

# Dealing with loss in the face of disasters and crises: Integrating interpersonal theories of couple adaptation and functioning

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## Abstract

The COVID-19 pandemic has highlighted the significant and varied losses that couples can experience during times of global and regional disasters and crises. What factors determine how couples navigate their close relationships during times of loss? In this paper, we elaborate and extend on one of the most influential frameworks in relationship science—the Vulnerability Stress Adaptation Model (VSAM, Karney and Bradbury, 1995)—to enhance the model's power to explain relationships during loss-themed disasters/crises. We do so by elaborating on attachment theory and integrating interdependence theory (emphasizing partner similarities and differences). Our elaboration and extension to the VSAM provides a comprehensive framework to guide future research and inform practice and policy in supporting relationships during and beyond loss-themed disasters/crises.

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## Keywords

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During their relationships, most couples experience loss-related stressors that can compromise relationship functioning. As the COVID-19 pandemic has highlighted, the experience of loss is often tied to global and regional disasters and crises. Health crises, natural disasters, acts of war/terrorism, and economic recession often entail multiple losses, including the death of loved ones or loss of livelihood and stable housing. Some couples weather the stress and deep sense of loss associated with such events, drawing on one another for support and maintaining relationship harmony. Others face temporary relationship difficulties during such events, while other relationships falter irretrievably. What factors determine how couples navigate their relationships during disasters and crises? To address this question, we elaborate and extend one of the most influential frameworks in relationship science—the Vulnerability Stress and Adaptation Model (VSAM) [1\*\*,2,3].

## The VSAM

The VSAM is a meta-theoretical framework for understanding relationship stability and change. The model integrates diathesis-stress and cognitive-behavioral perspectives, positing that relationship outcomes are a function of three interrelated factors: (1) *enduring vulnerabilities* (unique qualities, experiences, and dispositions of the individual that affect their ability to function effectively within the relationship); (2) *stressful events* (external stressors and strains); and (3) *adaptive processes* (thoughts and behaviors enacted by partners that promote relationship positivity or reduce relationship negativity). A key premise of the VSAM is that virtually all variables studied in the context of couple relationships fit within these three broad categories. However, research on the model has highlighted *specific* variables within each category that are particularly pertinent to loss-themed disasters and crises.

**Table 1** summarizes these variables and their many associations with relationship functioning. Regarding

Table 1

**Vulnerability Stress Adaptation Model component variables.**

## Vulnerabilities

- Individual differences
  - *Attachment orientations.* High levels of attachment avoidance and/or anxiety can undermine relationship functioning and impede the ability to draw on relationship partners to deal with loss-related stressors.
    - Avoidant individuals tend to distrust others (Feeney, 2016), engage in conflict avoidance (Feeney and Karantzas, 2017; Simpson et al., 1996), appreciate their partner's support less (Feeney, 2016; Gillath et al., 2016; Mikulincer and Shaver, 2016) and, when required to give support, do so in a more distant and controlling manner (Kunce and Shaver, 1994; Feeney and Collins, 2001). In addition, they perceive their partners with ambivalence, suspicion, and/or skepticism (Collins, 1996).
    - Anxious individuals often enact destructive or hostile conflict patterns (Feeney and Karantzas, 2017; Simpson et al., 1996), have ambivalent responses to partner support (e.g. conflating gratitude and love with worries about inferiority or the state of the relationship, Feeney, 2016), and provide compulsive and smothering support (Kunce and Shaver, 1994; Feeney and Collins, 2001).
      - *Mental Health Vulnerabilities and Negative Traits.* Mental health problems and associated vulnerability factors can also influence relationship quality (Braithwaite and Holt-Lunstad, 2017). Hierarchical models of psychopathology (Hierarchical Taxonomy of Psychology [HiTOP]; Kreuger et al., 2017) indicate for whom and in what contexts, individual difference risk factors may potentiate negative relationship outcomes.
    - Individuals high in disinhibition or trait aggression (those characterized by hostile cognitions, the expression of anger, and enactment of physical and verbal harm; Buss and Perry, 1992) may show little regard for their partner's stress. This may manifest in maltreatment, intimate partner violence (Ruddle et al., 2017), poor regulation of negative emotions (Finkel and Eckhardt, 2013), and greater relationship conflict.
    - Neuroticism (negative affectivity) is a predictor of lower marital satisfaction and instability (Karney and Bradbury, 1995) and maladaptive responses to disasters (Borja et al., 2009) for two possible reasons:
      1. Neuroticism predisposes people toward experiencing negative life events (both within and external to the relationship) via tendencies to enact more negative behaviors and internalize their partner's negative emotions (emotion contagion) (e.g. Karney and Bradbury, 1997).
      2. Neurotic individuals experience less general life satisfaction and appraise life events more negatively, which can carry over into relationship appraisals (e.g. Cote' and Moskowitz, 1998).
    - Mental health issues such as depression and anxiety predict relationship difficulties and dissatisfaction because of:
      - Cognitive and affective distortions regarding efficacy and hopelessness, which impair their ability to perspective-take and problem-solve relationship issues.
      - Cognitive biases can also lead people to underestimate the support available or provided by their partners (Braithwaite and Holt-Lunstad, 2017).
  - *Substance Use.* For individuals with a history of addiction, substance use increases during stress as a means to dampen distress or cope with the stressor (Greeley and Oi, 1999).
    - Consumption of alcohol and illicit substances disrupts executive functioning and impairs cognitive processes needed to regulate emotions and decision-making.
      - This can exacerbate destructive relationship behaviors, as well as attention to, and processing of, internal and external threat cues (Taylor and Leonard, 1983).
    - Substance use exacerbates conflict (MacDonald et al., 2000), which can result in partner violence (Testa et al., 2012).
      - In addition, couples in which substance abuse co-occurs (e.g. each partner has a history of dependency on alcohol) are more likely to experience declines in relationship satisfaction and higher rates of relationship dissolution (Homish and Leonard, 2007).

