & Rafaeli, 2003; Duck, Rutt, Hurst & Strejc, 1991; Laurenceau & Bolger, 2005; Reis, 1994). As

such, there is much to learn with regard to people's daily experiences and the associations these experiences have with relational self-expansion. In the current study, I assessed the association between daily relationship threats and the relational self-expansion, including the occurrence of exciting couple activities and people's experiences during exciting couple activities.

Daily diary sampling methodology also provides rich data which allows the researcher to investigate within-person variation (Bolger et al., 2003). Traditionally, the intimate relationships literature has reported between-person differences (i.e., some people experience greater relationship threats than others), however much can also be learned from investigating within-person differences (i.e., a person's relationship threats vary from day to day; Buck & Neff, 2012; Murray et al., 2003). For instance, relationship threats fluctuate not only from person to person, but may also fluctuate based on how threatened a person feels within their relationship from one day to the next. Additionally, daily diary sampling methodology allows the researcher to investigate not only how relationship threats (relative to one's average) are associated with relational self-expansion experiences today, but also how a person's relationship threats today are associated with their relational self-expansion experiences *tomorrow*. The current study sought to investigate within-person variation in daily relationship threats, in order to better understand its association with exciting couple activities.

Additionally, to better understand how daily relationships threats are associated with exciting couple activities, it was important to assess the relationship experiences for both partners. Intimate couples share a large amount of overlap in their relationship experiences, including individual differences (Kenny, Kashy, & Cook, 2006). For this

reason, a comprehensive examination of dyadic relationship experiences requires that partners be considered interdependent rather than independent. The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000; Kenny et al., 2006) allows the researcher to account for interdependence among couple members and to assess how partners influence one another. In other words, it was possible to examine how one's own threats (i.e., the actor) as well as the partner's threats were associated with one's relational self-expansion experiences, while controlling for the influence of the partner. Together, the use of a dyadic, daily diary sampling methodology allowed me to extend the self-expansion literature by capitalizing on naturally-occurring, within-person variation of daily relationship threats and assess its relationship with exciting couple activities, while also simultaneously accounting for the partner's experiences.

Overview and Hypotheses

The current research investigated one reason factor which may interfere with relational self-expansion: namely, relationship threats. In particular, the overall purpose of this research was to understand how both trait- and state-based relationship threat concerns were associated with people's experiences engaging in exciting (i.e., novel and arousing, which broaden one's perspectives of the self and the relationship) couple activities. I investigated these points in a 21-day daily diary study of couples, using the APIM model (Kenny et al., 2006). The general framework for the intersection of threats with relational self-expansion, as guided by the APIM analyses, is illustrated in Figure 1. In particular, this research was guided by two main research questions:

- 1) Is attachment insecurity (i.e., a trait-based threat concern) associated with one's general ratings for relational self-expansion, as well as a person's intentions and the occurrence of exciting couple activities?
- 2) Are everyday instances of relationships threats (i.e., a state-based threat concern) associated with people's daily experiences with relational self-expansion, including the occurrence of exciting couple activities and people's activity experiences?

Following the APIM model, these research questions were examined for actors (i.e., Are Allie's relationship threats experiences associated with Allie's relational self-expansion outcomes?) *and* partners (i.e., Are Noah's relationship threat experiences associated with Allie's relational self-expansion outcomes?). For state-based threat concerns, I examined the association between daily relationship threats for both same day and following day engagement and experiences with exciting couple activities.

The central tenet of my research was that perceptions of threats may affect people's perceptions of relational self-expansion as well as their engagement in exciting couple activities. First, I investigated how trait-based threat concerns (measured at the intake survey) were associated with perceptions of relational self-expansion as well as one's intentions and the frequency of engagement in exciting couple activities. Then, I assessed whether state-based relationship threats (examined on a daily basis) were related to people's ratings for general relational self-expansion as well as the occurrence of exciting couple activities on the same day and the following day. As well, I investigated whether relationship threats experienced on days when couples engaged in an exciting activity predicted their experiences during that activity. Finally, I assessed whether daily

relationship threats were associated with people's overall self-expanding experiences on the following day.

Trait-Based Threat Concerns (Hypotheses 1 through 3)

At the intake survey, I investigated the association between trait-based threat concerns and relational self-expansion. In particular, I assessed whether attachment insecurity was associated with people's evaluations of relational self-expansion as well as people's intentions and the frequency of exciting couple activities over the course of a 21-day daily diary study.

Relational self-expansion. The first hypothesis concerns the association between people's chronic predispositions for attachment insecurity (trait-level) and their ratings for relational self-expansion (see Figure 2 for a general representation). Given the empirical link between attachment style and growth and exploration (e.g., Bowlby 1969; 1988; Carnelley & Ruscher, 2000; Elliot & Reis, 2003; Feeney, 2004; Feeney et al., 2013), I predicted that attachment insecurity (assessed by both attachment anxiety and attachment avoidance) would negatively predict people's ratings for current relational self-expansion (Hypothesis 1a) as well as their perceptions that their relationship will offer future opportunities for self-expansion (Hypothesis 1b). Particularly, people with higher scores for attachment avoidance and/or attachment anxiety should report lower relational self-expansion (and lower anticipated future relational self-expansion) and have partners that report lower relational self-expansion.

Intentions and frequency of exciting couple activities. In addition to examining the effects of trait-level threats on general relational self-expansion ratings, I predicted that people with more insecure attachment styles (i.e., higher scores for attachment

anxiety and/or attachment avoidance) would report lower intentions for engaging in exciting couple activities over an upcoming three-week study period (Hypothesis 2; Figure 3). I also predicted that attachment insecurity would negatively predict the frequency of engagement in exciting couple activities, for people and their partners, over the three-week study period (Hypothesis 3; Figure 4).

State-Based Daily Threats Concerns (Hypotheses 4 through 12)

At the daily level, I assessed whether daily relationship threats were associated with relational self-expansion, including the occurrence of exciting couple activities and couples' experiences during those activities.

Relational self-expansion. One key focus of the present study was whether daily instances of relationship threats (i.e., a state-level threat concern) influence people's relational self-expansion experiences. I predicted that relationship threats would be negatively associated with people's evaluations of overall relational self-expansion at the daily level (Hypothesis 4; Figure 5). That is, people should report lower relational self-expansion on days when they experienced greater relationship threats, relative to their average. In addition, greater relationship threats experienced by the partner should also predict people's daily relational self-expansion experiences.

Exciting couple activity occurrence and experiences. Another key goal of this research was to examine whether daily relationship threats interfere with couples' engagement in exciting couple activities (Figure 5). First, I predicted that people and their partners would be less likely to engage in an exciting couple activity on days when they reported greater relationship threats than usual (Hypothesis 5). Second, I investigated whether people and their partners would report lower activity quality on days

characterized by greater relationship threats (Figure 6). Specifically, I predicted that people (and their partners) who engaged in an exciting couple activity on more threatening days would report lower self-expansion during the activity, in comparison to exciting activities that occur on less threatening days (Hypothesis 6). As well, I predicted that people would report lower positivity during the activity (Hypothesis 7) and report that the activity was less successful on days when they experienced greater relationship threats (Hypothesis 8). Finally, I predicted that people would have lower intentions to engage in similar exciting couple activities with their partner in the near future, when their daily relationship threats were higher than usual (Hypothesis 9).

Self-expansion outcomes on the following day. In the final hypotheses, I sought to investigate the role of state-level threat concerns on people's relational self-expansion experiences, by examining the effects of today's threats on tomorrow's experiences. It is known that engaging in couple activities has a carryover effect for relationship satisfaction on the following day (Muise et al., 2019), however, research has yet to investigate the effect of relationship threats on relational self-expansion. Although, given the nature of relationship threats, their effects on daily relationship experiences (e.g., Murray et al., 2003), and their potential to diminish relationship experiences (e.g., Baxter & Montgomery, 1996; Honeycutt, 1993; Planalp & Honeycutt, 1985; Planalp, Rutherford, & Honeycutt, 1988), it is quite plausible that perceived threats to the self may carryover to negatively predict relational self-expansion outcomes on the following day. It was hypothesized that people and their partners would report lower ratings of relational self-expansion when they experienced greater relationship threats on the previous day (Hypothesis 10). As well, greater instances of daily relationship threats today would

predict a lower likelihood that people and their partners engage in exciting couple activities on the following day (Hypothesis 11). That is, when people experience greater relationship threats, they were expected to portray a pattern of reduced self-expansion (ratings and occurrence) on the following day. Finally, on occasions when people reported greater relationship threats than usual, though still engaged in a couple activity on the following day, they and their partners should report that the activity was less self-expanding (Hypothesis 12).

Method

Participants

One hundred twenty-three couples in intimate, monogamous relationships who had lived together and been in a relationship for a minimum of two years were recruited to participate in a 21-day diary study entitled “Daily Relationship Experiences”. One couple was excluded from the study (i.e., because only one partner completed the background survey) leaving a final sample of 122 couples. Of the 122 couples, four couples withdrew their participation from the study for unknown reasons though were still included in the analyses because they contributed partial data (i.e., they completed the intake survey and at least two daily surveys). Participants ranged in age from 19 to 67 years ($M = 32.07$, $SD = 10.10$) and had been in their relationship for approximately eight years ($M = 8.21$, $SD = 7.08$, range = 2-48 years). The majority of participants were married (55.7%) or were seriously dating or engaged (44.3%). Participants’ sexual orientation was predominately heterosexual (86%), with 7% identifying as gay/lesbian, 5% identifying as bisexual, and 2% identified with “other”. Approximately one quarter (22.8%) of participants had children who were living in the home; of those with children,

participants had one to two children on average ($M = 1.54$, $SD = .64$). Participants predominately identified as White/European (78.3%), followed by Latin American (6.8%), East Asian (4.3%), South Asian (2.6%), Black/African (2.1%), and 6.0% were bi- or multi-ethnic/racial or self-identified as “other”. Overall, participants reported high relationship satisfaction ($M = 6.18$, $SD = .96$, range = 1.67-7.00) and their reported closeness to their partner was moderately high ($M = 5.20$, $SD = 1.30$, range = 1-7).

Sample size was determined following dyadic data recommendations which suggest a minimum of 100 couples (Kenny et al., 2006). The target sample for this study was 120 couples, though recruitment surpassed this number with 122 couples as a result of logistic reasons (i.e., multiple people expressing simultaneous interest in participating towards the end of the study recruitment).

Procedure

Recruitment occurred between December 2016 and April 2017. Couples were recruited through advertisements on the websites Reddit (posted on the r/Ottawa and r/SampleSize sub-Reddit pages) and Kijiji (posted in five major Canadian cities: Ottawa, Toronto, Edmonton, Halifax, and Hamilton). Recruitment also occurred through poster advertisements on the Carleton University campus and in various public locations (e.g., libraries, community centers, grocery stores) in Ottawa, Canada. Interested participants emailed the research study account and completed an email pre-screening questionnaire to assess their eligibility for the study (e.g., relationship status, relationship length, living situation, and availability to participate; see Appendix A). Close to 200 people emailed expressing interest in participating in this study with their partner. In 73% of these cases, both partners completed the email pre-screening questionnaire and were reached by

telephone where their eligibility was further verified. The majority of participants reported that they were recruited through word of mouth (i.e., their partner, family, friend; 35%) and Reddit (27.4%), followed by Kijiji (24.5%), and community posters (11%). At that time, participants were asked to provide their partner's first name and email address so that the email pre-screening questionnaire could be sent accordingly. Couples were eligible to participate if they were: a) in an exclusive, monogamous relationship, b) had been with their partner for at least two years, c) were currently living together, and d) both partners agreed and were available to participate in the study for the following three-week period.

Eligible participants were individually contacted via a brief telephone call to verify their responses and in order for the researchers to establish credibility of the research study with potential participants (see Appendix B). During the phone call eligibility check, the researchers also asked where the participant met their partner and their partner's date of birth. These two items served as an additional precautionary check for flagging fraudulent cases (e.g., spam emails) and to ensure desirable (but perhaps fictitious) responses were not provided in the email pre-screening measure. There were no suspected fraudulent cases; all participants who completed the second eligibility pre-screening were eligible and invited to participate in the study.

After agreeing to participate, each partner was emailed a unique link to their personal email account in order to begin the intake survey (average completion time was 55.89 minutes, $SD = 33.55$). Beginning on the following day, each partner was individually emailed a brief survey (10 to 15 minutes) each day for the next 21 consecutive days. In order to minimize participant attrition and fatigue, careful

consideration was given to the measures which were included at the daily level (e.g., Bolger et al., 2003). Participants were instructed to complete the survey in private (i.e., away from their partner) before they went to bed; although all participants had access to the survey between the hours of 5:00 p.m. and 9:00 a.m. the next morning (their local time). The daily survey took approximately 9.69 minutes to complete ($SD = 16.76$). Each person was paid up to CAD\$55 in Amazon.ca e-gift cards for participating (payment was pro-rated depending on the number of daily surveys completed).¹ As an additional incentive, participants received one draw entry per completed daily survey, for a chance to win one of two CAD\$100 Amazon.ca e-gift cards. In all, participants completed a total of 4,773 entries, for an average of 19.56 (out of 21) entries per person. This study was part of a larger daily diary project and only measures relevant to the current study will be reported below.

Intake Survey Measures

Participants completed each of the following background measures prior to commencing the daily diary portion of this study. The order for all measures following the demographics section was randomized (also see Appendix C).

Demographics. This section assessed general questions such as participants' age, gender, relationship status, and the length of time participants have been with their partner. As well, participants indicated their sexual orientation, ethnicity, the number of days per week that they see their partner, whether they have children, and where they heard about the study. Relationship quality was assessed using measures of relationship satisfaction and closeness. Relationship satisfaction was assessed using three items from

¹ Three couples were American (recruited via Reddit) and received payment in USD.

the Perceived Relationship Quality Component Inventory (PRQC; Fletcher, Simpson, & Thomas, 2000) which were evaluated on a scale from 1 (*not at all*) to 7 (*extremely*): “How satisfied are you with your relationship?”, “How content are you with your relationship?”, and “How happy are you with your relationship?” A composite score was created; greater scores represent greater relationship satisfaction ($\alpha = .93$). Closeness to one’s intimate partner was measured using the Inclusion of Other in the Self scale (Aron, Aron, & Smollan, 1992), in which participants view a total of seven increasingly overlapping circles (i.e., circles represent the “self” and “other”) and select one image which best represents their current relationship with their partner. Greater scores represent greater overlap between circles, and thus greater closeness to their partner.

Trait-based relationship threats. Trait-based relationship threats was operationalized using the Experiences in Close Relationships Scale – Short Form (ECR-S) questionnaire (Wei, Russell, Mallinckrodt, & Vogel, 2007). This 12-item measure assesses attachment security along two dimensions: avoidance of intimacy and anxiety about abandonment, each assessed by 6 items (1 = strongly disagree to 7 = strongly agree). Attachment avoidance included items such as, “I try to avoid getting too close to my partner” and “It helps to turn to my romantic partner in times of need.” (reverse-coded), and attachment anxiety included items such as “I need a lot of reassurance that I am loved by my partner.” and “I do not often worry about being abandoned” (reverse-coded). Aggregate scores were computed for attachment avoidance and attachment anxiety ($\alpha = .73$ for each), where higher scores reflect greater insecurity on the respective dimensions.

Relational self-expansion. Relational self-expansion was assessed using the 14-item Self-Expansion Scale (Lewandowski & Aron, 2002). Items were rated on a scale from 1 (*not very much*) to 7 (*very much*). Sample items include: “How much does being with you partner result in you having new experiences?”, “How much does your partner help to expand your sense of the kind of person you are?” and “How much does your partner provide a source of exciting experiences?” ($\alpha = .90$). In addition, a single item from the Potential for Relational Self-Expansion scale (Lewandowski & Ackerman, 2006) was used to assess future relational self-expansion opportunities. Using a scale from 1 (*strongly disagree*) to 7 (*strongly agree*), participants responded to: “I feel that my current relationship will give me opportunities to grow in the future.” For both measures, higher scores correspond to greater evaluations of relational self-expansion.

Intentions for engaging in future exciting couple activities. Intentions to engage in future exciting couple activities was assessed by having participants rate their likelihood of engaging in different couple activities over the following three weeks (adapted from Harasymchuk et al., 2017).² On a scale from 1 (*not at all likely*) to 7 (*very likely*), participants rated their likelihood of engaging in future exciting, self-expanding couple activities: “Start a new leisure activity with your partner”, “Visit a new place or go sightseeing with your partner”, and “Overall, how likely are you to do new and unfamiliar things with your partner, such as starting a new sport, seeing a new place, or learning something new together?” ($\alpha = .78$). Three items assessing security-restorative familiar couple activities were also included as filler items: “Go to your usual restaurant

² The wording of two items was modified from the original items used by Harasymchuk et al. (2017) in order to capture the overall (i.e., global) activity intentions for the self-expanding (i.e., exciting) and security-restorative dimensions, respectively.

for some comfort food with partner”, “Watch a favourite move that you have seen several times with your partner”, and “Overall, how likely are you to do comforting and familiar things with your partner such as watching a favourite movie, having comfort food, or snuggling up for some TV?” ($\alpha = .39$). The self-expanding and security-restorative activity dimensions were positively correlated ($r(235) = .26, p < .001$). The security-restorative items were included as filler items to disguise the research purposes and will not be discussed further.

