The Interpersonal Mechanisms of Prenatal Couple Conflict Dynamics

by

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B.Sc., University of British Columbia Okanagan

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We acknowledge and respect the Lək^{w}əŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Lək^{w}əŋən and W̱ SÁNEĆ Peoples whose historical relationships with the land continue to this day.

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Abstract

According to Kluwer's (2010) *transition to parenthood* model, attachment insecurity (attachment avoidance and anxiety) is a prenatal risk factor that can affect the ways couples manage conflict. However, the specific mechanisms that link attachment to conflict have not been elucidated. This thesis was the first to test emotional flooding, a type of interpersonal emotion dysregulation, as a mediator for the relationship between attachment insecurity and prenatal couple conflict behaviours. We also sought to understand the complex interplay between attachment and emotional flooding from a dyadic lens, examining how each partner's attachment style might interact to predict heightened emotions during conflict. Cross-sectional data were collected from 98 couples who were expecting their first child. Data were analyzed using hierarchical linear modeling (Raudenbush et al., 1995), polynomial regression (PR) and response surface analysis (RSA; Shanock et al., 2010), and variations of actor partner interdependence models (APIM; Cook and Kenny, 2005). The interaction between avoidant men and anxious women predicted greater emotional flooding in men. Avoidance matching between partners also predicted greater flooding in women. Finally, flooding mediated the relationship between attachment anxiety and displays of distress in men and displays of hostility in women. Results support literature citing coercive dynamics and the emotional antecedents of aversive conflict behaviours. Limitations and clinical implications are also discussed.

Keywords: adult attachment, emotional flooding, prenatal couples, conflict behaviours

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Introduction

The transition to parenthood is a period of readjustment for the family system and constitutes a period of stress and change at both the individual and dyadic level (Miscioscia et al., 2021). The experiences of parenthood vary between couples and individuals (Delmore-Ko et al., 2000); while some couples note positive gains over this period, other couples report negative changes, such as increased conflict and decreased intimacy and other positive displays (Kluwer, 2010). While there are numerous studies examining the individual (e.g., increases in postpartum depression; Epifanio et al., 2015) and dyadic (e.g., declines in relationship satisfaction; Mitnick et al., 2009) changes that occur once a child is born, parents are rarely studied as a dyad in the field of perinatal psychology (e.g., during pregnancy; Seefeld et al., 2022). Studies that do examine this period focus on prenatal predictors of postpartum functioning, such as personality traits, mental health problems, and couple satisfaction (Kuersten-Hogan & McHale, 2021). Fewer studies utilize observational methods, with many examining parental interactions during the postpartum period (e.g., triadic interactions of parents with their child; Kuersten-Hogan & McHale, 2021). Utilizing observational measures of prenatal family dynamics is useful for improving prenatal intervention programs that examine the change in romantic relationship functioning that couples experience during this period, potentially creating dyadic risk factors postnatally.

Therefore, the aim of this master's thesis is to examine a well-researched paradigm of relationship dynamics, couple conflict, in order to: 1) examine known risk factors that might be particularly salient during the prenatal period (e.g., insecure attachment style) 2) utilize observational methods to examine communication in both members of a dyad prenatally 3)

elucidate key mechanisms (e.g., interpersonal emotion dysregulation) that may connect risk factors to observed communication behaviours through an interpersonal framework.

Conceptual Frameworks for Prenatal Dynamics

According to Bowen's *Family Systems Theory* (Bowen, 1993), the family is formed by the interrelationship between individuals whose emotions and behaviours are dynamically interconnected. The couple dyad is a subsystem within the family unit that can benefit or suffer from changes to the system, such as the transition to parenthood. One reason involves the stress associated with having a child; this stress is not contained within the individual but can be mutually influential to both partners. However, this interdependence also suggests that resources and positive behaviours can affect both parents in an enhanced manner. For example, Don and colleagues (2021) found that partners' positive emotions were associated with elevated relationship satisfaction postpartum. Overall, systems theory focuses on the maintenance of equilibrium between subsystems (e.g., romantic partners), even if the "setpoint" is not ideal. For example, if couples experience conflict, the ultimate goal is to re-achieve the previous baseline prior to the argument (e.g., where both partners are not actively yelling or fighting), even if the couple was unhappy beforehand.

Other researchers have specifically framed the transition to parenthood as a crisis, moving towards a redefinition of the transition being stressful for most couples (Kuersten-Hogan & McHale, 2021). Others, like Cowan and Cowan (1985), contended that rather than viewing transitions as crises, family transitions are merely processes that unfold over a particular time frame. Similar to family systems theorists, the couple relationship is propelled into disequilibrium as both members experience changes at the individual, couple, and intergenerational level (Cowan & Cowan, 1985). Cowan and Cowan (1985) also emphasized that

the stress of becoming parents merely exacerbates pre-existing intra- and inter-personal problems. Rather than focusing on re-establishing a previous baseline, the disequilibrium of parenthood might force the couple to establish a new setpoint, one that could be better or worse for couple functioning.