**External Stressors (Theme of Loss)**

- *Loss of Loved Ones During Crises and Natural Disasters*
  - Sudden or unexpected (actual or anticipated) loss of a person who serves as an important source of comfort and support.
  - Inability to be physically present and supportive during a loved one's final days.
  - Social restrictions that prohibit or limit rituals around grief and loss (possibly compromising the normative progression of grief).
  - Strain of sudden or unexpected loss that impacts negatively on relationship functioning, especially if partners experience dissimilar grief reactions (Winegard et al., 2014).
- *Loss of partner connection*
  - Lengthy times of lack of close proximity or separation can create problems for couples in terms of changes in emotional connection (Noller et al., 2001).
  - Lengthy periods of very close contact may exacerbate destructive relationship behaviors that escalate negative interactions, leading to interpersonal aggression or distress (e.g. Lanier and Maume, 2009).
  - For couples with significant vulnerabilities and limited adaptive processes, chronic stressors may increase the prospect of relationship dissolution.
  - Decrease in connection may result in perceived lack of intimacy or support (Noller et al., 2001).
  - For couples separated because of the closing of geographic borders, or for whom partners must quarantine/isolate after contracting a contagious disease (such as COVID-19), partners can experience heightened distress and loneliness given their inability to draw on each other for love, comfort, and security (Doherty and Feeney, 2004).
  - For couples with children, physical separation means that one partner cannot help with parenting duties (e.g. home schooling). Single parenting is linked to high rates of distress, especially during disasters (Solomon et al., 1993).
- *Loss of Community*
  - During large-scale disasters, sudden and unexpected loss-related changes can occur within the community.
  - Loss of employment and income in the community is often accompanied by increases in loneliness, competition, and polarization.

Table 1 (continued)

## Vulnerabilities

- o Mistrust of official disaster-related information and lack of transparency in aid distribution can add to feelings of isolation and loss (Bonanno *et al.*, 2010).
- o Participation in neighborhood and civic organizations tends to decline following disasters (Picou *et al.*, 2004), as do perceptions of social support (Kaniasty and Norris, 2004).
- o Couples may suffer from a loss of embeddedness within their community. This may disrupt couple functioning, especially for those who experience trauma symptoms or other mental health concerns, which can impair adaptive processes (Marshall and Kuijer, 2017).
- **Other Pandemic-related Losses**
  - o Financial strain due to economic stagnation can increase psychological distress, which, in turn, can affect maladaptive relationship processes that erode relationship satisfaction. From a stress-spillover perspective, the negative effects of financial hardship may carry over into the relationship, being manifested as social withdrawal, irritability, and anger; these ineffective responses often impede relationship functioning (Repetti and Wang, 2017). Financial instability stress experienced by one partner can also crossover to affect the mood and behaviors of the other, further contributing to relationship maladjustment (Howe *et al.*, 2004) and divorce (Yeung and Hofferth, 1998).
  - o Actual or impending grief may center on the sudden or unexpected loss of a home, which represents another severe form of loss given the link between 'home' and a person's sense of identity (Anton and Lawrence, 2014).
  - o Anticipated health loss/mortality salience due to pre-existing health conditions can make people more vulnerable during crises and natural disasters. For these couples, stress may result in health anxiety (Birnie *et al.*, 2013) and, in more extreme cases, death-related anxiety or worries regarding one's own (or the partner's) mortality (Lehto and Stein, 2009).