Daily Diary Measures

Starting the evening following the intake survey, participants began the daily diary survey which was administered every day for 21 consecutive evenings (also see Appendix D).

State-based relationship threats. Two subscales were selected from Murray and colleagues’ (2003) Daily Experiences Record to create a daily measure of relationship threats. The subscales consisted of five items measuring anxiety about acceptance (i.e., concern for the availability of a partner’s acceptance) and six items measuring felt rejection/hurt (i.e., feelings of rejection by a partner). Together, the scale consisted of 11 items, including: “rejected or hurt by partner”, “your partner was irritated with you”, and “your partner didn’t really care what you thought” (felt rejection/ hurt items) and “worried about disappointing partner”, “your partner was pulling away from you”, and “unsure whether partner was happy in your relationship” (anxiety about acceptance items). Each day, participants indicated the extent to which they felt these threats using a scale of 1 (*not at all*) to 7 (*especially*). Because the focus was on daily relationship threats in general, an aggregate daily score for relationship threats was computed across both

subscales (rather than distinguishing between the two; $r(4748) = .66, p < .001$).

Reliability of the 11 items was high ($\alpha = .93$), with higher scores representing greater daily relationship threats.

Daily relational self-expansion. Six items were drawn from Lewandowski & Aron's (2002) Self-Expansion Scale to assess daily self-expansion with one's partner (Muise et al., 2019). Some items included: "How much did being with your partner result in you having new experiences?", "Did you feel a greater awareness of things because of your partner?", and "How much did you feel you gained a larger perspective on things because of your partner?" Items were evaluated on a scale from 1 (*not very much*) to 7 (*very much*) with higher scores representing greater perceptions of daily relational self-expansion. Reliability of the six items was high ($\alpha = .96$).

Daily exciting couple activities. Daily engagement in exciting couple activities was measured by a "yes" or "no" response to the following question:

"Thinking about your responses to the questions above, can you think of a specific activity that you did with your romantic partner today that resulted in you feeling a sense of excitement, a greater awareness of things around you, an expansion of your sense of self, and/or an increased knowledge of yourself and the world around you?"

People who reported "no" to this question were asked whether they worked outside of the home today (*yes/no*), and people who responded "yes" reported the number of hours they worked and rated their overall work day on 14 items assessing their thoughts and feelings while at work that day (e.g., how much they enjoyed their job today, how bored they felt, how worried they were about finances). Those who responded "no" completed the same

14 items regarding their day, overall. In both cases, these questions were included as “filler” items (i.e., to avoid people from selecting “no” for the exciting activity to receive a shorter survey on subsequent days). The inclusion of these additional items also helped disguise the research hypotheses and mitigate any risks associated with memory of survey skip patterns over the 21-day period. No hypotheses were developed for these measures and they will not be discussed further.

Participants who responded “yes” to engaging in an exciting activity with their partner were asked additional questions about the activity. They provided a brief description about the activity they engaged in, the time of day, the length of time of the activity, and who initiated the activity (i.e., they did, their partner did, it was mutually initiated, or it occurred to chance). Then, on a scale from 1 (*not at all*) to 7 (*extremely*), participants rated the extent to which their exciting couple activity was novel, arousing, and positive. A composite score for self-expansion during the exciting couple activity was computed using ratings of activity novelty and arousal as defined in past literature (e.g., Aron et al., 2000; Aron et al., 2001), where greater scores represent greater self-expansion during the activity ($\alpha = .25$).

Then, on a scale from terrible (1) to terrific (7), participants evaluated how successful they thought the activity was (“Overall, how would you evaluate the success of this activity with your partner?”). Lastly, participants indicated how likely they would be to “do this same activity in the near future” and “do activities like this in the near future”, where items were rated from 1 (*not at all likely*) to 7 (*extremely likely*). These two items were highly correlated and were aggregated to assess people’s future exciting

couple activity intentions ($\alpha = .81$), where a greater score represented greater future activity intentions.³

Post-diary questions. Finally, post-diary questions were included to ensure the accuracy and completeness of participants' daily reports (e.g., Campbell, Simpson, Boldry, & Rubin, 2010; Overall & Sibley, 2009). At the end of each daily survey, participants rated "How truthful or honest were you in reporting events for today?" (1 = *not at all truthful/honest*, 7 = *completely truthful/honest*). Participants also had the opportunity to note extenuating circumstances (if any) that occurred to them and/or their family that day (e.g., partner was away for overnight business trip, accident, death in the family, illness). This item was included to capture any major circumstances which may have affected one's regular reporting and which may warrant the data being excluded (e.g., relationship conflict or dissolution, bereavement of close other).^{4,5}

Results

The central goal of this research was to investigate whether trait-based and state-based relationship threat concerns may one obstacle to engaging in exciting couple activities, as well as help to explain why some people may experience diminished relational self-expansion outcomes compared to others. In particular, I predicted that

³ Participants also evaluated how close they felt to their partner during the exciting couple activity as well as how satisfied they were with their relationship during the activity—both of which were included for exploratory purposes.

⁴ Daily relationship satisfaction was also assessed using a single item adapted for daily use from the PRQC (Fletcher, Simpson, & Thomas, 2000), "How satisfied were you with your relationship?" which was rated from 1 (*not at all*) to 7 (*extremely*). On average, people reported high daily relationship satisfaction ($M = 6.13$, $SD = 1.17$, range = 1 to 7). However, because I had no specific hypotheses for people's daily relationship satisfaction, this variable will not be discussed further.

⁵ A single item measure for daily (general) time spent with the partner was also included for exploratory purposes.

people's pre-existing threat concerns (i.e., attachment insecurity) and daily evaluations of relationship threats would be negatively associated with people's evaluations of overall relational self-expansion, their engagement in exciting couple activities, and their experiences when engaging in exciting couple activities.

Data Analytic Strategy

The data was hierarchically structured among days (level 1), within participants (level 2), and among couples (level 3). For this reason, multilevel modelling (Raudenbush & Bryk, 2002; Kenny, Kashy, & Bolger, 1998; Singer & Willett, 2003) was used for the analyses. This approach offers flexibilities while controlling for dependence (and redundancies) due to the repeated structure of the data (Laurenceau & Bolger, 2005). Multilevel modelling also allows for probabilistic variability within these levels, is capable of dealing with missing data and uneven case numbers, and handles any violations of normality by using robust standard errors (Reis & Gable, 2000). Furthermore, it has been the standard analytic approach used for daily diary data for over one decade (Bolger et al., 2003; Kenny et al., 2006). The data were analyzed using the mixed models procedure in SPSS 21.0 (e.g., Peugh & Enders, 2005). Analyses which involved a dichotomous outcome (e.g., engaging in an activity or not) were analyzed using GENLIMMIXED models in SPSS 21.0.

Even though couples were independently sampled, persons and days within each couple were non-independent and thus warranted the need to control for interdependence of partners. Analyses were guided by the APIM (Kashy & Kenny, 2000; Kenny et al., 2006), such that actor and partner variables were simultaneously entered into the model.

Throughout this paper, effects will always be described in terms of the actor unless the effect of the partner is specifically mentioned.

Background models were specified using a fixed effects model where persons were nested within the dyads (between-person analyses). Daily models were specified using a two-level cross model with random intercepts, where persons were nested within dyads and persons and days were crossed in order to account for the fact that both dyad members completed surveys on the same days (Kenny et al., 2006). I employed restricted maximum likelihood estimation in all background and daily models due to its strong range of capabilities when handling missing data (for reviews, see Baraldi & Enders, 2010; Nezlek, 2003; Raudenbush & Bryk, 2002; Schafer & Graham, 2002). Both the background and daily models were specified using compound symmetry with correlation parameterization—a structure allowing for constant variance and covariance. In addition, unstructured correlations were specified for estimating the random intercept within the daily level models.

In order to assess the extent to which the total variance of each of the outcome variables was due to within- versus between-person change, I also conducted intercept-only (i.e., unconditional means) models for each of my outcome variables. In particular, I calculated the intraclass correlations (ICC) for each of the continuous outcome variables that were assessed during both the intake as well as the daily surveys (e.g., Kenny et al., 2006; Tabachnick & Fidell, 2007). The following formulas were used to calculate the ICCs for the intake and daily surveys, respectively:

$$\text{ICC (Intake)} = \frac{\text{Between variance}}{\text{Between variance} + \text{Within variance}}$$

$$\text{ICC (Daily)} = \frac{\text{Between variance (level 3)}}{\text{Between variance (level 2)} + \text{Between variance (level 3)} + \text{Within variance}}$$

Table 1 presents the ICC values for the intake survey outcome variables and Table 2 presents the ICC values for the daily survey outcome variables. ICC values range between 0 and 1. Values that are closer to 0 indicate that the outcome variable varies over time (i.e., level 1 variance; greater within-person differences). The outcome variables assessed in the intake survey involve two levels of data, thus, ICC values that are closer to 1 indicate less stability over time (i.e., level 2 variance; greater between-person differences). Similarly, ICC values that are closer to 1 for the outcome variables assessed during the daily survey indicate less stability over time (i.e., level 3 variance) but represent greater between-couple differences.

Data Cleaning and Transformations

Before assessing the hypotheses, I first examined the overall characteristics of the daily level data. Recall that the current study generated a total of 4,773 diary reports (out of 5,124 possible daily observations). The quality of these reports were deemed quite high as the majority of participants reported that they were “completely truthful/honest” when answering the daily surveys (81%) and there were zero cases where participants reported that they were “not at all truthful/honest”. Attention was given to participants’ comments for any extenuating circumstances which may have affected their daily reporting. Participants provided comments for only 8.4% of daily reports; these included everyday obstacles such as having the flu or their partner was away or working long hours. There were no reports of extreme extenuating circumstances such as relationship

conflict, dissolution, or bereavement which may have warranted exclusions. Thus, no data exclusions were made at the daily level.⁶

Mean scores for all background and daily measures were computed, followed by the respective partner scores for each measure. Following suggestions within the multilevel modeling framework for data analyses, effects were partitioned into their within- and between-group components in order to reduce the chance of confounding effects. All level 1 predictors were grand-mean centered and level 2 predictors were person-mean centered (Raudenbush, Bryk, Cheong, & Congdon, 2004; Zhang, Zyphur & Preacher, 2009). The grand-mean centered scores represent the deviation of the dependent variable from the mean (as a function of the predictor) and the person-mean (i.e., group-mean) centered scores represent deviations from that person's mean on a given variable, allowing for the examination of score deviations from one time point to the next (Enders & Tofighi, 2007). Therefore, significant within-person differences can be interpreted as having a one-unit deviation above or below that person's average (across all the days in which they completed measures for that variable). Between-person differences were also assessed for relationship threats by creating aggregates for the daily threats variable across the 21 days.

In each model assessing the effects of daily relationships threats, I included the within-person predictor variables (i.e., variables centered on the person's own mean) and controlled for the between-person predictor variables (i.e., variables centered on the

⁶ Because the sample contained mixed-sex couples (whom may be distinguishable from other couples), tests of distinguishability were conducted for the variable gender as per recommendations by Kenny and colleagues (2006). Results were consistent with the null hypothesis that dyad members are indistinguishable (regardless of gender for either the actor or the partner) and were analysed as such in all subsequent analyses.

sample mean). As the focus on the current study was on differences in relationship threats relative to one's own average, I conducted within-person analyses. However, between-person results are presented in the tables for greater context. Additionally, lagged day analyses were conducted to examine the temporal sequence of the effect of threats across days (West, Biesanz, & Pitts, 2000). Specifically, I computed variables for both the actor and the partner in order to reflect the day-to-day nature of self-expansion, exciting couple activity engagement (dichotomous variable), and activity-related self-expansion measures. Following common practice for lagged analyses in the close relationships research, these variables were each lagged by one day (i.e., $t-1$; Algoe et al., 2010; Stadler, Snyder, Horn, Shrout, Bolger, 2012; Young, Curran, & Totenhagen, 2012).

Trait-Based Threat Analyses

Broadly, it was hypothesized that attachment insecurity (operationalized by high attachment anxiety and/or attachment avoidance) would negatively predict relational self-expansion. Trait-based threat analyses were assessed for their association on general relational self-expansion ratings (Hypothesis 1a and b) as well as for upcoming activity intentions (Hypothesis 2) and the frequency of exciting couple activities (Hypothesis 3). Descriptive statistics and correlations (including cross-partner correlations) for all variables measured at background are presented in Table 1. The sample had low scores for attachment anxiety ($M = 3.44$, $SD = 1.24$, range = 1.00 to 6.83) and attachment avoidance ($M = 2.06$, $SD = 0.90$, range = 1.00 to 4.83). Actors' scores for attachment anxiety and avoidance were positively correlated ($r(244) = .26$, $p < .001$). Furthermore, actors' and partners' scores for attachment anxiety were not correlated ($r(24) = -.01$, $p = .90$), however, actors' and partners' scores for attachment avoidance were positively

correlated ($r(244) = .18, p = .004$), and actors' scores for attachment anxiety were positively correlated with partners' scores for attachment avoidance ($r(244) = .17, p = .01$). ICCs for each of the intake outcome variables ranged between .19 and .53 (19% to 53%; see Table 2).

Insecure attachment styles and relational self-expansion. My first hypothesis was that attachment avoidance and attachment anxiety would be negatively associated with people's general evaluations of relational self-expansion. To test the hypothesis that trait-based threats are associated with lower evaluations for relational self-expansion, two models were conducted: i) perceived current relational self-expansion and ii) perceived future opportunities for relational self-expansion. In the first model, both the actor and partner scores for attachment anxiety and attachment avoidance were entered as simultaneous predictors and relational self-expansion ratings was added as the outcome variable. I found that there was an association with relational self-expansion for attachment avoidance but not attachment anxiety (Table 3). People with higher scores for attachment avoidance reported lower relational self-expansion ($b = -.33, SE = .07, t(237.76) = -4.60, p < .001, 95\% CI = -.47, -.19$), compared to those with lower scores for attachment avoidance. However, there was no association between attachment anxiety and relational self-expansion. There were no significant partner effects for attachment anxiety and avoidance (i.e., a partner's attachment style did not shape the other person's relational self-expansion ratings).

In the second model, attachment avoidance negatively predicted ratings for future self-expansion, such that people with higher (versus lower) scores for attachment avoidance perceived their relationship to offer fewer opportunities for future relational

self-expansion ($b = -.40$, $SE = .08$, $t(230.73) = -5.35$, $p < .001$, 95% CI = $-.55$, $.25$; Table 3). Attachment anxiety had no effect on future opportunities for relational self-expansion. As well, no partner effects were observed with either attachment anxiety or avoidance.⁷ People with higher scores for attachment avoidance reported lower relationship self-expansion both in the present as well as interpreted lower opportunities for relational self-expansion in the future, relative to people with lower scores for attachment avoidance.

Insecure attachment styles and exciting couple activities. Next, it was hypothesized that higher scores for attachment avoidance and attachment anxiety would predict lower intentions for (Hypothesis 2), as well less frequent engagement in, exciting couple activities over the three-week study period (Hypothesis 3). Contrary to predictions, neither attachment avoidance nor attachment anxiety predicted people's intentions to engage in exciting activities with their partner in the next three weeks (Table 4). Additionally, neither the partner's attachment avoidance nor attachment anxiety was associated with the actor's intentions to engage in exciting couple activities over the next three weeks.

The second model built upon the first by investigating whether attachment avoidance and attachment anxiety were negatively associated with the frequency of exciting couple activities that people reported over the course of the study. Again, no

⁷ To ensure that the association between attachment anxiety and/or attachment avoidance on relational self-expansion were not due to some combination of both the actor's and the partner's scores for each attachment dimension, I conducted exploratory interaction analyses. In particular, I computed and then added the following four interaction variables into the model: actor anxiety-partner anxiety, actor avoidance-partner avoidance, actor anxiety-partner avoidance, and actor avoidance-partner anxiety. The results for both models remained unchanged and no interaction effects were observed ($ps > .10$).

significant effects were observed for either the actor's attachment avoidance or attachment anxiety in predicting the number of exciting couple activities over the three weeks (Table 4). Furthermore, no partner effects were observed for either the effect of attachment avoidance or attachment anxiety on intentions or frequency of engagement in exciting couple activities.⁸

State-Based Threat Analyses

It is possible that people may encounter relationship threats not only as a result of their pre-dispositional (i.e., trait-based) tendencies, but also from their daily (i.e., state-based) experiences with their intimate partner. In the following section, I examined the effects of daily relationship threats on self-expansion by testing three hypotheses: daily threats as an obstacle to daily relational self-expansion ratings (Hypothesis 4), daily threats as an obstacle to people's experiences engaging in daily exciting couple activities (Hypotheses 5 to 9), and the effects of today's threats on tomorrow's relational exciting activity experiences (Hypotheses 10 to 12). On average, people experienced low daily relationship threats ($M = 1.56$, $SD = .91$, range = 1-7) and daily threats reported by the actor and the partner were positively correlated ($r(4558) = .43$, $p < .001$). The ICCs values for the daily outcome variables ranged between .14 and .41 (14% to 41%; see Table 5).

Daily relationship threats and relational self-expansion. It was hypothesized that people would report lower relational self-expansion on days when they experienced greater daily relationship threats than usual (Hypothesis 4). Overall, people reported

⁸ Results from both models remained unchanged when exploring the cross-level effects of attachment insecurity ($ps > .27$).

moderately low daily relational self-expansion ($M = 3.07$, $SD = 1.79$, range = 1-7) and the actor and partner scores for daily relational self-expansion were positively correlated ($r(4546) = .37$, $p < .001$). Consistent with predictions, on days when people reported greater threats within their relationship compared to their usual, they reported lower scores for relational self-expansion on that same day ($b = -.09$, $SE = .03$, $t(3731.34) = -2.61$, $p = .01$, 95% CI = $-.15$, $-.02$; Table 6). A partner effect was also observed such that on days when partners reported greater relationship threats than usual, actors reported lower self-expansion with their partner ($b = -.11$, $SE = .03$, $t(3727.12) = -3.40$, $p < .001$, 95% CI = $-.18$, $-.05$). Evaluations of relational self-expansion appear to depend not only one's own perceived daily threats but also the partner's daily threat experiences.

Daily relationship threats and experiences with exciting couple activities. The next hypothesis assessed whether daily relationship threats were negatively associated with people's experiences engaging in everyday exciting activities with their partner. That is, I was interested in assessing people's experiences on days when they actually reported an exciting couple activity. Specifically, these analyses were conducted among days in which people indicated "yes" when asked if they engaged in a shared activity with their partner which resulted in "feeling a sense of excitement, a greater awareness of things around you, an expansion of your sense of self, and/or an increased knowledge of yourself and the world around you". Across the 21-day period, participants reported a total of 926 exciting couple activities (range = 0 to 17 activities; 18.1% of all observations).⁹ The mean occurrence of activities across the entire sample was 3.72 (out

⁹ Twenty-nine people reported engaging in zero exciting couple activities over the course of the study. Of these people, there was only one couple in which both partners reported

of 21) and was 6.84 (out of 21) among people who reported at least one shared couple activity during the study. Actor's and partner's reports for daily activities were positively correlated ($r(4550) = .41, p < .001$), as were the sum number of activities reported by actors and partners across the 21-day period ($r(5124) = .52, p < .001$). Descriptive statistics and correlations for the key daily variables, as reported on days when people engaged in an exciting couple activity, are displayed in Table 7.

Two independent volunteers coded the data to identify matches and mismatches between the daily exciting couple activities reported by both members of the couple. The level of agreement for matches and mismatches between volunteers was extremely high ($K = .99, p < .001$). There was a match between partner's reported activities in 44% of cases (i.e., both the actor and partner reported the same activity on a particular day), and a partial match of activities in 6.4% of cases (i.e., both partners mentioned an activity on the same day, but one partner mentioned at least one component which was different from their partner's description). Mismatches in couples' reported activities were present in 49.5% of cases (i.e., one partner mentioned an exciting couple activity but the other partner did not).

What types of exciting couple activities did people engage in? To provide context to the exciting couple activities that people reported, additional analyses were conducted. As part of the daily diary protocol, participants provided a brief description of the activity they engaged in (on days when they reported a self-expanding couple activity). To examine themes of participants' self-reported exciting couple activities, two

zero exciting couple activities. The partners for the remaining 27 people reported at least one self-expanding activity over the study period.

volunteers who were blind to the study hypotheses independently coded the open-ended descriptions provided on days when the participant engaged in an activity with their partner. A 13-theme coding scheme, developed in other literature to code for exciting couple activities (Muisse et al., 2019) was adapted for this data. Small elaborations to the themes were made and an “other” category was added to capture any responses that did not fit well into the existing categories. Volunteers were instructed to stay as true to the wording as possible (i.e., to avoid any inferences) and to code the responses in as many (or few) themes as they saw fit. Volunteers resolved a few coding disagreements by discussion.

In Table 8, the various exciting activity themes that were mentioned by participants are presented. Cohen’s kappa agreement between the two raters varied from .43 to 1.00 across themes, with a high level of agreement between raters for all but two themes (e.g., Landis & Koch, 1977). All activities were coded into at least one theme, with approximately 10% of activities including detail regarding a second theme, and only a few activities including three themes. Percentage was computed for each theme by computing the mean rating from each volunteer. Paralleling Muise et al (2019), the most commonly reported activity themes included “outings” (38.7%; e.g., went to a local event/attraction), “leisure” (34.6%; e.g., watched a movie, played board games), “household activities” (8.8%; e.g., went shopping for a particular item, completed errands), and “physical activity” (8.4%; e.g., went hiking, tried yoga). Additional context for the exciting couple activities is reported in Appendices E and F.

In the following sections, I examined whether daily relationship threats were negatively associated with exciting couple activities; particularly with regard to the daily

occurrence of exciting couple activities (Hypothesis 5), as well as for ratings of activity self-expansion (Hypothesis 6), activity positivity (Hypothesis 7), activity success (Hypothesis 8), and future intentions for exciting couple activities (Hypothesis 9).

Occurrence of exciting couple activities. A logistic regression was conducted in order to assess whether daily relationship threats were negatively associated with whether or not people participated in an exciting couple activity that day (Hypothesis 5). In this model, both actor and partner person-mean centered scores for daily relationship threats were included as predictor variables and the dichotomous activity variable (i.e., “yes” or “no”) was included as the outcome variable. To interpret values from a logistic regression, the odds ratio is subtracted from 1; values below one represent a negative association and values above one represent a positive association. Consistent with predictions, one’s own daily relationship threat concerns (*odds ratio* = .79, *t* = -3.20, *p* < .001, 95% CI = .68, .91) were associated with a lower likelihood of engaging in a self-expanding couple activity that same day. That is, for every one unit increase in a person’s reported daily relationship threats (compared to their usual), people were 0.21 times (or 21%) less likely to engage in an activity that same day with their partner. However, daily relationship threats experienced by the partner were not associated with whether or not the actor reported engaging in an activity on that same day (*odds ratio* = 1.00, *t* = -.05, *p* = .96, 95% CI = .87, 1.14).

Experiences during exciting couple activities. A series of models were conducted in order to test the hypothesis that daily relationship threat concerns were negatively associated with people’s experiences during their engagement in exciting couple activities. First, I assessed how daily relationship threats may affect the key features of

people's exciting couple activities, as defined by models assessing self-expansion during the activity (operationalized by activity novelty and arousal) (Hypothesis 6). Then, I assessed whether daily relationship threats affects people's ratings of how positive and successful the exciting couple activity was (Hypotheses 7 and 8), as well as how likely they were to engage in similar exciting couple activities in the future (Hypothesis 9). Each model was conducted using the sub-sample of days in which participants responded "yes" to engaging in an exciting activity with their partner.

In Table 7, the descriptive statistics and correlations for people's overall evaluations of their exciting activity experiences are presented. An analysis of the descriptive statistics indicated that just over half of the total reported activities were rated as quite "novel" (53.2%; characterized as any score above the neutral (4) point on the scale), whereas in only 10.6% of cases, participants rated the activity as "not at all novel". Activities were also rated quite positively; in over half (53.5%) of the cases, people provided a rating of "extremely positive" (relative to only 0.5% of cases where a rating of "not at all positive" was provided). People reported that their exciting couple activity was "extremely arousing" in 11.5% of cases, though "not at all arousing" in 24.9% of cases. As well, in over half of the reported activities (59.1%), people evaluated the overall success of the activity with their partner as "terrific" (i.e., the highest possible rating). Finally, the majority of people (89.4%) reported that they would be at least moderately likely to engage in a similar exciting couple activities in the future (i.e., characterized by any score about the neutral (4) point on the scale), compared to only 2.8% of cases when people indicated that they were "not at all likely".

To investigate the role of threats on the key features of people's exciting couple activities, I first investigated how activity self-expansion may be associated with relationship threats. Here, I simultaneously entered the person-mean centred and grand-mean centered daily threat variables as predictors and ratings of self-expansion (defined by a composite score for ratings of activity novelty and arousal) as the outcome variable. Consistent with this hypothesis, people who engaged in an activity with their partner reported lower activity-based self-expansion on days when they experienced greater relationship threats than usual ($b = -.28$, $SE = .09$, $t(775.35) = -3.29$, $p < .001$, 95% CI = $-.45, -.11$; Table 9). However, there was no effect of the partner's daily relationship threats on the actors' self-expanding activity experiences. Then, I conducted analyses to investigate the role of threats on how positive and successful the activity was. People evaluated the exciting couple activity to be less positive on days when they experienced greater relationship threats than usual ($b = -.45$, $SE = .07$, $t(771.07) = -6.84$, $p < .001$, 95% CI = $-.58, -.32$; Table 10). There was no effect of the partner's relationship threats on one's own ratings of activity positivity. On days when people experienced greater relationship threats than usual and engaged in an exciting activity with their partner, they tended to report that the activity was less successful ($b = -.38$, $SE = .05$, $t(766.19) = -6.95$, $p < .001$, 95% CI = $-.49, -.27$; Table 10). There was no effect of the partner's relationship threats on people's ratings of activity success. Lastly, I assessed the effects of daily relationship threats for people's intentions to engage in similar exciting couple activities in the near future (an aggregate score computed from intention ratings to engage in the same activity and activities like the one they reported, in the near future). When a person experienced greater relationship threats than usual, they tended to report lower likelihood

of engaging in similar exciting activities with their partner in the near future ($b = -.29$, $SE = .09$, $t(787.13) = -3.11$, $p < .01$, 95% CI = $-.48, -.11$; Table 11). There were no effects of the partner's ratings of relationship threats on a person's intentions for future exciting couple activities.¹⁰

Today's threat experiences and tomorrow's relational self-expansion. In the final three hypotheses, I assessed whether daily relationship threats were negatively associated with people's relational self-expansion experiences on the following day. Three models were conducted to assess the association between today's reported relationship threats and: general ratings of relational self-expansion tomorrow (Hypothesis 10), the occurrence of an exciting couple activity tomorrow (Hypothesis 11), and ratings activity-based self-expansion tomorrow (among those who reported an exciting couple activity; Hypothesis 12).

In the first model, a lagged analysis was conducted whereby a person's rating of relational self-expansion for the following day was regressed on their relationship threats score for today, while controlling for today's self-expansion ratings. Contrary to predictions, neither one's own nor their partner's experiences with relationship threats

¹⁰ Exploratory analyses suggest that people felt less close to their partner when they (but not their partner) experienced greater relationship threats (actor: $b = -.39$, $SE = .07$, $t(766.85) = -5.66$, $p < .001$, 95% CI = $-.52, -.25$ and partner: $b = -.06$, $SE = .06$, $t(767.30) = -.95$, $p = .34$, 95% CI = $-.19, .06$). People also reported lower relationship satisfaction during the activity when either they ($b = -.40$, $SE = .05$, $t(749.77) = -8.28$, $p < .001$, 95% CI = $-.49, -.30$) or their partner ($b = -.14$, $SE = .04$, $t(754.35) = -3.23$, $p < .001$, 95% CI = $-.23, -.06$) experienced daily relationship threats which were greater than usual.

today, affected their of general relational self-expansion ratings on the following day (Table 12).^{11,12}

A second model was conducted to test whether there may be spillover effects of daily relationship threats from one day to the next; particularly, whether today's relationship threats predicted people's engagement in exciting couple activities tomorrow. Relationship threats were not associated with whether or not people engaged in an exciting couple activity on the following day (*odds ratio* = 1.11, $t = 1.41$, $p = .16$, 95% CI = .96, 1.27). Furthermore, the partner's relationship threat experiences were also not associated with whether or not people engaged in exciting couple activities on the following day (*odds ratio* = 1.05, $t = .65$, $p = .52$, 95% CI = .91, 1.21). This remained unchanged even when accounting for whether or not the person engaged in an exciting couple activity today, and suggests that experiencing daily relationship threats which are greater than usual, does not predict people's engagement in exciting couple activities on the following day.¹³

¹¹ People's daily ratings for relational self-expansion positively predicted their ratings for relational self-expansion on the following day ($b = .14$, $SE = .02$, $t(3625.17) = 7.76$, $p < .001$, 95% CI = .11, .18).

¹² An exploratory analysis was conducted to investigate whether daily relational self-expansion experiences predicted relationship threats on the following day. These results suggest that people ($b = -.03$, $SE = .01$, $t(4111.01) = -2.90$, $p = .004$, 95% CI = -.05, -.01) and their partners ($b = -.04$, $SE = .01$, $t(4111.08) = -4.26$, $p < .001$, 95% CI = -.06, -.02) tend to experience lower relationship threats when reported greater relational self-expansion on the previous day. However, neither the occurrence of an exciting couple activity nor the activity self-expansion predicted relationship threats on the following day ($p > .73$).

¹³ The occurrence of an exciting couple activity today predicted people's engagement in exciting couple activities tomorrow (*odds ratio* = 1.43, $t = 3.62$, $p < .001$, 95% CI = 1.18, 1.74). That is, people who engaged in an activity with their partner today were 1.43 times (or 43%) more likely to report engaging in an exciting activity with their partner on the following day.

Third, I examined the association between daily relationship threats and people's ratings of activity-based self-expansion on the following day. Among those who engaged in an exciting couple activity today, there was no association between today's relationship threat experiences and tomorrow's ratings for activity self-expansion. As well, no partner effect was observed (Table 12).

Exploratory Analyses

Next, I conducted exploratory analyses to provide greater context for the generalizability of the results. I explored whether trait- and state-based threats may differentially affect people's relational self-expansion experiences depending on their gender and how long they have been in their current intimate relationship. These results were mixed and are summarized in Appendices G and H.¹⁴

Exploratory analyses were also conducted to investigate whether the effects of trait- and state-based threats were generalizable across gender and relationship length. Overall, daily relationship threats were slightly greater for women ($n = 2476$, $M = 1.53$, $SD = .89$), compared to men ($n = 2264$, $M = 1.58$, $SD = .91$, $t(4738) = 2.12$, $p = .04$, 95% CI = $-.11$, $-.00$). For trait-based threats, gender significantly moderated the association between attachment avoidance and relational self-expansion (both current and future opportunity evaluations), though this link was significant for both men and women ($ts > -2.48$, $ps < .01$). For state-based threats, gender moderated the association between a person's daily relationship threats and their activity self-expansion ratings, as well as their reported positivity during the activity, but the link was significant (or moderately

¹⁴ Due to the null effects reported for the effect of daily relationship threats on tomorrow's relational self-expansion (and experiences; i.e., Hypotheses 10-12), exploratory analyses were not conducted for the lagged effects models.

significant) for both men and women ($ts > -1.85, ps < .065$). With exception, women were significantly more likely than men to report lower intentions to engage in a similar exciting couple activity on days when they experienced greater threats than usual (men: $t(776.98) = -.90, p = .37, 95\% \text{ CI} = -.43, .16$; women: $t(853.73) = -3.10, p = .002, 95\% \text{ CI} = -.68, -.15$). No other interactions were observed.

I also explored relationship length as a moderator. Relationship length was not correlated with daily relationship threats ($r(273) = .10, p = .10$). Exploratory analyses were again conducted for trait- and state-based threat analyses. Only one interaction was observed between attachment avoidance and relationship length for evaluations of future relational self-expansion ($b = -.002, SE = .001, t(259.93) = -2.28, p = .023, 95\% \text{ CI} = -.003, -.001$), whereby attachment avoidance negatively predicted people's future self-expansion ratings when they had been in their relationships for a longer ($b = -.43, SE = .09, t(270.43) = -5.09, p < .001, 95\% \text{ CI} = -.60, -.27$) versus shorter amount of time ($b = -.10, SE = .10, t(264.92) = -1.02, p = .31, 95\% \text{ CI} = -.28, .09$).