## Adaptive Processes

- **Social support.** Social support can serve a stress-buffering function, whereby the provision of partner support reduces the stress associated with adverse life events (Cutrona and Russell, 2017; Feeney and Collins, 2019; Simpson and Overall, 2014).
  - o There are two primary types of support, safe haven and secure base. Safe-haven support involves providing comfort and assistance to a partner in times of stress. Secure-base support involves acknowledging a partner's skills and abilities and fostering autonomy, exploration, and personal growth (Cutrona and Russell, 2017; Feeney and Thrush, 2010).
  - o Effective support provision occurs when a partner is responsive to the support-seeker's needs, allowing them to feel understood, validated, and cared for, ensuring that the support provided is tailored and appropriate (Cutrona and Russell, 1990; Reis and Clark, 2013; Simpson and Overall, 2014). The provision of mutual support requires that each partner is a sufficiently skilled support provider who has the appropriate mental models and behavioral competencies to enact care that meets the other's needs (Cutrona and Russell, 1990).
  - o Unresponsive social support that fails to satisfy a partner's needs or highlights their lack of competence can exacerbate stress and distress, leading both partners to feel inadequate. Thus, sensitive and responsive support is an important adaptive factor for couples because:
    - Partners can draw on each other as a source of safe haven in times of extreme stress and loss.
    - When facing novel challenges, a partner's provision of secure-base support may provide the encouragement and confidence needed to enact constructive responses to stress, facilitate the acceptance of loss, and promote recovery from grief.
  - o Couples fare better in terms of relationship adjustment and longevity when partners mutually respond to one another's needs (Murray and Holmes, 2009; Murray *et al.*, 2009). Conversely, differences in the provision of social support by partners is typically associated with greater relationship dissatisfaction and conflict in couples (Gottman, 1999).
- **Conflict Patterns**
  - o Differences in attitudes, beliefs, preferences, goals, and approaches to handling loss-themed stressors can attenuate or exacerbate conflict.
  - o Couples that engage in adaptive patterns of conflict resolution (positive problem-solving, cooperative behavior, the acceptance of responsibility, and providing or soliciting disclosure, Feeney and Karantzas, 2017) report greater relationship satisfaction and stability (Gottman, 1999).
    - Constructive conflict patterns also assist partners in regulating one another's distress during stressful events.
  - o Some couples, however, respond to conflict with maladaptive patterns of destructive engagement and/or conflict avoidance (Karantzas and Feeney, 2017; Simpson *et al.*, 1996).
    - Destructive engagement is a dominating approach that involves coercion, blame, and manipulation.
    - Conflict avoidance involves withdrawal, distancing, and lack of openness. Such patterns are ineffective in resolving relationship problems and often amplify relationship distress (Gottman, 1999).
      - Maladaptive conflict patterns can co-occur in couples, particularly the demand-withdrawal (Christensen and Heavey, 1990). It occurs when destructive engagement by one partner is countered with conflict avoidance by the other.
      - This dyadic pattern predicts relationship dissatisfaction because it does not lead to problem resolution and frequently leaves partners feeling invalidated or misunderstood (Christensen and Shenk, 1991).
    - Other couples engage in mutual destructive engagement. This similarity in negative responses to conflict can produce an escalating exchange of negative behaviors and emotions involving criticism, contempt, and hostility (Hellmuth & McNulty, 2008).
      - This pattern often results in dissatisfaction and sometimes interpersonal aggression (Murphy and Eckhardt, 2005; Rogge and Bradbury, 1999).
- **Relationship Commitment**
  - Commitment involves the desire or intent to persist with (maintain) a relationship (Arriaga and Agnew, 2001). It is a critical factor in promoting relationship adjustment and longevity (Le and Agnew, 2003; Schoebi *et al.*, 2012).
  - Commitment is a key factor in inhibiting destructive relationship behaviors and promoting constructive ones.
  - According to the investment model (e.g. Rusbult, 1980), commitment entails an adaptive process involving three factors:
    1. Investment size—the amount of resources, time, and effort a person has put into the relationship;
    2. Satisfaction level—the extent to which the relationship meets a person's needs, and
    3. Quality of alternatives—whether there are viable alternatives to the current relationship that could fulfill one's needs as well or better than the current relationship.

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**Table 1** (continued)

| Vulnerabilities  |
|--|
| <ul style="list-style-type: none"> <li>• People are more committed to their relationships when investment and satisfaction are high and viable alternatives are poor.</li> <li>■ The positive relationship outcomes for partners who are both highly committed occur because of the way in which high commitment couples enact adaptive relationship behaviors and hold positive perceptions of each other and their relationship (VanderDrift &amp; Agnew, 2020).</li> <li>■ Highly committed couples are more likely to engage in constructive relationship behaviors because they undergo pro-relationship transformation of motivation, whereby they forego their initial, immediate self-interest and instead focus on broader relationship promotion goals (Yovetich &amp; Rusbult, 1994; Reis &amp; Arriaga, 2015).</li> <li>■ During crises and loss, being in a highly committed relationship should ameliorate feeling of distress and help partners navigate loss.             <ul style="list-style-type: none"> <li>• However, partners who differ in their levels of commitment tend to experience more relationship adjustment difficulties and reduced relationship longevity (Rhoades et al., 2006).</li> </ul> </li> </ul> |

enduring vulnerabilities, we focus on individual differences that have important relational consequences: mental health vulnerability factors, negative traits, and a history of substance use. In addition, we highlight attachment orientations as a key vulnerability factor that requires considered elaboration within the VSAM. For stress, we focus on five loss-themed stressors: loss of loved ones, loss of existing patterns of connection to partners, loss of community, financial/material loss, and mortality salience. Regarding adaptive processes, we address conflict patterns, social support, and relationship commitment. The VSAM organizes these three broad factors within a mediation model, with feedback loops to account for stability and change in relationship functioning over time (see Figure 1).

**An elaboration and extension of the VSAM**

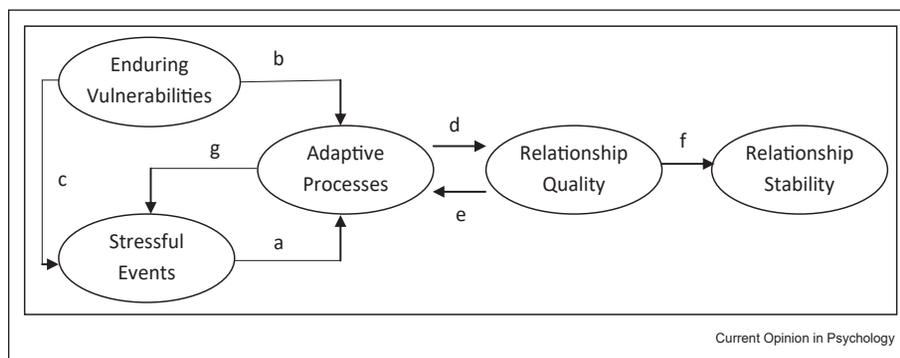
Our elaboration of, and extension to, the VSAM is designed to enhance the model’s power to explain

relationships during loss-themed crises and disasters by primarily elaborating aspects of attachment theory [4\*\*] and integrating interdependence theory (emphasizing partner similarities and differences) [5\*\*,6]. This elaboration and novel extension, shown in Table 2, provides a comprehensive framework to both guide future research efforts and inform practice and policy in supporting relationships during and beyond crises. Next, we briefly outline our elaboration and extension; then describe their relevance to couples’ experiences of crises marked by loss.