Discussion

Intimate couples regularly encounter situations where they must decide between pursuing opportunities to promote growth in their relationship and protecting the self against feeling hurt and rejected (Murray et al., 2006). The objective of this research was to examine whether relationship threats (both trait and state) interfere with relational self-expansion opportunities and experiences (i.e., a component of growth). More specifically, I examined whether threats (trait- and state-based) were associated with decreased relational self-expansion (i.e., broadening one's perspective of the self and world due to partner), a decreased daily occurrence of exciting couple activities (i.e., the types of

activities that are known to contribute to increased relational self-expansion), and an overall less successful exciting couple activity experience. Additionally, a key objective was to investigate whether threats experienced by both members of the couple negatively predicted a person's relational self-expansion outcomes. Overall, findings from the current study suggest that threats are negatively associated with relational self-expansion; however, it depends on how threats are measured. Trait-based differences in perceived relationship threats (i.e., high attachment avoidance and/or high attachment anxiety) did not consistently predict relational self-expansion, however, state-based differences in relationship threats negatively predicted people's evaluations of relational self-expansion, as well as couples' engagement and experiences with exciting couple activities.

Trait-Based Threats and Relational Self-Expansion

The first goal of this research was to investigate whether pre-existing (i.e., trait-based) concerns for relationship threats may be associated with people's overall evaluations of relational self-expansion, intentions to engage in exciting couple activities, and the frequency of exciting couple activities over time. In other words, I wanted to examine whether some people may be less apt to experience growth in their relationship when they have pre-existing threat concerns. My predictions were inconsistently supported and differed as a function of attachment style (i.e., fear of avoidance and fear of abandonment) and the manner in which self-expansion (and related experiences) were measured.

Attachment avoidance. Supporting my first hypothesis, people who scored higher on fear of closeness (i.e., attachment avoidance) reported lower relational self-expansion (presently and when anticipating future opportunities) versus those with lower

attachment avoidance. Given the nature of attachment avoidance (i.e., overall discomfort with closeness) and the general lack of interest and curiosity with exploration that these people tend to have (Coy et al., 2012; Hazan & Shaver, 1990; Mikulincer, 1997), it is not surprising that people with higher attachment avoidance evaluated their relationship as less self-expanding (versus people that scored lower on fear of closeness). Generally speaking, people with avoidant attachment styles avoid intimacy and closeness in their intimate relationships (see Pietromonaco & Beck, 2015) and view solitary explorations as more essential to the self than their relationships (Carnelley & Ruscher, 2000; Hazan & Shaver, 1990). By nature, self-expansion is a process which may undermine an avoidant person's feelings of safety, as relational self-expansion is innately related to close connection with an intimate partner.

Indeed, research has found that avoidant individuals adopt goals to minimize their closeness and intimacy towards their partner and avoid negative outcomes rather than gain positive outcomes (Impett & Gordon, 2010). Similarly, avoidant individuals are more likely to make sacrifices (i.e., a pro-relational behaviour) for avoidant motives (i.e., to avoid negative outcomes) than they are to make sacrifices for approach motives (i.e., to add positive outcomes; Mattingly & Clark, 2012). People with avoidant attachment styles also tend to have low hopes for the future in order to circumvent the activation of the attachment system (Spielmann, Maxwell, MacDonald, & Baratta, 2012). In particular, when people with higher attachment avoidance perceive greater potential for intimacy in their relationships and they set lower expectations for connection (i.e., a social reward). It is possible that a similar defense mechanism is at play within the context of relational self-expansion, where avoidant individuals respond in a manner that will help them

circumvent the potential loss of relationship rewards. Correlational findings also suggest that people with higher attachment avoidance rate their relationships to be less self-expanding than people with lower attachment avoidance (Bacev-Giles & Harasymchuk, 2016). Taken together, people with higher (versus lower) attachment avoidance tend to report lower relational self-expansion, both globally and when anticipating future relational self-expansion opportunities.

However, findings for attachment avoidance were not completely supportive of my hypotheses. At the intake survey, people with higher attachment avoidance did not display lower intentions to engage in exciting couple activities in the near future, and reported no difference in the number of exciting couple activities they engaged in, relative to people with lower attachment avoidance. It was initially reasoned that people with higher attachment avoidance may withdraw from opportunities which promote a broadened perspective of the world (i.e., exciting couple activities). However, neither the actor nor partner's attachment avoidance predicted people's intentions for engaging in exciting couple activities nor the frequency of engagement in these activities over time. Traditionally, attachment avoidance has been associated with reduced closeness to an intimate partner, however, there are situations when people with higher attachment avoidance may not exhibit typical deactivating strategies (e.g., emotional responses in caregiving; Berant, Mikulincer, & Shaver, 2008). One possibility for these findings is that people with higher (versus lower) attachment avoidant may devalue the benefits of relational self-expansion and may view self-expansion generally less positively, compared to those with low attachment avoidance. By this logic, these people may naturally display lower intentions for exciting couple activities as well as engage in fewer

exciting couple activities. A second possibility is that people who are high in attachment avoidance might engage in activities with their partner, though do so for reasons which satisfy their personal (rather than relational) needs. A third possibility is that people with higher (versus lower) attachment avoidance may seek opportunities for exciting couple activities (i.e., one way to expand the sense of self) regardless of their pre-disposition for attachment avoidance. For instance, there are times when specific relationship characteristics such as higher relationship quality may act as a buffer and encourage people with higher attachment avoidance to seek greater closeness to their partners (e.g., Slotter & Luchies, 2014). There is also evidence that people with higher attachment avoidance are more likely to engage in exploratory behaviours when the activity is important to their relationship (Carnelley & Ruscher, 2000). And, finally, it is likely that the attachment system is most activated when people use cues from their daily (rather than global) relationship interactions (e.g., Campbell, Simpson, Boldry, & Kashy, 2005). Therefore, it is possible that people's responses towards future intentions for exciting couple activities and the frequency of engagement in exciting couple activities may instead be a function of a more specific, underlying mechanism.

Although a person's own attachment avoidance is associated with relationship experiences such as the promotion of relational self-expansion, there are instances when the partner's attachment avoidance might not matter. In particular, null partner effects for attachment avoidance have been observed in previous research. Results from a study of sacrifices (i.e., the act of forgoing one's personal interests or desires for the benefit of the relationship) suggests that people with higher attachment avoidance are more willing to sacrifice for avoidant partner-focused goals (e.g., to avoid getting the partner upset) and

are less willing to sacrifice for approach partner-focused goals (i.e., to make their partner happy; Impett & Gordon, 2010). Although, when people had partners with higher attachment avoidance, they were *less* likely to sacrifice for avoidant partner-focused goals, but there was no difference between how willing (or not willing) they were to sacrifice for approach partner-focused goals.

Attachment anxiety. Contrary to predictions, attachment anxiety did not predict evaluations of relational self-expansion, intentions for upcoming exciting activities, or the frequency of engagement in exciting couple activities over time, for either the person or their partner. Generally, people with higher scores for attachment anxiety have a tendency to seek extreme closeness to their partners to mitigate their chronic concerns of fear of abandonment and rejection (see Pietromonaco & Beck, 2015). They also tend to fear disapproval from others and consequently respond in ways which allow them to gain social approval and experience increased intimacy in their relationships (e.g., Carnelley & Ruscher, 2000; Hazan & Shaver, 1990). The current findings are interesting given past research, because people high in attachment anxiety tend to explore less than their secure counterparts, as well as display reduced interest in novel stimuli (Green & Campbell, 2000), and avoid thrill and adventure seeking during personal explorations (Carnelley & Ruscher, 2000).

One possible explanation is that people high in attachment anxiety feel a tension between their fears for rejection and abandonment and their desires to be close to the partner. Consequently, people who score higher on attachment anxiety may act out of character (i.e., the attachment system is not activated as it normally would be) when it comes to adding opportunities for growth to their intimate relationships (e.g., Mikulincer

& Shaver, 2007). Research has found that although fearful individuals (i.e., high attachment anxiety and high attachment avoidance) seek personal, solitary exploration in order to withdraw from their partner during times of relationship distress and avoid negative affect, preoccupied individuals (i.e., high attachment anxiety and low attachment avoidance) show patterns of disinhibition which are no different than those exhibited by people with secure attachments (Carnelley & Ruscher, 2000). Other research has found that regardless of whether a person has low versus high attachment anxiety, people explored with their partner for the same amount of time and reported similar positive affect during the exploration (Coy et al., 2012). This suggests that people's desire to broaden their sense of selves and their relationships are superseded by their pre-existing concerns for relationship threats. This is quite likely as people with high attachment anxiety tend to be hyperactive in their strategies to gain proximity, love, and support in their relationships, and they frequently make personal sacrifices in order to feel better about themselves or avoid relationship conflict (Impett & Gordon, 2010). Researchers have also found that people who score high on attachment anxiety use both approach (i.e., to add positive outcomes) and avoidant (i.e., to avoid negative outcomes) motives when they make sacrifices in their relationship (Mattingly & Clark, 2012). In an effort to seek reassurance about the security of their relationships, anxiously attached individuals make sacrifices which help to bolster their relationship (e.g., make their partner happy), though they also weaken their relationship by possessing sacrificial motives to prevent negative relationship outcomes (e.g., relationship dissolution), thus resulting in a vicious cycle. Given this past research, it is possible that there is an underlying mechanism (such as approach versus avoidance motives) which can help uncover whether people with high

attachment anxiety face dual behaviours with regard to their appraisals of relational self-expansion, as well as intentions and frequency of engagement in exciting couple activities.

Contrary to hypotheses, there were also no effects of the partner's attachment anxiety on the relational self-expansion outcome variables. People who have anxiously attached partners often encounter relationship situations where they are required to comfort their partners by providing extreme closeness (Mikulincer & Shaver, 2007) and are more likely to sacrifice their own interests and desires in order to avoid conflict with the partner (Impett & Gordon, 2010). As well, partners who are more anxiously attached are characterized by inconsistent relationship responses (e.g., support giving; Collins & Feeney, 2004). It might also be possible that the effects of the partner's attachment anxiety on relational self-expansion differs depending on how attachment insecurity is assessed (i.e., global versus day-to-day fluctuations; Campbell et al., 2005). Based on these findings, it is possible that people with anxious partners may experience a dilemma when they encounter relational self-expansion opportunities: providing the closeness their partner desires versus avoiding circumstances which may trigger (or add to existing) relationship conflict.

State-Based Threats and Relational Self-Expansion

Another goal of this research was to examine whether everyday relationship threat concerns were associated with people's responses to daily relational self-expansion, as well as their daily engagement and experiences with exciting couple activities. Findings from the current research suggest that daily relationship threats mattered for *both* the person and their partner's evaluations of how self-expanding their relationship was on

that same day. For the occurrence of exciting couple activities, only the actor's (but not the partner's) daily relationship threats were linked to how likely they were to engage in an exciting couple activity on that day. Earlier evidence suggests that when people experienced threats (whether dispositional or induced threats to one's self-concept clarity), they expressed lower interest in non-relational self-expansion and they self-expanded less when confronted with a potential intimate partner (Emery, Walsh, & Slotter, 2015). Just like people tend to report marital appraisals which are less positive (e.g., relationship satisfaction, disclosure, intimacy) on days when they experience greater relationship stresses or threats than usual (e.g., Buck & Neff, 2012; Derrick et al., 2012; Murray et al., 2000), relationship threats also appear to be detrimental to couples' appraisals for daily relational self-expansion. People's reduced likelihood of engaging in exciting couple activities on more threatening days is justified given that people are less likely to take risks in their recreational activities when they feel threatened (Cavallo et al., 2009), and are more likely to emotionally and behaviourally distance themselves from their intimate partners in the presence of rejection (e.g., Norona & Welsh, 2006). As well, novelty (i.e., one characteristic of exciting couple activities) is associated with relationship uncertainty (Baxter & Montgomery, 1986; Baxter, 2011; Witt, 2009) and engaging in activities which are novel and arousing pose their own set of threats to the self (Bacev-Giles & Harasymchuk, 2015; 2018), which in turn may decrease one's likelihood of engaging in exciting activities when they already feel threatened. Consistent with the risk regulation system, people may choose to avoid promoting their relationship via exciting couple activities on days when they feel that there is a greater need to protect

the self against risk of rejection (Murray et al., 2006) as a means to mitigate the risk of additional threats (e.g., Murray & Holmes, 2011).

Although people reported moderately high (i.e., favourable) activity experiences on days when they engaged in exciting couple activities, they reported lower quality activity experiences on days when relationship threats were greater than usual. In particular, actors (but not partners) who engaged in an exciting couple activity and experienced greater relationship threats felt that the exciting couple activity was less self-expanding, and less positive and successful, compared to days when threats were lower. Greater (versus lower) relationship threats were also associated with lower intentions to engage in future exciting couple activities, for the actor but not the partner. The effect of relationship threats on exciting couple activity experiences was consistent with trends observed in one study of shared relationship activities, which found that couple activities which caused more stress were associated with lower activity evaluations (e.g., activity-related relationship satisfaction; Girme et al., 2014). Furthermore, it is sensible that relationship threats are associated with lower future intentions for exciting couple activities, given that people's predictions for behavioural forecasts tend to be largely biased by their current experiences (Lemay, Lin, & Muir, 2015). Applied to the current context, people are likely to expect that their current threat experiences will continue into the future, and as such, report lower intentions when their threats are high (versus report higher intentions when their threats are low).

Contrary to hypotheses, partner effects were not observed for the effect of relationship threats on the occurrence of exciting couple activities nor activity experiences. Although partner effects have been observed in a past longitudinal study

which investigated the role of shared relationship activities on relationship maintenance in couples (e.g., Girme et al., 2014), other longitudinal research investigating the effects of threats on dependence regulation in a sample of newlywed couples did not find partner effects (Derrick et al., 2012). It is possible that partner effects for relationship threats were not observed in the current research as relationship threats (especially those assessed in the current study) are a subjective experience (e.g., Murray et al., 2003). Relationship threat experiences may not necessarily be a two-way relationship for couples' relational self-expansion experiences, as relationship threats are inherently linked to a person's own behaviours and responses towards the partner. For instance, the actor may be unaware that their responses have caused their partner to feel rejected or hurt, and as such, the partner's daily relationship threats may be irrelevant to one's own relational self-expansion outcomes.

Together, these results suggest that the experience of daily threats may be troublesome for relational self-expansion, particularly when threats are greater than usual for a person. This has important implications as it suggests that intimate couples may derive more favourable relational benefits when they promote self-expansion via exciting couple activities on days which are less threatening. That is, although self-expansion is an inherently positive process, on days when people feel that there are greater threats in their relationship, they may not want to jeopardize feeling more threatened by stepping outside of their comfort zone and engaging in an exciting couple activity. Further, results from this research suggest that the favourable experiences which people typically seek from exciting couple activities might be compromised on days when they feel more threatened than usual but engage in an exciting couple activity. Finally, although exciting couple

activities involve the active participation of both members of the couple, people's relational self-expansion experiences, including their likelihood of engaging in exciting couple activities and experiences therein, are likely a function of a person's unique daily relational threat experiences.

Relationship threats predicting next day relational self-expansion. Although daily relationship threats negatively predicted people's same day relational self-expansion ratings, the likelihood that a person engaged in exciting couple activities, and their activity experiences, the current study suggests that relationship threats were not strong enough to carryover from one day to the next. That is, daily relationship threats did not predict people's relational self-expansion ratings, nor the occurrence of exciting couple activities or their activity experiences on the following day. Rather than use one's previous day relationship threats as a cue for relational self-expansion evaluations, people seem to have a tendency to evaluate their daily relational self-expansion based on how much it has fluctuated from the previous day. For instance, reporting high relational self-expansion on one day was associated with high relational self-expansion on the following day. This is consistent with the self-expansion model which suggests that people who report greater self-expansion tend to be more attuned to and enact more regular self-expansion opportunities (Aron & Aron, 1986). On the other hand, exploratory analyses suggested that a carryover effect might instead exist between daily relational self-expansion and relationship threats on the following day, whereby greater daily relational self-expansion may act as a buffer and predict lower relationship threats on the following day. This may be because people who have more self-expanding relationships tend to

report more favourable relationship experiences, such as greater satisfaction and lower daily relationship threats.

Relationship threats were also unrelated to whether or not couples engaged in an exciting activity on the following day. In fact, these results trended in a positive (rather than the predicted negative) direction. If this was significant, this would suggest that greater relationship threats would decrease one's likelihood of engaging in an exciting couple activity on the same day, but would increase one's likelihood of engaging in a couple activity on the following day. Through exploratory analyses I also investigated the reversed association (i.e., the occurrence of an exciting couple activity in predicting relationship threats on the following day) which ruled out the possibility that the activity itself predicted relationship threats on the following day. It is possible that there was not enough variance in daily relationship threats to observe this difference. However, it is possible that daily relationship threats and relational self-expansion follow a pattern of relational ebb and flow. Indeed, this has been observed in other daily diary data, where researchers investigated the role of daily relationship hassles and uplifts (e.g., obligations, house maintenance, and recreation) in predicting daily mood (Totenhagen, Serido, Curran, & Butler, 2012). Researchers found that people's daily moods towards hassles and uplifts predicted their same-day as well as following-day relationship qualities, and that people's moods improved following stressful days—suggesting that people return to a homeostatic balance. However, interpretations for these findings remain unclear and future research is required. Lastly, relationship threats were unrelated to people's following day ratings for activity-based self-expansion. Again, an exploratory analysis of

this reversed association (i.e., activity-based self-expansion in predicting relationship threats on the following day) was not supported.