**Attachment theory**

Although often applied to explain bonding [7\*], attachment theory arose from Bowlby’s formulations about reactions to, and outcomes of, loss. According to Bowlby [8], responses to the loss of an attachment figure (i.e. the primary caregiver to whom an individual turns for comfort and support) are governed by the attachment

**Figure 1**



Vulnerability Stress Adaptation Model (Karney and Bradbury, 1995). Vulnerabilities and stressors are assumed to be directly associated with adaptive processes (paths a and b). For example, severe stressors can overwhelm partners’ cognitive-affective capacities and draw resources away from the relationship, compromising adaptive processes. The VSAM also assumes that vulnerabilities and stressors can combine to further mitigate adaptive processes (path c). In turn, adaptive processes are associated with relationship satisfaction (path d) and, subsequently, stability (path f). Thus, adaptive processes are assumed to mediate associations between vulnerabilities and stressors and relationship outcomes. The model also includes important reciprocal associations (paths e and g). First, relationship quality can affect adaptive processes: relationship satisfaction facilitates these processes, whereas relationship dissatisfaction compromises them by driving maladaptive cognitive, affective, and behavioral responses, especially during stressful events. Second, adaptive processes can help ameliorate stressors. For example, constructive responses to conflict and/or the rendering of support may reduce the severity or chronicity of stressors. Importantly, the VSAM not only describes stability and change in couple relationships, but also generates predictions about when change is likely to occur. Generally speaking, relationship satisfaction should decrease when the challenges faced (vulnerabilities and stressors) increase to levels above those to which the couple can effectively adapt.

Table 2

## VSAM theoretical elaborations and extensions.

| Characteristics  |   | Preferences and Strategies for Dealing with Distress   | Loss Context Manifestation   |
|--|---|--|--|
| Attachment Theory: The Role of Attachment Orientations                   |   |  |  |
| Attachment anxiety   | <ul style="list-style-type: none"> <li>• Intense needs for love and approval.</li> <li>• Preoccupation with relationship partners.</li> </ul>   | <p>Hyperactivation</p> <ul style="list-style-type: none"> <li>• Exaggerated expressions of distress.</li> <li>• Persistent attempts to gain partners' attention and approval.</li> </ul>   | <p><i>Across all loss contexts (actual/impending)</i></p> <ul style="list-style-type: none"> <li>• Persistent attempts to physically or symbolically reunite with their partners.</li> </ul> <p><i>Interpersonal (the death of a loved one, the dissolution of a romantic relationship)</i></p> <ul style="list-style-type: none"> <li>• Heightened (and complicated) grief symptoms.</li> </ul> <p><i>Non-interpersonal (job loss, loss of health)</i></p> <ul style="list-style-type: none"> <li>• Heightened health anxieties and financial worries. (See: Collins and Gillath, 2012; Fraley and Bonnano, 2004; Hobdy et al., 2007; Van der Meer et al., 2006)</li> </ul>   |
| Attachment avoidance   | <ul style="list-style-type: none"> <li>• Discomfort with closeness.</li> <li>• Chronic distrust of others.</li> <li>• Excessive self-reliance.</li> </ul>                                     | <p>Deactivation</p> <ul style="list-style-type: none"> <li>• Downregulation or suppression of distressing events.</li> <li>• Physical or psychological distancing from partners.</li> </ul>  | <p><i>Across all loss contexts (actual/impending)</i></p> <ul style="list-style-type: none"> <li>• Little physical or symbolic proximity-seeking.</li> </ul> <p><i>Interpersonal (the death of a loved one, the dissolution of a romantic relationship)</i></p> <ul style="list-style-type: none"> <li>• Few grief symptoms and little separation distress (especially in the short-term).</li> </ul> <p><i>Non-interpersonal (job loss, loss of health)</i></p> <ul style="list-style-type: none"> <li>• Few health-related anxieties and financial worries. (See: Fraley and Shaver, 2016; Hobdy et al., 2007; Meredith and Strong, 2019)</li> </ul>   |
| Interdependence Theory: The Role of Partner Similarities and Differences |   |  |  |
| Similarities   | <p>Partner A and B—chronic anxieties (ruminative coping).</p> <p>Partner A and B—rumination over financial concerns.</p> <p>Partner A and B—personal or cultural attitudes to disclosure.</p> | <p>Both partners may worry constantly about spread of illness, the health behaviors of their partner, and the need to maintain strict isolation.</p> <p>Both partners desire to curtail spending and enhance efforts to save (especially during a crisis).</p> <p>Both partners disclose the loss of connection to others.</p> | <p><i>Health anxieties</i></p> <ul style="list-style-type: none"> <li>• Partners feel validated and supported in terms of their worries, concerns and enactment of health behaviors.</li> <li>• Each partner's chronic anxiety may spill over to escalate the anxiety experienced by the other, to the point of high distress.</li> </ul> <p><i>Financial loss</i></p> <ul style="list-style-type: none"> <li>• Partners jointly work towards developing strategies to curtail spending and budgeting goals.</li> <li>• Partners mutually support one another's saving endeavors.</li> <li>• Partners may feed into each other's distress if financial concerns are significant.</li> </ul> <p><i>Loss of connection to partner</i></p> <ul style="list-style-type: none"> <li>• Possible increase in constructive communication and problem-solving due to helpful suggestions/advice from close others.</li> </ul> |

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| Table 2. (continued) |   |  |  |
|----------------------|---|--|--|
| Characteristics      | Preferences and Strategies for Dealing with Distress  | Loss Context Manifestation   |  |
| Differences          | Partner A—chronic anxiety (ruminative coping).<br>Partner B—chronic avoidant coping.  | <p>Both partners remain private about loss of connection.</p> <p>Worry constantly about spread of illness, the health behaviors of their partner, and the need to maintain strict isolation.<br/>Dismiss the likelihood of becoming ill, does not adhere to best-practice health guidelines.</p> | <ul style="list-style-type: none"> <li>• Possible increase in couple disconnection as suggestions/advice from close others heighten couple conflict and/exacerbate distress regarding the issue.</li> <li>• Loss of connection is either maintained or increases as couple struggles to derive constructive ways to redress issue without the help and support of others.</li> <li>• Motivation to redress loss of connection increases in a bid to minimize the need to seek help from others (though efforts may fall short of addressing the issue).</li> </ul> <p><i>Health anxieties</i></p> <ul style="list-style-type: none"> <li>• Both partners likely to experience frustration and annoyance regarding their partner’s level of health concerns.</li> <li>• Conflict over divergent approach to health behaviors; each partner may feel their level of concern and enactment of health behaviors is invalidated by the other.</li> </ul> <p><i>Financial loss</i></p> <ul style="list-style-type: none"> <li>• Conflict may escalate because of differences in characteristics and preferences.</li> </ul> <p><i>Loss of connection to partner</i></p> <ul style="list-style-type: none"> <li>• Couple tension and conflict may ensue if:               <ul style="list-style-type: none"> <li>o Partner A enacts preferences, which Partner B may experience as a loss of face or violation of privacy.</li> <li>o Partner B strongly advocates for their preference, and Partner A may feel invalidated regarding their need to disclose and seek support from others.</li> </ul> </li> </ul> |
|                      | Partner A—rumination over financial concerns.<br>Partner B—downplaying of financial concerns.<br><br>Partner A—tendency to disclose.<br>Partner B—tendency to avoid disclosure. | <p>Partner A—curtail spending and enhance efforts to save (especially during a crisis).<br/>Partner B—does not curtail spending.</p> <p>Partner A—Disclose the loss-related stressor to others.<br/>Partner B—Remain private about loss-related stressor.</p>                                    |  |

behavioral system. This system motivates people to seek proximity to their attachment figures to gain comfort and feel safe in times of threat and distress. Studies of adult attachment have expanded Bowlby's notion of loss to include relationship breakdown [9,10], social disconnection [11], material loss [12], loss of physical/mental well-being [13–15], and mortality salience [16,17]. Attachment theory provides a novel perspective on loss [18] and explains individual differences in attachment-related behaviors, cognitions, and affect (termed attachment orientations) [14,19,20\*]. Although attachment orientations were acknowledged as a vulnerability factor in the original VSAM, the differential effects of attachment orientations on couple dynamics were not elaborated. Thus, our focus on attachment orientations significantly elaborates on the vulnerability component of the VSAM (see Table 2).

### Interdependence theory

In accordance with interdependence theory [5,6,21], a series of causal conditions determines the quality of exchanges in close relationships and their associated outcomes. These conditions include not only external stressors (e.g. the physical and social environment), but also the characteristics and preferences that a person (P) brings to the relationship, the characteristics and preferences that the other (O) brings to the relationship, and the interaction between the two (PxO effects). Although many of these conditions are contained in the three factors of the VSAM, the original model does not articulate how differences and similarities between partners might affect relationship processes and outcomes. Moreover, the focus on personal characteristics is limited to vulnerabilities, yet personal attitudes, preferences, and strengths are also likely to shape relationship processes and outcomes [22,23\*\*]. Therapeutic models of couple functioning that draw on interdependence theory, such as Integrative Behavioral Couple Therapy [23\*\*,24,25], highlight that similarities and differences between partners—both vulnerabilities *and* strengths—are vital to understanding couples' adaptive and maladaptive processes. Furthermore, severe loss-themed stressors should exacerbate the impact of similarities and differences on relationship functioning (see Table 2). Thus, expanding the VSAM to explicitly incorporate the characteristics and preferences of both partners, and the interactions between them, provides an important extension in modeling relationship dynamics at any given point in time and overtime.