One explanation for these findings is that people may have underlying predispositions which allow them to “forgive and forget” their partner’s transgressions. For instance, people who possess a predisposition for forgiveness (e.g., Luchies, Finkel, McNulty, & Kumashiro, 2010) towards a partner may respond to their partner in ways which help to alleviate the relationship threats that they have experienced. People who are promotion-focused see greater benefit in repairing and sustaining their relationship and are thus more forgiving of a partner’s transgressions, compared to those who are prevention-focused (i.e., individuals who are more likely to view the costs of relationship deterioration; Molden & Finkel, 2010). Additionally, people’s predispositions for forgiveness shares some commonalities with self-regulation; people with greater self-regulatory strength are more likely to forgive their partner both concurrently as well as over time (Pronk, Karremans, Overbeek, Geertjan, & Wigboldus, 2010). Other research suggests that threats are differentially perceived depending on one’s emotional capital (i.e., akin to a bank account of positive, shared relationship experiences), which may buffer against harmful relationship instances (Feeney & Lemay, 2012). Through examination of relationship threats in both a 7-day diary study of married couples as well as an experimental study of exploration behaviours, researchers found that emotional capital moderated people’s responses to relationship threats above and beyond factors such as relationship satisfaction, trust, and commitment, such that people with high (versus low) emotional capital were less reactive to relationship threats. Thus, it is possible that an underlying mechanism, such as high emotional capital, can help explain

these discrepant findings, especially given the highly satisfied sample of couples in the current study.

A second explanation is that people may adopt “reset effects” from one day to the next. For instance, self-regulation research has purported a “fresh start effect” whereby people use various temporal landmarks such as a new week, month, or year as adaptive strategies to relegate past negative experiences (e.g., Dai, Milkman, & Riis, 2014). It is possible that even in instances when threats were greater than usual, people may adapt strategies which allow them to “wipe clean” the negative relationship experiences they experienced from the previous day. This may be one adaptive strategy that couples use to mitigate relationship threats and thus maintain their relationship (e.g., Murray, Holmes, Griffin, & Derrick, 2015). Finally, the relationship threats people reported were often ranked quite low. Thus, although these relationship threats may have been threatening enough to impact relational self-expansion outcomes on the same day, the nature of these threats were likely not severe enough to affect people’s evaluations of relational self-expansion and overall exciting couple activity experiences on the following day.

Implications for Theory

Evidence for the benefits of exciting couple activities is well-documented; however, little is known about what obstacles get in the way of people’s engagement in these activities. To my knowledge, this was the first study to empirically investigate the link between relationship threats and relational self-expansion. Using naturalistic methods, I was able to provide a picture of the association between relationship threats and people’s outcomes when they try to add growth to their relationships.

Contributions to the self-expansion model. The self-expansion model theorizes that people seek to engage in exciting (i.e., novel and arousing) couple activities as a way to broaden their perspectives of the self, the partner, and the world around them (see Aron et al., 2013; Mattingly & Lewandowski, 2014); however, until this point, this literature has predominately focused on the benefits of exciting couple activities (e.g., Aron et al., 2000; Carson et al., 2007; Girme et al., 2014; Graham, 2008; Harasymchuk et al., 2019; Kilbourne et al., 1990; Muise et al., 2019; Reissman et al., 1993; Rollock, 2011). Although the self-expansion literature has pointed to obstacles which may be apparent during the self-expansion process (Aron & Aron, 1986; Aron et al., 2000; 2001), this study is the first to my knowledge, to explicitly investigate how people respond to relational self-expansion opportunities within the face of trait- and state-based relationship threats. As well, this study investigated relational self-expansion experiences from many angles, including not only people's overall appraisals of relational self-expansion, but also their intentions for upcoming exciting couple activities, the occurrence of these activities over time, as well as their experiences during exciting couple activities.

This research provides valuable insight to the self-expansion literature for why couples may engage in exciting couple activities less often than they wish to or should. It suggests that seeking opportunities for relational growth may not bode well during instances of relationship threats (particularly those experienced from day-to-day). In particular, these results suggest that daily relationship threat experiences may provoke unfavourable responses for relational self-expansion. For this reason, couples may be best suited to seek opportunities for growth, such as engaging in exciting couple activities,

during times of low relationship threats. Allie and Noah may be more successful with adding novelty to their relationship and may derive more favourable relationship experiences from these activities on days when there are less risks of feeling rejected or hurt in their relationship. Given the strong empirical link between exciting couple activities and positive relationship outcomes, this finding is especially important as it warrants that engaging in exciting couple activities may not always be associated with relationship-promoting benefits.

Clinician accounts suggest that seeking opportunities for self-expansion may be beneficial to combating relational boredom (i.e., one prevalent issue for couples facing distress; Aron & Aron, 1986). However, there is often a gap between what people think they should do when they are bored and what they are likely to do (e.g., Harasymchuk et al., 2017). Contributing to previous relational self-expansion work, people have prescriptive beliefs that they should engage in more growth-enhancing exciting couple activities during instances of relational boredom (i.e., low self-expansion), and they even report a greater preference for exciting (rather than security-restorative familiar) couple activities (Harasymchuk et al., 2017). However, people are more likely to reduce their engagement in familiar couple activities rather than engage in more exciting couple activities (Harasymchuk et al., 2017). In other words, people intuitively know that engaging in exciting couple activities might benefit their relationship (e.g., Harasymchuk et al., 2017). From this, it can be reasoned that neither novel and exciting nor familiar and routine couple activities are superior over the other—each type of couple activity provides essential functions for enhancing relational growth versus restoring security. Together, both novel and familiar activities are unique in their contributions to

relationship maintenance strategies and couples do not always have to add novelty to their relationships. Instead, the current findings suggest that there are times when couples should avoid exciting couple activities (and any potential stresses that come along with that novelty and unpredictability; e.g., Baxter & Montgomery, 1996) and instead benefit from engaging in familiar couple activities.

In this research, I found that people reported generally low relationship threats on a day-to-day basis, though even still, they reported poorer relational self-expansion outcomes. It seems logical that experiencing greater or more intense relationship threats would only strengthen the association between daily relationship threats and self-expansion outcomes. However, it is important to note the possibility that there may also be circumstances which mediate the relationship between threats and relational self-expansion. That is, not all relationships threats may lead to reduced self-expansion outcomes. New research suggests that people are more likely to experience self-expansion when they possess implicit growth beliefs (i.e., they believe that their relationship can be cultivated over time; Mattingly, McIntyre, Knee, & Loving, 2019). Researchers found that people who held growth beliefs, reported greater self-expansion, and in turn, greater relationship quality. Conversely, destiny beliefs (i.e., the belief that relationships are fixed and cannot change) was an inconsistent predictor of self-expansion. In this sense, a person's appraisals and their responses towards threats can help to further delineate the association between relationship threats and relational self-expansion; some people might respond more constructively to threats than others.

Contributions to attachment theory. One strength of the current study was that it merged the attachment and self-expansion literatures. This was valuable because adult

attachment behaviour shapes many relationship experiences, including their growth and exploration. Attachment theory suggests that having a secure base is quintessential to a person's successful growth and exploration (Feeney & Van Vleet, 2010). Rooted in the attachment theory, people are able to safely and successfully explore their environments when their partner is available (i.e., in the event of obstacles during exploration), nonintrusive (i.e., exploration behaviours are not inhibited), and encouraging and accepting (i.e., there is positive support for their exploration; Bowlby, 1988; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010). Typically, the secure base literature has focused on an individual's exploratory experiences, however, the provision of a secure base and people's associated responses to exploration is dyadic in nature and may extend to relational self-expansion outcomes. For instance, there were some commonalities with the provision of a secure base in the current measure of relationship threats (e.g., the partner wasn't there or was pulling away). It is possible that perceiving greater relationship threats on one day, relative to usual, may have triggered a response whereby people who felt less confident in their partner's ability to provide a secure base reported reduced likelihood of seeking opportunities for relational growth. Given that relational self-expansion is a type of exploration which involves the active participation of not one, but both partners, this research may arguably promote a deepened understanding of secure base provision.

Although the attachment hypotheses were not all supported, the current research offers insight into how differences in attachment style may (or may not) influence exploratory behaviours which are self-expanding in nature. It further advances the attachment literature by assessing relational self-expansion (i.e., a form of exploration)

within the context of *established couples*. This was advantageous because the majority of attachment literature has focused on one's personal pursuits for activities related to work, school, and leisure explorations, though has seldom investigated exploratory behaviours within the presence of a long-term romantic partner (with exception, Coy et al., 2012; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010). At a broader level, results from the current study are consistent with the attachment theory in two ways: a) people are less likely to explore their environments within the presence of threats (Bowlby, 1988), and b) they are less likely to explore when their attachment figure is not responsive to their needs for a secure base (Collins & Feeney, 2010; Feeney, 2004; Feeney & Thrush, 2010; Feeney & Van Vleet, 2010). In both cases, relationship threats may prime people to withdraw from opportunities for relational growth. This type of response to threats is adaptive as it facilitates positive relationship behaviours, contributing to the maintenance of more satisfying, long-lasting relationships (Mikulincer & Shaver, 2007).

Contributions to the risk regulation system. The maintenance of satisfying and long-lasting intimate relationships requires that people behave and respond to their partners in ways which help to promote their relationship. However, relationship-promotion also comes with risks to personal security, and may induce short-term risks of rejection which can be associated with long-term feelings of pain (Murray et al., 2006). The risk regulation system suggests that intimate partners regularly face the dilemma between wanting to seek interdependence while minimizing their risks of security. The current research supports this theory by suggesting that when faced with relationship threats, people seem to prioritize their personal concerns for self-protection and security over their desires to promote their relationship through novel and arousing couple

activities. Past research suggests that people experience greater relationship benefits when they set aside their needs for self-protection and instead prioritize their needs for relationship-promotion. Although, it is also known that repeatedly responding to threats by prioritizing goals for self-protection does not bode well for intimacy and closeness (Murray et al., 2006). This has important implications for the current results which suggest that when people detect the presence of greater threats in their relationship, they are less likely to engage in exciting couple activities (which are known to promote benefits such as increased relationship satisfaction; e.g., Aron & Aron, 1986; 1997; Girme et al., 2014; Graham, 2008; Harasymchuk & Fehr, 2010; Harasymchuk et al., 2019; Mattingly & Lewandowski, 2013; Muise et al., 2019).

The dilemma people face between relationship threats and seeking relational growth can be better understood by how people mitigate threats to their relationship. Similar to people's evaluations of whether to seek closeness to their intimate partner versus prioritize the goal for self-protection against risks of rejection, people might use strategies to evaluate their relationship threats and then decide how to respond to that threat (Murray & Holmes, 2009; 2011). Research suggests that there are three strategies that people use to mitigate the risks associated with relationship threats, these include: justifying costs of the threats, ensuring that there is mutual dependence in the relationship, and using accommodation strategies rather than responding to threats in negative, retaliatory ways. Applied to the context of the current research, it is likely that people's responses to engaging in exciting couple activities was a product of how costly they evaluated relational growth in comparison to their experienced costs. People who experienced greater relationship threats may have appraised exciting couple activities as a

threatening endeavour for their sense of security; that is, the risks of vulnerability of the self would have been more costly than the benefits of relational growth. Accordingly, justifying costs may have been one mitigation tactic used by people to decide whether to promote their relationship or restore a sense of security. However, results from the current study suggest that using mitigation tactics does not necessarily mean that if a person increases their need for sense of security they are simultaneously forgoing opportunities for relationship growth. Rather, although a person may increase their sense of security by forgoing exciting couple activities, they may actually be also promoting (or at the very least, maintaining) their relationship by responding to relational growth opportunities in ways that mitigate the potential for additional relationship stressors.

Finding a balance between relationship-promotion and minimizing risks to the self is also important to intimate relationships as it can help facilitate an equilibrium between threats and relational benefits. Research proposes that declines in state-based relationship well-being prompts people to initiate state-threat mitigation tactics, which in turn help to restore relationship well-being (Murray et al., 2015). Indeed, in a longitudinal, experiential study of newlywed couples, researchers found when people experienced decreased relationship well-being in one year (compared to their average), they engaged in more threat-mitigation strategies in the following year. In turn, when people engaged in more threat-mitigations strategies (i.e., a compensatory response to decreased well-being in the previous year), they reported increased relational well-being in the following year. In other words, people's responses to relationship threats follow a normative cycle which is concerned with the need to balance one's goals for self-protection and relationship-promotion, ultimately reaching a point of equilibrium. In sum,

the current research provides a deeper understanding into people's responses to relationship threats, particularly within the context of relationship growth.

Methodological Strengths

One key strength of this research was sampling couples from established intimate relationships. Given the interdependent nature of intimate relationship processes and experiences, it was important to assess the experiences of both couple members (Kenny et al., 2006). In doing so, I was able to investigate the effect of relationship threats on relational self-expansion experiences for each partner, while controlling for the other partner's relationship threats.

A second key strength was that I used daily diary methodology. To date, the relational self-expansion literature has been based on laboratory and longitudinal designs (e.g., Aron et al., 2000; Carson et al., 2007; Coulter & Malouff, 2013; Mattingly & Lewandowski, 2013; Reissman et al., 1993; Tomlinson et al., 2018), though has had limited application with daily diary-type methodologies (with exception, Graham, 2008; Harasymchuk et al., 2019; Muise et al., 2019). And longitudinal couples' studies have often investigated exciting couple activity experiences through controlled settings such as intervention programs (e.g., Carson et al., 2007; Coulter & Malouff, 2013; Reissman et al., 1993), rather than with one's actual, self-reported activities (with exception, Graham, 2008; Girme et al., 2014; Harasymchuk et al., 2019; Muise et al., 2019). Although there is merit for each of these research designs, a much different picture of relational self-expansion can be painted through daily diary methodology. In particular, the collection of daily diary reports maximized the ecological validity of the study by capturing relationship experiences in a more naturalistic setting (i.e., day-to-day; Bolger et al.,

2003) and reduced the risk of retrospective bias by capturing this information within close proximity to which experiences occurred (Algoe, Gable, & Maisel, 2010; Bolger, Davis & Rafaeli, 2003; Duck, Rutt, Hurst & Strejcek, 1991; Laurenceau & Bolger, 2005). For instance, daily diary methodology allowed me to observe people's subtle fluctuations in daily relationship threats (e.g., felt rejected by partner, worried about disappointing partner, partner was not there for them) over time, which would not have been possible using other methodologies. One other benefit of using daily diary survey methodology was that I could also examine within-person variation (i.e., how a person's threats differ over time) instead of only between-person variation (i.e., how a person's threats differ from others' threats). Together, the current research had several methodological strengths, each of which contributed to a greater understanding of the influence of relationship threats on relational self-expansion outcomes.

Limitations and Future Directions

Despite the strengths of the current research, there are few limitations which raise interesting questions for future research. The first limitation relates to issues with the state-based relationship threats measure. Although daily relationship threats were negatively associated with relational self-expansion and people's engagement and experiences with exciting couple activities, the current study did not assess the context in which daily relationship threats occurred. It is unclear at which point in the day people experienced the relationship threats that they reported. It is possible that relationship threats may have been due to the experiences people had within their relationships either prior, during, or after their engagement in exciting couple activities (or some combination thereof). Relationship threats were significantly greater on days when people did not

engage in an activity, suggesting that people were likely to disengage from excitement in their relationship during times when threats were high. However, relationship threats can occur at any time, and the point in which they occur may have different implications for people's relational self-expansion outcomes. It should also be acknowledged that people encounter a variety of daily stressors or threats, and those which are experienced outside of their intimate relationship (e.g., the workplace, obligations, other relationships) may spillover into their relationship experiences and shape how a person responds to relational self-expansion. As well, people are only able to process so much self-expansion before opportunities are transformed to stressors (Aron & Aron, 1986). For example, if a person is experiencing too much self-expansion other aspects of their life (e.g., they started a new job), they might not respond poorly to opportunities for self-expansion with their partner. Future research is needed to eliminate "noise" within the current data and to disentangle the context in which daily relationship threats occurred.

The state-based relationship threats measure had strengths in that the items appeared to be sensitive enough to capture perceptions of threats on a daily basis, however, one limitation is that the average threats experienced by participants were on average, quite mild. This is likely due to the fact that participants tended to be highly satisfied in their relationships. However, in order to tap into the sensitivity of daily threats and how they impair people's relational self-expansion experiences, future research could evaluate not only the extent to which threats were experienced, but also how people respond to threat instances, and how intense daily threats are for a person. To better understand how people respond to their partner's negative behaviours, future research could investigate whether accommodation strategies, for instance, might mediate the

association between daily relationship threats and relational self-expansion outcomes (e.g., Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). A valuable contribution to literature would be to investigate how implicit growth versus destiny beliefs might moderate the association between relationship threats and relational self-expansion outcome (Mattingly et al., 2019). It would also be valuable to understand how obstacles like relationship threats are perceived. For instance, research conducted in the lab has already begun to investigate how people's experiences with exciting couple activities may differ depending on whether obstacles are perceived as challenging (i.e., a positive appraisal) or a hindrance (i.e., a negative appraisal; Searle & Auton, 2015). Ultimately, this forthcoming research will help understand how people's appraisals of relationship threats may interfere with relational self-expansion, as well as understand whether threats *during* exciting couple activities may add additional obstacles to relational self-expansion outcomes.

There were also a few measurement issues which may have contributed to the inconsistent effects found for insecure attachment styles. First, it is possible that the exciting activity intentions measure (assessed at intake) was not specific enough to reflect one's typical responses to exciting couple activities. In order to understand whether there is truly no effect of attachment insecurity on people's intentions for upcoming exciting activities, it is recommended that this measure be improved so that items are more specific to one's typical self-expansion experiences. Second, it is possible that the effects of insecure attachment styles on relational self-expansion may be more suitably assessed from a within-person perspective (e.g., Campbell et al., 2005; Girme, Agnew, VanderDrift, Harvey, Rholes, & Simpson, 2018). Future research should investigate

whether day-to-day examinations of trait-based relationship threats such as attachment insecurity may better capture people's typical responses to and experiences with relational self-expansion. Such research could capture how people's pre-dispositions for responding to threats occur more naturally and whether fluctuations in their responses to threats affects their experiences with relational growth over time.

Conclusion

Engaging in exciting couple activities brings opportunities for couples to grow and expand their sense of self; however, little is known about the obstacles to implementing this relational maintenance practise. The current findings demonstrate that people's chronic concerns for avoidance of closeness and fear of abandonment play less of a role in shaping couples' appraisals or responses to relational self-expansion. Instead, a strong pattern of results suggests that the incidence of state-based relationship threats undermines couples' day-to-day feelings of relational self-expansion, as well as the occurrence and success of couple activities which are known to promote growth in the relationship. These results suggest that Allie and Noah are both likely to evaluate their relationship as less self-expanding on days when they feel greater relationship threats. And although Allie may want to initiate an exciting activity with Noah in order to promote growth within her relationship, it is likely that Allie will not pursue that activity nor will reap the benefits of the activity on days when relationship threats are high.

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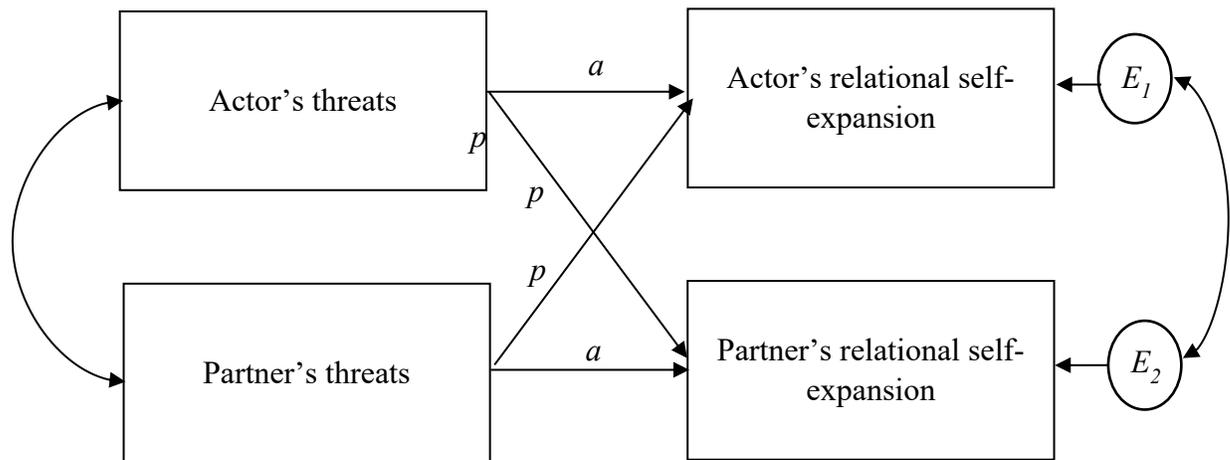


Figure 1. Overall Actor Partner Interdependence Model (APIM) for the effects of relationship threats on relational self-expansion. The actor and partner effects are denoted by “a” and “p”, respectively. Residual errors for relational self-expansion, E_1 and E_2 are reflected for the actor and partner, respectively.

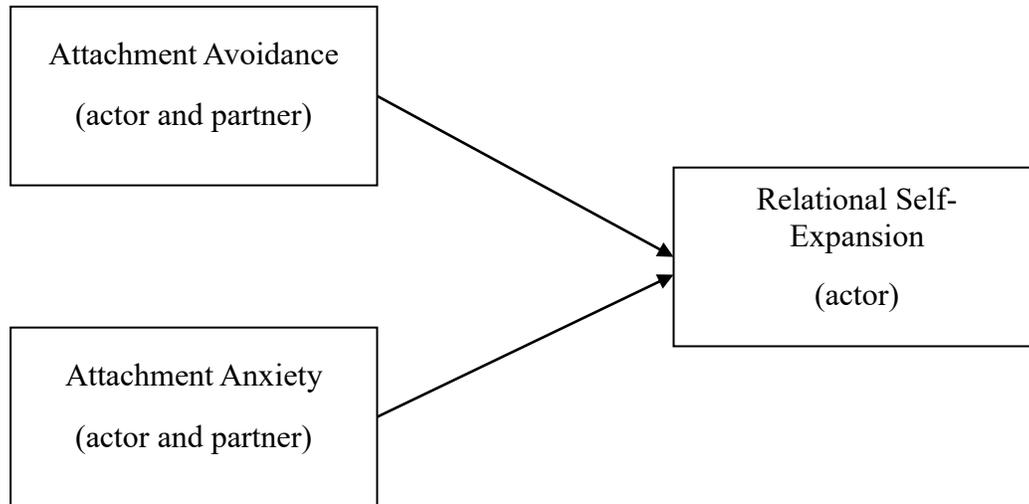


Figure 2. Visual representation of Hypothesis 1a and 1b. Relational self-expansion was measured by current as well as perceived future ratings. This model was conducted according to the APIM.

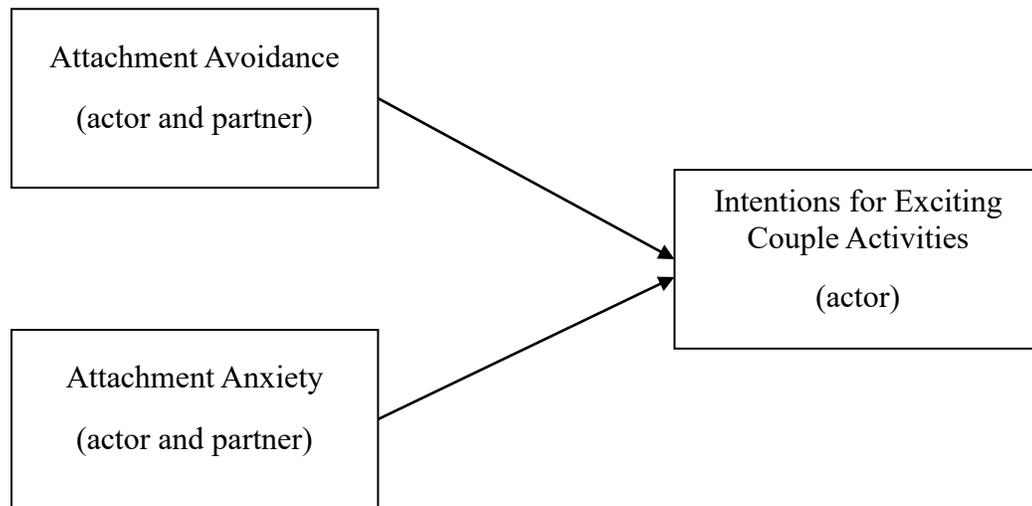


Figure 3. Visual representation of Hypothesis 2. This model was conducted according to the APIM.

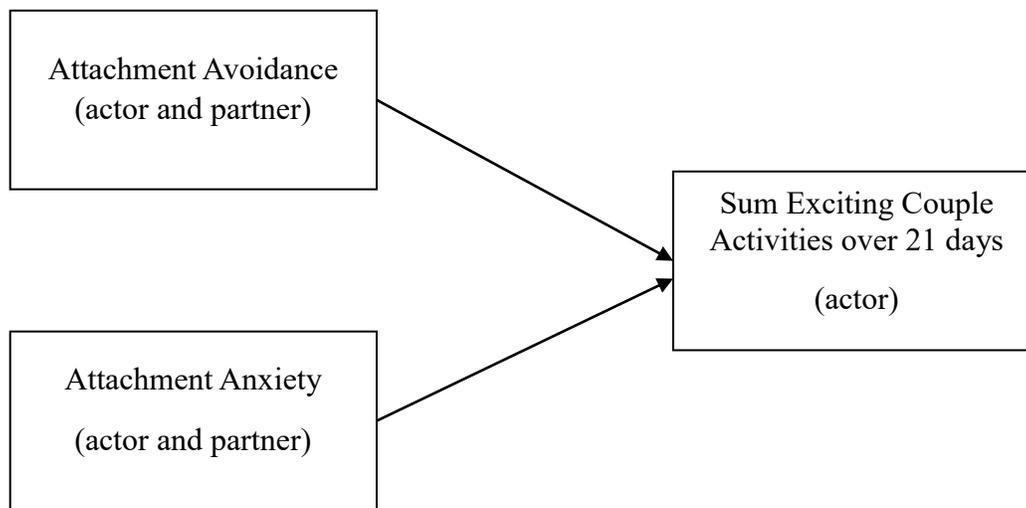


Figure 4. Visual representation of Hypothesis 3. This model was conducted according to the APIM.

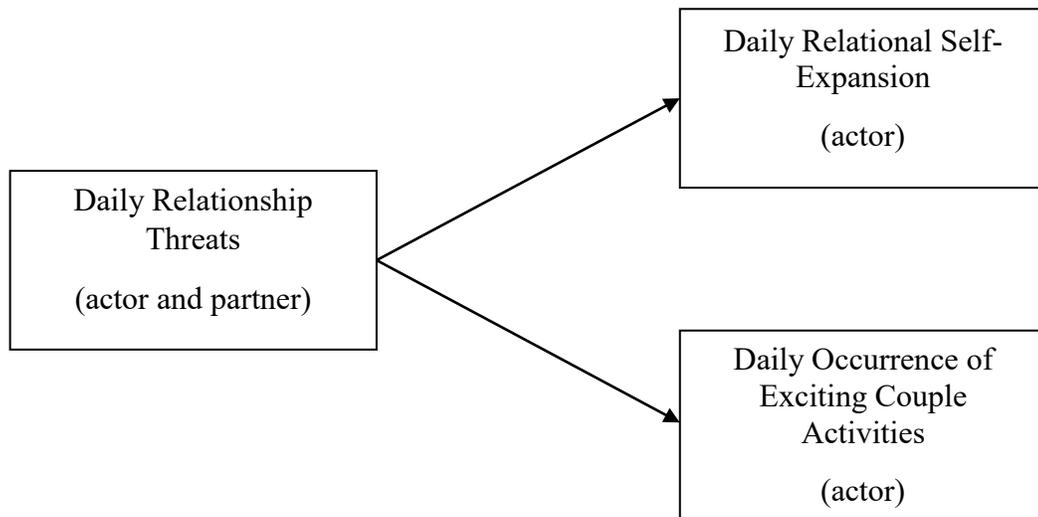


Figure 5. Visual representation of Hypotheses 4 and 5. Models were conducted according to the APIM.

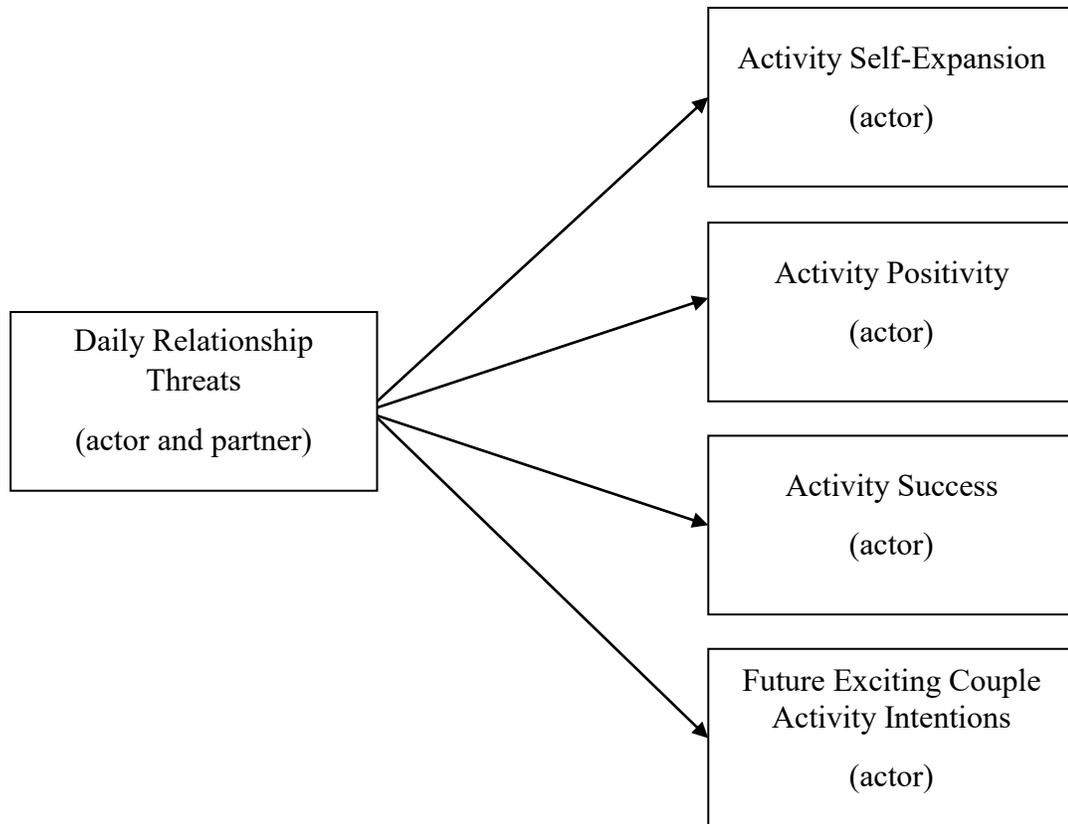


Figure 6. Visual representation of Hypotheses 6 through 9. Models were conducted according to the APIM.

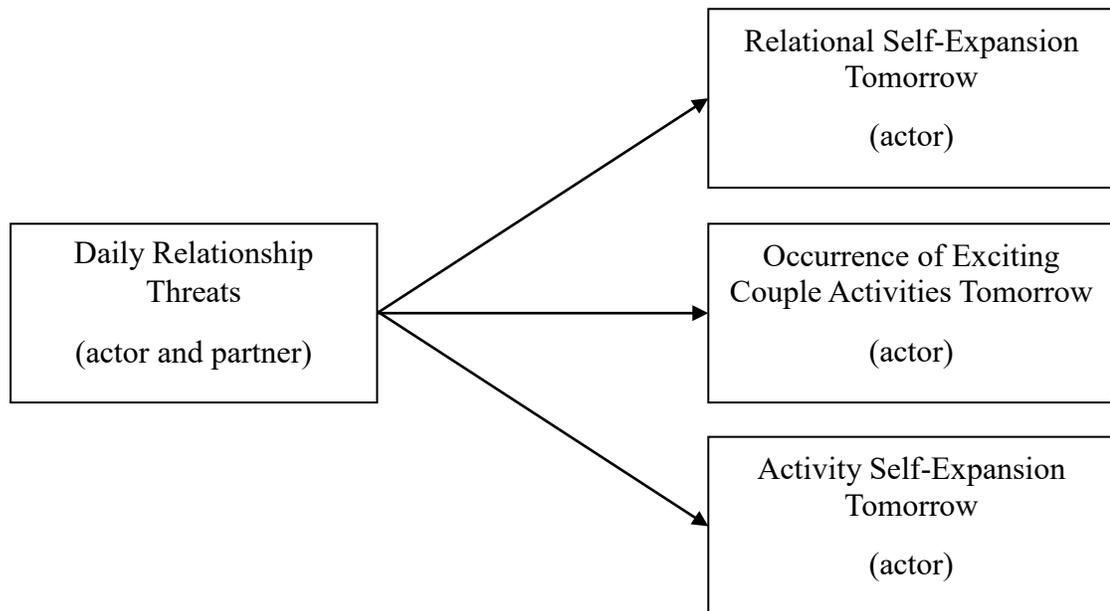


Figure 7. Visual representation of Hypotheses 10 through 12. Models were conducted according to the APIM.