### VSAM dynamics: relationships in times of loss

We now illustrate how elaborating on attachment orientations within the VSAM and extending the VSAM to incorporate partner similarities and differences can clarify relationship dynamics and outcomes during loss.

Let's first consider attachment orientations. Maintaining close proximity with close others in disaster relief centers (during natural disasters) or in one's home (during lockdowns or quarantine restrictions, such as with COVID-19) should be especially challenging for highly avoidant individuals, given their preference for greater interpersonal distance [19]. Indeed, the lack of control over physical distance may lead avoidant individuals to respond with more emotional withdrawal, which may be exacerbated if they also experience job-related stress that spills over into the couple relationship. For highly anxious individuals, who yearn to feel more secure [19], contexts that force proximity to close others may meet their desire and preference for greater intimacy. If, however, interactions become acrimonious and their partners pull away, such threats may heighten fears of abandonment in anxious people. Among anxious individuals separated from their partners during a crisis, the reduction in closeness may produce loneliness and amplify relationship distress. Moreover, if anxious individuals face the actual or impending loss of a partner, they run the risk of experiencing complicated grief [26]. Financial stress could also heighten anxious individuals' needs for comfort and reassurance, causing them to focus on their own distress instead of their partner's needs.

The characteristics of highly anxious and avoidant individuals play out in all three adaptive processes, which are depicted in Table 2. Attachment anxiety and avoidance, for example, are both negatively associated with constructive problem-solving but are differentially associated with *maladaptive* conflict behaviors. Specifically, anxious individuals' preoccupation with relationships is reflected in hyperactivating strategies such as destructive engagement, whereas avoidant individuals' discomfort with emotional closeness is reflected in the deactivating strategy of conflict avoidance [27,28]. Research on attachment pairings highlights the consequences of partner *differences and similarities* for conflict interactions [29,30]. Couples that include an anxious and an avoidant partner may enter into demand-withdrawal cycles in which the anxious individual pursues the avoidant partner for validation, intimacy, and discussion of issues, while the avoidant partner retreats physically and emotionally [27,31]. In contrast, couples with two anxiously attached partners may become enmeshed in mutually destructive engagement or pursuer–pursuer struggles during which each individual seeks engagement and satisfaction of their own needs but overlooks those of their partner [27].

With respect to social support provision, anxious individuals may smother or compulsively attempt to help their partner, whereas avoidant individuals are likely to limit their emotional involvement by being distant or controlling. Both types of insecure individuals, as a result, are likely to provide less effective support, especially during disasters and crises. If, for instance, an individual is

distressed or depressed in response to financial concerns following job loss, insecure partners may struggle to provide the appropriate type and amount of support.

Both forms of attachment insecurity also manifest in difficulties with relationship commitment, albeit in different ways [32]. Anxious individuals tend to be highly committed to their relationships and invest time, effort, and resources into them, but their commitment is often tenuous because of chronic relationship worries and dissatisfaction [32,33]. In contrast, avoidant individuals usually invest less in their relationships [33], so differences in partners' levels of commitment can become a point of contention that also undermines support.

Turning to other vulnerability factors, trait aggression, which involves disregard for others and lack of empathy, is likely to facilitate destructive conflict patterns marked by manipulation and control [34]. Individuals high on trait aggression or anger often fail to respond in validating or understanding ways that meet their partner's needs. Particularly during stressful times, they are likely to privilege their own needs over those of their partner. In addition, they tend to be less committed to relationships, often seeing their partners as a means to an end and not being willing to invest time or resources in the relationship [35].

People high in internalizing-related traits and struggling with depression and/or anxiety-related disorders often lack the cognitive-affective and behavioral capacities to problem-solve relationship issues effectively, which often fuels relationship negativity. Given that neuroticism and internalizing disorders involve chronic worries and low efficacy, these individuals are likely to be hypervigilant and hypersensitive to loss-related stressors. They also display poorer relationship adjustment as their chronic worries spill over into their relationships. In this respect, neuroticism and the mental health status of both partners may attenuate adaptive relationship processes and exacerbate maladaptive responses.