Table 1

Descriptive Statistics and Correlations among Key Background (Level 2) Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Attachment anxiety	3.44	1.24	-.01	.26**	-.03	-.01	-.09	-.11	-.22**
2. Attachment avoidance	2.06	0.90		.18**	-.29**	-.33**	-.07	-.09	-.46**
3. Relational self-expansion	5.34	0.99			.19**	.70**	.40**	.24**	.54**
4. Future relational self-expansion	6.16	1.03				.18**	.31**	.20**	.48**
5. Future exciting activity intentions	4.19	1.55					.44**	.20**	.30**
6. Frequency of exciting activities	3.72	3.45						.52**	.24**
7. Relationship satisfaction	6.18	0.96							.43**

Note. Correlations are based on aggregates of the background variables (level 2). Correlations in boldface represent cross-partner (i.e., actor and partner) correlations. * $p < .05$, ** $p < .001$.

Table 2

Summary of Intraclass Correlations (ICC) for Outcome Variables (Intake Survey)

Variance	Relational Self-Expansion	Future Relational Self-Expansion	Intentions for Exciting Couple Activities	Sum Exciting Couple Activities
Within-person (level 1)	.79	.87	1.34	5.66
Between-person (level 2)	.19	.20	1.08	6.28
ICC	.19	.19	.45	.53

Note. Variance is reported for the intercept-only models for each outcome variable assessed from the intake survey.

Table 3

Models Assessing the Effects of Attachment Avoidance and Anxiety on Current and Future Evaluations of Relational Self-Expansion

(Hypothesis 1)

	Relational self-expansion				Future relational self-expansion			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	5.34	.07	80.69**	5.21, 5.47	6.15	.07	88.29**	6.01, 6.28
<i>Actor effects</i>								
Anxiety	.04	.05	.79	-.06, .14	.07	.05	1.19	-.04, .17
Avoidance	-.33	.07	-4.60**	-.47, -.19	-.40	.08	-5.35**	-.55, -.25
<i>Partner effects</i>								
Anxiety	.02	.05	.48	-.08, .13	-.01	.05	-.12	-.11, .10
Avoidance	-.04	.07	-.63	-.19, .10	.01	.07	.08	-.14, .15

Note. Anxiety = attachment anxiety, Avoidance = attachment avoidance. * $p < .05$, ** $p < .001$.

Table 4

Models Assessing the Effects of Attachment Avoidance and Anxiety on Intentions and Frequency of Engagement in Exciting Couple Activities (Hypotheses 2 and 3)

Predictor	Activity intentions				Sum self-expanding activities			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	4.19	.12	34.47**	3.94, 4.43	3.72	.27	13.77**	3.19, 4.26
<i>Actor effects</i>								
Anxiety	-.11	.09	-1.24	-.28, .06	-.25	.19	-1.30	-.62, .13
Avoidance	-.09	.12	-.77	-.32, .14	-.14	.25	-.55	-.63, .36
<i>Partner effects</i>								
Anxiety	-.02	.09	-.26	-.19, .15	-.28	.19	-1.48	-.65, .09
Avoidance	.06	.12	.51	-.17, .29	-.20	.25	-.80	-.70, .30

Note. Anxiety = attachment anxiety, Avoidance = attachment avoidance. * $p < .05$, ** $p < .001$.

Table 5

Summary of Intraclass Correlations (ICC) for Outcome Variables (Daily Survey)

Variance	Relational Self-Expansion	Activity Self-Expansion	Activity Positivity	Activity Success	Future Activity Intentions
Within-person (level 1)	2.05	1.35	.80	.58	1.49
Between-person (level 2)	-.16	.18	.22	.11	.48
Between-couples (level 3)	1.30	.64	.16	.16	.40
ICC	.41	.29	.14	.19	.17

Note. Variance is reported for the intercept-only models for each outcome variable assessed from the daily survey.

Table 6

Model Assessing the Effects of Daily Relationship Threats on Daily Relational Self-Expansion (Hypothesis 4)

Predictor	Daily relational self-expansion			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	3.59	.33	10.79**	2.93, 4.25
<i>Within-person</i>				
Actor threats	-.09	.03	-2.61*	-.15, -.02
Partner threats	-.11	.03	-3.40**	-.18, -.05
<i>Between-person</i>				
Actor threats	-.16	.11	-1.50	-.37, .05
Partner threats	-.16	.11	-1.47	-.37, .05

Note. Daily relationship threats (level 1 predictor) was person-mean centered. * $p < .05$, ** $p < .001$

Table 7

Descriptive Statistics and Correlations among Key Daily (Level 1) Variables, for Days when an Exciting Couple Activity was Reported

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Relational self-expansion	4.65	1.60	.34**	-.09**	.27**	.17**	.31**	.29**	.29**	.11**
2. Relationship threats	1.42	.69		.48**	-.07*	-.04	-.33**	-.07*	-.41**	-.12**
3. Activity novelty	4.37	1.89			.41**	.15**	.26**	.73**	.21**	-.05
4. Activity arousal	3.59	2.06				.40**	.26**	.79**	.20**	.21**
5. Activity positivity	6.22	1.08					.26**	.34**	.64**	.33**
6. Activity self-expansion	3.98	1.49						.39**	.27**	.11**
7. Activity success	6.38	.92							.26**	.23**
8. Future activity intentions	5.72	1.54								.36**

Note. Correlations are based on aggregates of the daily variables (level 1). Correlations in boldface represent cross-partner (i.e., actor by partner) correlations. Items in rows three through 10 were assessed in response to people's experiences during the reported exciting couple activity ($n = 926$). Few correlations are significant, although weak, and should be interpreted with caution. * $p < .05$, ** $p < .001$.

Table 8

Summary of Exciting Activity Themes and Coding Agreement Generated from Participants' Open-ended Responses

Theme	Description	Percent Reported		K	Example
		Rater 1	Rater 2		
Outings	Attending a special event or having a 'date night' with a partner (e.g., out visiting or travelling some place). This may or may not include activities which involve family or friends.	38.7	38.6	.81	"We went out to dinner and then saw a movie."
Household activities	Completing household, family or maintenance tasks with a partner such as doing chores or running errands.	8.7	8.8	.74	"Bought a new car and assembled a treadmill."
Leisure	Spending time with a partner that did not include a special event or outing. For instance, this could include relaxing together, having dinner at home, having a discussion, or passive activities such as watching television. This may or may not include activities which involve family or friends.	34.4	34.8	.66	"We played some board games, watched some tv and just spent time together."
Disclosure	Disclosing thoughts and feelings to a partner.	3.1	2.3	.43	"We talked about how we both like that we have settled into a work and life routine. It is a bit unexpected (especially for me) because a routine could feel dull but instead I find it intensely satisfying."

Future	Planning or discussing future events relevant to the relationship; planning a wedding, shopping for a new house, discussing future life events (i.e., children, honeymoon).	3.6	4.4	.70	“House viewings for the first time to look for our first home.”
Sex	Engaging in sexual activity with one’s partner.	3.0	2.6	.92	“We had great sex.”
Care	Giving or receiving care or support from a partner. Included practical or emotional support and general kindness towards a partner.	3.0	4.0	.62	“I wasn't feeling well and he was sympathetic and caring.”
Physical activity	Doing something active with a partner such as exercising, playing a sport, or participating in outdoor physical activities.	8.2	8.5	.93	“Joined a gym and went for the first time today.”
Affection	Cuddling or being intimate with a partner that is not directly associated with sex.	2.1	3.3	.67	“I gave her a massage”
Learning	Learning something new with a partner, teaching a partner something, or being taught something by a partner.	3.5	2.5	.50	“I practiced driving standard, which I wouldn't be doing at all if it weren't for him. Scary, but exciting and learning new things.”
Negative	Having an argument or disagreement with a partner or expressing negative emotions to a partner.	1.0	0.9	.94	“We had an argument about the marketing involved in Tim Horton's Roll-up-the-rim which led to a very interesting debate.”
Religious/spiritual	Attending a religious service or engaging in spiritual activities with a partner such as praying or meditating.	0.5	0.4	.89	“She was baptized today at church.”

Humor	Laughing or sharing a funny experience with a partner.	2.5	2.4	.93	“We enjoyed some fun together where we just joked around and acted silly, it was completely spur of the moment but it was a lot of fun for both of us.”
Other	Any activities which are not conceptualized by the preceding themes. Also may include any instance in where it seems that the participant was answering a different question than the one being asked or any instance where it is made explicit that one’s partner was not involved in the activity, or any instances where the response provided by participants is so ambiguous that strong inferences would otherwise be necessary to accurately code the response.	1.0	1.0	1.00	“car negotiations”

Note. Some descriptions were coded using more than one category, thus percentages may be greater than 100. *K* = Kappa coefficient.

Table 9

Model Assessing the Effects of Daily Relationship Threats on Self-Expansion during Exciting Couple Activities (Hypothesis 6)

Predictor	Activity self-expansion			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	3.59	.29	12.36**	3.02, 4.17
<i>Within-person</i>				
Actor threats	-.28	.09	-3.29**	-.45, -.11
Partner threats	-.01	.08	-.16	-.17, .15
<i>Between-person</i>				
Actor threats	.02	.13	.19	-.23, .27
Partner threats	.10	.12	.84	-.14, .34

Note. Daily relationship threats (level 1 predictor) was person-mean centered. * $p < .05$, ** $p < .001$

Table 10

Models Assessing the Effects of Daily Relationship Threats on Ratings Quality for Exciting Couple Activities (Hypotheses 7 and 8)

Predictor	Activity positivity				Activity success			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	6.89	.16	41.93**	6.56, 7.21	7.32	.13	55.21**	7.06, 7.58
<i>Within-person</i>								
Actor threats	-.45	.07	-6.84**	-.58, -.32	-.38	.05	-6.95**	-.49, -.27
Partner threats	-.09	.06	-1.38	-.21, .04	-.08	.05	-1.57	-.18, .02
<i>Between-person</i>								
Actor threats	-.48	.08	-5.84**	-.65, -.32	-.61	.07	-8.95**	-.75, -.48
Partner threats	.00	.08	.03	-.15, .16	-.06	.07	-.84	-.19, .07

Note. Daily relationship threats (level 1 predictor) was person-mean centered. * $p < .05$, ** $p < .001$.

Table 11

Model Assessing the Effects of Daily Relationship Threats on Future Intentions for Exciting Couple Activities (Hypothesis 9)

Predictor	Future intentions			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	6.12	.26	23.68**	5.60, 6.63
<i>Within-person</i>				
Actor threats	-.29	.09	-3.11*	-.48, -.11
Partner threats	-.01	.09	-.13	-.19, .16
<i>Between-person</i>				
Actor threats	-.12	.12	-.99	-.37, .12
Partner threats	-.15	.12	-1.24	-.38, .09

Note. Daily relationship threats (level 1 predictor) was person-mean centered. * $p < .05$, ** $p < .001$

Table 12

Model Assessing the Within-Person Effects of Daily Relationship Threats on Exciting Couple Activity Experiences for the Following Day (Hypotheses 10 and 12)

Predictor	Relational self-expansion tomorrow				Activity self-expansion tomorrow			
	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI	<i>b</i>	<i>SE</i>	<i>t</i>	95% CI
Constant	3.08	.11	28.89**	2.87, 3.29	4.09	.13	31.19**	3.83, 4.36
Actor threats	.05	.03	1.57	-.01, .12	.02	.18	.13	-.33, .38
Partner threats	.01	.03	.229	-.06, .07	-.10	.19	-.54	-.47, .27
Self-expansion	.14	.02	7.76**	.11, .18	-.09	.08	-1.16	-.24, .06

Note. Daily relationship threats (level 1 predictor) was person-mean centered. * $p < .05$, ** $p < .001$.

Appendices

Appendix A: Email Pre-Screening Questions

Hello *[name]*,

Thank you for expressing an interest to participate in our relationship study entitled, “Daily Relationship Experiences”. In order to assess your eligibility, we have a few questions for you. First, you should know that your participation in these pre-screening questions is voluntary and the responses you provide are confidential (including contact information).

Do you consent to participate in the pre-screening questions to assess your eligibility for the study?

- Yes, I agree to participate in the pre-screening questions.
- No, I do not agree to participate in the pre-screening questions.

If your answer is “No”, please do not continue to answer the questions.

Please type your response to each of these brief questions into the form below.

1. What is your current relationship status?
2. How long have you been in your romantic relationships with your partner?
3. Are you in an exclusive relationship with your partner? That is, do you have a monogamy agreement with your partner?
4. Are you and your partner available to participate in this survey for 21 days in the near future?
5. Do you live with your partner (i.e., live together at least 5 of 7 nights a week together)?
6. Is this your personal email account that only you (i.e., not partner) has access to? If it is not, please provide your personal email account so we can contact you.
7. This study involves participation from both you and your partner (we will need to contact your partner separately). What is your partner’s unique email address (i.e., not one you share together)? Please inform your partner before sending us their email address.
8. Do you live in Canada or the USA?

The next step of this study is to follow-up with you via a brief telephone call (i.e., 3 minutes) to go over a few questions and the format of the study. Please note that we will be calling you from the following number: (XXX) XXX-XXXX

1. What is your phone number?
2. When is a good time to reach you for a short (i.e., 3 minutes) phone call (provide alternate times if possible)?

Thank you very much for your input! We will be in contact with you soon.

Appendix B: Telephone Pre-Screening Script

Hello, may I please speak with *[participant's first name]*. Hi *[participant's name]*, my name is *[research assistant's name]* and I am calling you today regarding your interest in the couples' research study entitled 'Daily Relationship Experiences' being conducted at Carleton University. Is this a good time?

[If yes] Perfect! I first want to thank you for your interest in this study. I am calling you today because you and your partner have passed the first pre-screening phase. I have just a few quick questions to go over with you to assess your eligibility.

[If no] When would be a good time to call you back? Thank you very much, I will speak with you shortly. Have a nice day.

[If participant did not wish to be called back] Thank you for your interest, have a nice day.

Do you consent to me asking you a few questions about your relationship to assess your eligibility for the study? As a reminder, your participation in these pre-screening questions is voluntary and your responses are confidential.

[If the potential participant said yes, the pre-screening questions continued. If the potential participant said no, they were thanked for their time and the call was ended].

1. I'll start by asking, what is your date of birth?
2. Do we have it correct that you are currently in a *[relationship status from email pre-screening questionnaire]*?
3. Do we have it correct that you live with your partner?
4. In what month is your partner's birthday?
5. Where did you and your partner meet?
6. On average, how many days per week do you see your partner?
7. Are you and your partner available to participate in this survey for 21 days in the near future? *[If "no", end call.]*
8. Do you have a unique email address that only you have access to?
9. According to my records I have your email address noted as *[email address provided in email pre-screening]*. Was this correct?
10. Are you participating from Canada or the United States?
11. When would you and your partner be able to start the 21-day survey?

Great! The next step for me is to contact your partner and verify eligibility. If you and your partner pass this final assessment of eligibility, we will email each of you further information and a study link to your personal email addresses. If you and your partner are not eligible, we will notify you via email within one day of speaking to your partner.

Do you have any questions about your participation in this study?

[If "no"] Alright, well thank you once again for your interest in this study – it is very much appreciated – and I will be in contact via email soon!

Appendix C: Intake Survey Measures (Day 1)

Demographic Section

In this first part of the survey we will ask you some general questions about yourself.

1. What is your age? _____years
2. What is your gender?
 - a) Female
 - b) Male
 - c) Transgendered
 - d) Other _____
3. Please select the response that *best* describes your current relationship status?
 - a) Seriously dating relationship, but not living together
 - b) Seriously dating relationship and living together
 - c) Married
 - d) Other (please specify): _____
4. Are you engaged? Yes No
5. How long have you and your partner been in an exclusive romantic relationship for? Please state in years and/or months.

_____years
_____months
6. On average, how many days per week do you see your partner? _____
7. Please indicate the number of children that are living in your home. If you do not have any children living in your home, please enter '0' into the space below. _____
8. What is your sexual orientation?
 - a) Heterosexual (straight)
 - b) Homosexual (lesbian)
 - c) Homosexual (gay)
 - d) Bisexual
 - e) Other (please specify): _____
9. Which of the following best describes your ethnic/racial background? Please select one and **specify** in the space provided.
 - White: e.g., North American, European, etc. (please specify): _____
 - Black: e.g., African, Caribbean, etc. (please specify): _____
 - East Asian: e.g., Chinese, Korean, etc. (please specify): _____
 - South Asian: e.g., Indian, Pakistani, etc. (please specify): _____
 - Latin American: e.g., Mexican, Columbian, etc. (please specify): _____

Experiences in Close Relationships Scale-Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007)

The following statements concerns how you feel in romantic relationships. We are interested in how you *generally* experience relationships, not just what is happening in a current relationship.