Negative relationship outcomes are shaped not only by each partner's mental health vulnerabilities and negative traits but also by partner *similarities and differences* in these traits. For instance, a couple in which only one partner has a mental health issue is associated with increased emotional distance between partners [36]. Furthermore, couples with concordant high levels of depression or neuroticism experience lower relationship satisfaction [37], whereas couples in which both partners have aggressive tendencies report maladaptive relationship processes [38].

Finally, individuals who experience chronic substance misuse are susceptible to even greater use during stressful times to regulate their distress [39]. Substance misuse is a key factor in the perpetration of partner

maltreatment and a predictor of greater relationship dissatisfaction [40]. Moreover, loss-related stressors may strengthen the link between substance misuse and relationship difficulties. Indeed, partner violence is most likely to occur when a vulnerability (e.g. a history of substance misuse) is coupled with high external stress, limited adaptive processes, or other personal vulnerabilities [41]. Furthermore, conflict and aggression can ensue when partners differ in their levels of substance abuse [42] or when one partner is addicted and the other is not (or is trying to stop using). These partner differences may perpetuate intractable issues, further eroding relationship satisfaction.<sup>1</sup>

### Implications for research, policy, and practice

With regard to research, our extended VSAM has important implications for studying couples (and close relationships) during disasters and crises marked by loss. First, the integrative nature of the model highlights the need to consider the interplay between vulnerabilities, stressors, and adaptive processes. The model, therefore, underscores the importance of assessing individual differences relevant to loss, as well as partner differences and similarities that may affect how couples navigate stressors. Second, because our extended model focuses on relationship stability and change, research should be designed to capture multiple assessment waves and use analytic procedures that can model linear and non-linear trajectories over time. Past studies of responses to natural disasters and crises have identified longitudinal, within-person patterns of adjustment [43] but have not identified the relationship dynamics that impact relational adjustment. Monitoring relationship adjustment plus associations between the growth trajectories of vulnerabilities, stressors, adaptive processes, and relationship evaluations may reveal thresholds or 'tipping points' at which certain couples report relationship declines or improvements. Identifying these thresholds could significantly advance our understanding of relationship adjustment during significant loss. Third, given the importance of partner similarities and differences in relationship outcomes, research should model dyadic configurations of similarities and differences in vulnerabilities and adaptive processes. Such research may identify classes of couples at greater risk of experiencing relationship difficulties during and after loss-related experiences.

In terms of policy and practice, the extended VSAM highlights that different types of couples are likely to benefit

<sup>1</sup> It is important to note that vulnerable couples can maintain a stable relationship, provided that stressors remain low or support and resources are in place to buffer them. Nevertheless, such couples may be vulnerable to sharp declines in relationship quality if stressors increase or supports are removed. Likewise, high-functioning couples (those with strong adaptive processes) may be able to weather significant loss-related stressors and hardships, but if they become too great, such couples may also experience lower relationship satisfaction.

from different types of support strategies and public health responses. These strategies and responses may include a mix of therapeutic and public health programs that target the relationship itself (e.g. strengthening adaptive processes) or that address existing vulnerabilities, including partner similarities and differences or stressors. By highlighting the interconnections between all these factors, our model suggests that intervening in any of the three components could have additive or multiplicative effects in enhancing relationship well-being. Thus, there are multiple avenues and points of intervention to support couples during disasters and crises.

If couples have few vulnerabilities and evidence reasonably effective adaptive processes but express concerns about maintaining their relationships during loss, relationship education programs that draw attention to couples' assets and strengths may be effective [44]. If, however, couples encounter major stressors and have serious vulnerabilities along with limited adaptive processes, skills-based programs are less likely to be helpful. Such couples may need evidenced-based couple therapy or secondary interventions to help them understand and short-circuit destructive interaction patterns [45–48] (this issue).<sup>2</sup>

## Conclusion

In this article, we have described the value of the extended VSAM to help researchers, policy-makers, and practitioners support couples while they swim in 'rough seas'. The extended VSAM highlights how different couples are likely to experience varying relationship trajectories during crises such as the COVID-19 pandemic. It also illustrates how focusing on key enduring vulnerabilities—including insecure attachment orientations, external stressors, adaptive processes, and differences and similarities between partners—can sharpen the field's response to meeting the needs of those who are most vulnerable.

## Conflict of interest statement

Nothing declared.

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