Respond to each statement by indicating how much you agree or disagree with it.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

Avoidant attachment items:

1. It helps to turn to my romantic partner in times of need. (reverse-coded)
2. I want to get close to my partner, but I keep pulling back.
3. I turn to my partner for many things, including comfort and reassurance.
4. I try to avoid getting too close to my partner.
5. I usually discuss problems and concerns with my partner. (reverse-coded)
6. I am nervous when partners get too close to me.

Anxious attachment items:

7. I need a lot of reassurance that I am loved by my partner.
8. I find that my partner(s) don't want to get as close as I would like.
9. My desire to be very close sometimes scares people away.
10. I do not often worry about being abandoned. (reverse-coded)
11. I get frustrated if romantic partners are not available when I need them. (reverse-coded)
12. I worry that romantic partners won't care about me as much as I care about them.

Self-Expansion Scale (Lewandowski & Aron, 2002)

Please answer each question according to the way you personally feel, using the following scale. Please be open and honest in your responding.

1	2	3	4	5	6	7
Not very much						Very much

1. How much does being with your partner result in your having new experiences?
2. When you are with your partner, do you feel a greater awareness of things because of him or her?
3. How much does your partner increase your ability to accomplish new things?
4. How much does being with your partner make you more appealing to potential future partners?

6. Overall, how likely are you to do comforting and familiar things with your partner such as watching a favorite movie, having comfort food, or snuggling up for some TV?

You've reached the end of this survey. Thank you very much for your participation! We will be emailing you with the link to next survey, tomorrow evening at 5 P.M. (EST). You will receive an email from the email address noreply@qemailserver.com with a link for the first diary report.

Please complete tomorrow's survey between 5 P.M. and 9 A.M. (the following day), local time.

Please ensure that you have added this email address to your safe list so it is not flagged as spam.

Appendix D: Daily Diary Measures (Days 2 through 22)

Welcome back to the *Daily Relationship Experiences* study! We thank you for your time. Your participation is valuable to this research.

We ask that you please complete this survey in private (i.e., away from your partner), as their presence could affect your responses.

Daily Relationship Threats (modified from Murray, Bellavia, Rose, & Griffin, 2003)

Please think about your overall experiences today. Indicate to what extent you felt....

1	2	3	4	5	6	7
Not at all						Extremely

Felt rejection/hurt subscale:

1. rejected or hurt by your partner
2. your partner didn't understand you
3. your partner wasn't there for you
4. your partner was angry with you
5. your partner was irritated with you
6. your partner didn't really care what you thought

Anxiety about acceptance subscale:

7. worried about disappointing your partner
8. unsure whether your partner was happy in your relationship
9. your partner was pulling away from you
10. your partner was bored with you
11. you cared more about the relationship than your partner
12. you felt foolish in front of your partner
13. you felt embarrassed around your partner

Daily Relational Self-Expansion (modified from Lewandowski & Aron, 2002, in Muise et al., 2019)

Please answer each question according to the way you felt TODAY, using the following scale.

1	2	3	4	5	6	7
Not very much						Very much

1. How much did being with your partner result in you having new experiences?
2. Did you feel a greater awareness of things because of your partner?
3. How much did being with your partner expand your sense of the kind of person you are?

4. How much did your partner provide you with a source of excitement?
5. How much did you feel you gained a larger perspective on things because of your partner?
6. How much did your partner increase your knowledge?

Exciting Couple Activity

Thinking about your responses to the questions above, can you think of a specific activity that you did with YOUR ROMANTIC PARTNER TODAY that resulted in you feeling a sense of excitement, a greater awareness of things around you, an expansion of your sense of self, and/or an increased knowledge of yourself and the world around you?

- Yes [*if selected, continue to next question*]
- No [*if selected, skip to “Filler Questions” section*]

Follow-up on Activity with Partner (If “Yes” selected for activity engagement)

1. Please provide a brief description about the activity you engaged in with your partner. What was it? What did you do? _____

2. Approximately what time of the day did you engage in this activity with your partner? Please select one of the following boxes. If your activity lasted all day (i.e., was something that you started in the morning and ended in the evening), please select the option “all day”.

- a) A.M.
- b) P.M
- c) All day

3. Approximately how long did this activity last? Please select the answer that is closest.

- a) Less than 1 hour
- b) 1 to 3 hours
- c) 4 to 6 hours
- d) More than 7 hours

Exciting Couple Activity Experiences

On the next page, we would like you to reflect on your overall experience engaging in this exciting activity with your partner. Use the following scales to rate your experience in this activity.

1. How novel was this activity? (1 = *not at all novel* to 7 = *extremely novel*)
2. How positive was this activity? (1 = *not at all positive* to 7 = *extremely positive*)
3. How arousing was this activity? (1 = *not at all arousing* to 7 = *extremely arousing*)
4. Overall, how would you evaluate the success of this activity with your partner? (1 = *terrible* to 7 = *terrific*)
5. During this activity, how close did you feel to your partner?

(1 = *not at all close* to 7 = *extremely close*)

6. During this activity, how satisfied were you about your relationship with your partner?

(1 = *not at all satisfied* to 7 = *extremely satisfied*)

7. Who initiated the activity you participated in?
- I did
 - My partner did
 - We both did (it was mutual)
 - Neither of us did. The activity happened by chance.
 - Other (please specify): _____

Future Exciting Couple Activity Intentions

1	2	3	4	5	6	7
Not at all likely						Extremely likely

- How likely would you be to do this same activity in the near future?
- How likely would you be to do activities like this in the near future?

Filler Questions (if “No” selected for exciting couple activity engagement)

We are interested in studying people’s daily experiences in their romantic relationships, and in their lives more generally. In this portion of the study, we would like you to think about the extent to which of the following things happened to you today.

Did you work outside the home today?

- Yes, I worked outside the home today (e.g. at a paid or volunteer job) [*if selected, continue to next question (“Daily Work Experiences”)*]
- No, I did not work outside the home today (e.g. I had the day off, I do not have a job) [*if selected, skip to “Daily Experiences” section*]

Appendix E: Additional Exciting Activity Context

Additional descriptive analyses were conducted to better understand the quality of exciting couple activities that people reported and the times when they most often occur. In just over half of the cases (54.1%), self-reported activities occurred on weekends (Fridays, Saturdays, and Sundays). Few of the reported activities also fell on Canadian holidays (15 on Christmas Eve and Christmas Day, 12 on Valentine's Day, and 6 on New Year's Eve or Day). A larger proportion of activities were reported on the first day of the survey (12.1%), followed by a large drop in the number of activities reported on the second (7.6%) and third days (7.3%). It is possible that this initial drop in activities was a result of habituation to the daily survey protocol (see Bolger et al., 2003), however, a fairly consistent proportion of the activities were reported thereafter for days four through 21 (see Figure 8 in Appendix F). Additionally, reported activities most often occurred during the afternoon (76.3%) compared to 13.9% of cases when the activity happened throughout the day. Most activities lasted between one and three hours in length (48.8%), followed by less than one hour (25.7%), between four to six hours (15.6%), and more than seven hours (9.9%). To put this into perspective, regardless of whether people engaged in an exciting couple activity or not, most people spent an average of 5.51 hours with their partner per day ($SD = 2.30$; range = 1-8 hours), with 30.2% indicating that they spent more than seven hours (30.2%) with their partner and 12.1% indicating that they spent fewer than two hours per day. In the majority of cases, people reported that both they and their partner mutually initiated the activity (39.6%), and less often their partner initiated the activity (29.3%), they initiated the activity (23.2%), or neither they nor their partner initiated it (i.e., it happened by chance; 3.7%).

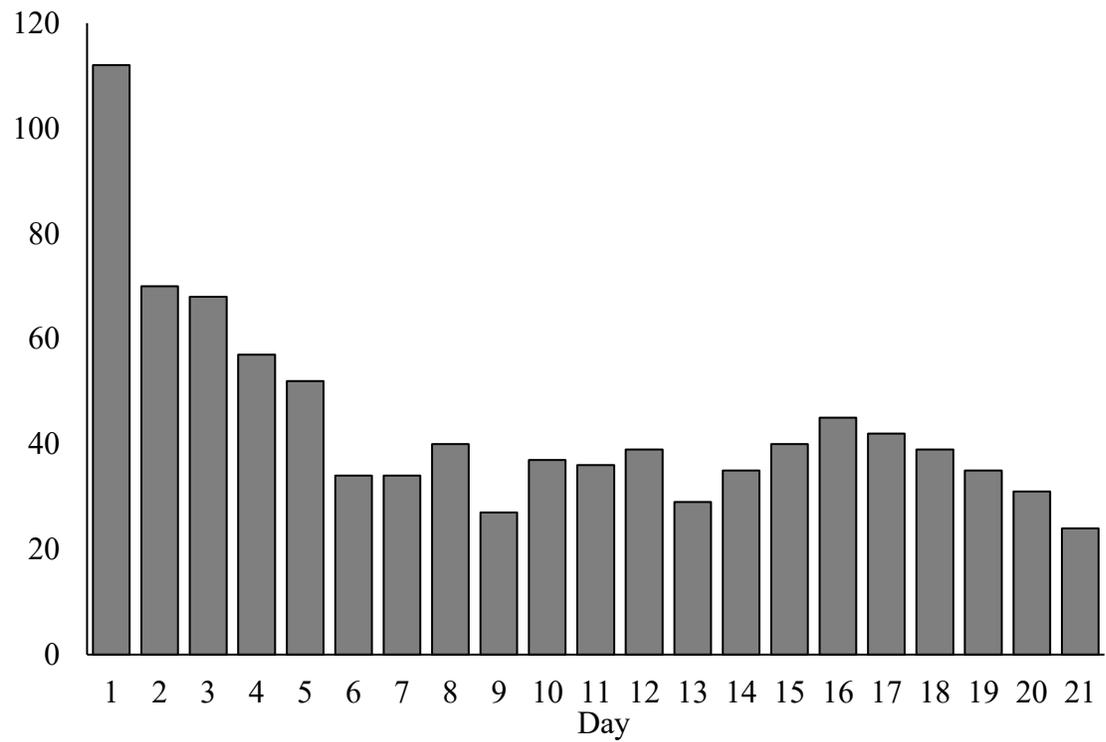
Appendix F: Additional Figures

Figure 8. Distribution of the Number of Exciting Couple Activities Reported by Participants Over 21 Days

Appendix G: Exploratory Analyses for Attachment Insecurity as a Moderator

Exploratory analyses were conducted to examine whether attachment insecurity moderated the association between daily relationship threats and relational self-expansion. An analysis of bivariate correlations suggests that daily relationship threats are moderately correlated with individual differences in attachment anxiety ($r(235) = .30$, $p < .001$) and attachment avoidance ($r(235) = .31$, $p < .001$). For these reasons, I conducted exploratory analyses to understand whether the effect of relationship threats on relational self-expansion may be stronger for people with a predisposition for more avoidant or more anxious attachment styles. Exploratory analyses were conducted for all models assessing Hypotheses 4 through 9 (i.e., the effects of daily relationship threats on relational self-expansion, the occurrence of exciting couple activities, as well as activity experiences). Each model included four interaction variables (attachment anxiety by relationship threats and attachment avoidance by relationship threats, for both the actor and the partner) as well as controlled for both the actor's and partner's scores for daily relationship threats, attachment anxiety, and attachment avoidance (see Table 13 in Appendix H). No interactions were observed between either attachment avoidance and attachment anxiety and daily relationship threats for either daily relational self-expansion ratings or the occurrence of exciting couple activities. Three significant interactions were observed for attachment insecurity and daily relationship threats on people's exciting couple activity experiences. However, interaction effects were scattered and inconsistent for the effects of threats for the actor versus partner and attachment anxiety versus attachment avoidance (see Tables 13 through 15 in Appendix H). Simple effects were probed for each significant interaction but generally suggested that daily relationship

threats were negatively associated with relational self-expansion experiences for people who were either low (i.e., one standard deviation below the mean) or high (i.e., one standard deviation above the mean) in attachment insecurity (anxiety or avoidance). Together, these effects were inconclusive and were not further investigated.

Appendix H: Additional Tables from Exploratory Analyses

Table 13.

Exploratory Models Assessing the Association between Attachment Insecurity and Daily Relationship Threats on Relational Self-Expansion (General Ratings and Activity Occurrence)

Predictor	Relational self-expansion			Occurrence of activities		
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>T</i>
Constant	3.09	.11	29.15**	-1.58	.09	-17.12**
<i>Actor effects</i>						
Relationship threats	-.12	.04	-3.34**	-.17	.08	-2.20*
Anxiety	-.03	.07	-.44	-.11	.06	-1.81
Avoidance	-.09	.09	-1.01	-.01	.08	-.44
AnxietyXThreats	-.01	.02	-.56	-.10	.05	-1.79
AvoidanceXThreats	.14	.03	4.54**	-.11	.07	-1.60
<i>Partner effects</i>						
Relationship threats	-.09	.04	-2.47*	-.01	.08	-.18
Anxiety	.06	.07	.82	-.13	.06	-2.12*
Avoidance	-.13	.09	-1.52	-.04	.08	-.44
AnxietyXThreats	-.02	.03	.74	-.02	.05	-.42
AvoidanceXThreats	-.04	.03	-1.32	.03	.06	.43

Note. Anxiety = attachment anxiety, Avoidance = attachment avoidance, AnxietyXThreats = interaction between daily relationship threats and attachment anxiety, AvoidanceXThreats = interaction between daily relationship threats and attachment avoidance. Daily relationship threats was person-mean centered and attachment anxiety and attachment avoidance were grand-mean centered. * $p < .05$, ** $p < .001$.

Table 14

Exploratory Models Assessing the Association between Attachment Insecurity and Daily Relationship Threats on Exciting Couple

Activity Ratings

Predictors	Activity self-expansion			Activity positivity			Activity success		
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>
Constant	3.80	.09	41.62**	6.17	.05	117.43**	6.30**	.04	148.59**
<i>Actor effects</i>									
Relationship threats	-.29	.09	-3.23**	-.48	.07	-7.08**	-.32	.06	-5.64**
Anxiety	.11	.06	1.73	.04	.04	.95	-.02	.03	-.74
Avoidance	-.10	.08	-1.16	-.26	.05	-5.01**	-.28	.04	-6.69**
AnxietyXThreats	.04	.06	.75	.19	.04	4.32**	.04	.04	1.18
AvoidanceXThreats	-.00	.08	-.01	.08	.06	1.39	.01	.05	.16
<i>Partner effects</i>									
Relationship threats	.02	.09	.20	-.10	.07	-1.47	-.11	.06	-1.93
Anxiety	.04	.06	.71	.00	.04	.07	.01	.03	.41
Avoidance	-.08	.08	-1.02	-.04	.05	-.79	-.12	.04	-2.91*
AnxietyXThreats	-.00	.06	-.03	.04	.05	.83	.10	.04	2.58*
AvoidanceXThreats	-.09	.07	-1.31	.07	.05	.18	-.06	.04	-1.36

Note. Anxiety = attachment anxiety, Avoidance = attachment avoidance, AnxietyXThreats = interaction between daily relationship threats and attachment anxiety, AvoidanceXThreats = interaction between daily relationship threats and attachment avoidance. Daily relationship threats was person-mean centered and attachment anxiety and attachment avoidance were grand-mean centered. * $p < .05$, ** $p < .001$.

Table 15

Exploratory Model Assessing the Association between Attachment Insecurity and Daily Relationship Threats on Intentions for Future Exciting Couple Activities

Predictors	Future intentions		
	<i>B</i>	<i>SE</i>	<i>t</i>
Constant	5.70	.08	71.61**
<i>Actor effects</i>			
Relationship threats	-.32	.10	-3.25**
Anxiety	.03	.06	.59
Avoidance	-.06	.08	-.85
AnxietyXThreats	.05	.07	.70
AvoidanceXThreats	.07	.09	.74
<i>Partner effects</i>			
Relationship threats	.05	.10	.55
Anxiety	.09	.06	1.64
Avoidance	-.18	.08	-2.38*
AnxietyXThreats	-.12	.07	-1.80
AvoidanceXThreats	.07	.08	.97

Note. Anxiety = attachment anxiety, Avoidance = attachment avoidance, AnxietyXThreats = interaction between daily relationship threats and attachment anxiety, AvoidanceXThreats = interaction between daily relationship threats and attachment avoidance. Daily relationship threats was person-mean centered and attachment anxiety and attachment avoidance were grand-mean centered. * $p < .05$, ** $p < .001$.