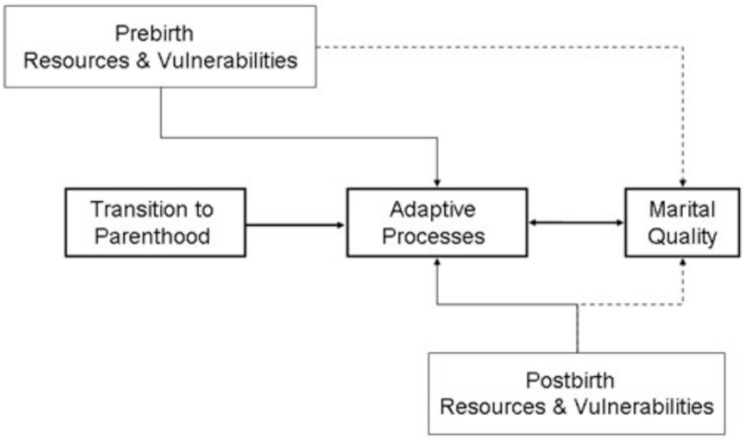
Beyond these systemic lenses, there are other theoretical frameworks that help to explain parenthood transitions; however, few theories have been explicitly applied to prenatal family dynamics. Lewis (1989) regarded the transition to parenthood as a developmental task due to its transitional nature where the family undergoes change. Viewing the transition to parenthood as a developmental task provides a framework for understanding challenges and opportunities for growth that new parents face, highlights the skills that develop during this period (e.g., effective co-parenting), and acknowledges the emerging dynamics between parent-child and family systems at large. The nature and direction of this change can be best predicted by the structural organization during the time period just prior to the transition. Therefore, highly competent families with flexible and effective coping skills at the prenatal period are best equipped to maintain or develop adaptive structures during the transition to parenthood. These families might be able to navigate potential stressors more effectively than parents who are less flexible in their ability to navigate difficult times.

Kluwer's (2010) *transition to parenthood model* (see Figure 1) focuses on perinatal factors (e.g., prebirth resources and vulnerabilities) that ultimately affect how couples transition across parenthood. The transition to parenthood model attempts to describe how couple communication and prebirth/postbirth resources and vulnerabilities affect marital quality. Prebirth resources and vulnerabilities refer to factors that not only affect how couples adapt to the transition to parenthood, but also affect the trajectory of this life stage, including whether this

transition causes a negative or positive change in marital quality. It includes a host of factors including socioeconomic status (Belsky & Rovine, 1990), gender (Twenge et al., 2003), planned versus unplanned pregnancy (Bouchard et al., 2006), depression (Campbell et al., 1992), attachment style (Karney & Bradbury, 1995), and gender attitudes (MacDermid et al., 1990). These prebirth resources and vulnerabilities can affect the way that couples communicate/behave with one another, termed adaptive processes. Adaptive processes refer to the overarching class of couple behaviours, such as conflict behaviours, spousal support, relationship maintenance behaviours, and overall communication techniques (Kluwer, 2010). Prebirth resources and vulnerabilities and their associations with adaptive processes are captured in the *Vulnerability Stress Adaptation* (VSA; Karney & Bradbury, 1995) model and the *enduring dynamics model* (Huston et al., 2001).

Figure 1

Kluwer's (2010) Transition to Parenthood Model



The VSA model focuses on external stressors that require adaptation and accompanying adaptive processes of how partners and couples challenge stressors and transitions (Gottman, 1979; Hill, 1949). In addition, the model accounts for enduring vulnerabilities that might contribute to the experience of the stressor and the ways in which couples adapt to new

situations. Overall, this model has three main tenets that govern relationship quality changes: it is the dynamic interplay of each partner and who they are (i.e., enduring vulnerabilities), the situations they encounter (i.e., transition to parenthood), and how the couple responds to those situations (i.e., adaptive processes; Kluwer, 2010). This theory defines the term "adaptive processes" as partners' thoughts and actions that are used to challenge stressors and transitions that couples face. This model posits that relationship quality is enhanced when couples deal with stressors in constructive ways (e.g., utilizing problem solving) and worsened when poor adaptive strategies are chosen (e.g., utilizing displays of anger).

The transition to parenthood model also draws on the enduring dynamics model (Huston et al., 2001), which focuses on how relationships might deteriorate over time. Specifically, it proposes that interpersonal patterns are established during the initial stages of the relationship and are subsequently maintained over time. Relationship problems, therefore, can often come from partner shortcomings that existed at the beginning of the relationship itself (e.g., personality, conflict management strategies; Karney & Bradbury, 1995). These findings have been demonstrated across the transition to parenthood, as Kluwer and Johnson (2007) found that postnatal relationship distress often stems from issues that existed during pregnancy, such as the frequency of conflicts. Cox and colleagues (1999) found that partners' prenatal interaction styles were associated with the initial level of marital satisfaction and the rate of decline across the transition to parenthood. These findings suggest that the transition to parenthood often intensifies problems that existed prior to pregnancy. This is why certain couples are at greater risk during the period, while other couples can experience no changes or even improvements across the transition to parenthood. What might predict the subsequent declines? Research on couples at the transition to parenthood has found that those exhibiting low marital adjustment (Wallace &

Gotlib, 1990), high conflict frequency (Kluwer & Johnson, 2007), low positive communication (Cox et al., 1999), and insecure attachment (Rholes et al., 2001) are often characterized by decreased relationship satisfaction over time.

Purpose of the Study

Currently missing in existing models are the specific mechanisms that link prebirth resources/vulnerabilities to adaptive processes, and how the transition to parenthood offers a unique backdrop to examine this association. One commonly studied vulnerability in couples research is partners' attachment styles (more notably attachment insecurity) and its association with behaviours during conflict (e.g., an adaptive process). A wealth of research has found that attachment insecurity is associated with destructive responses (e.g., poor emotion regulation during conflict) that are associated with poor outcomes in couple interactions (e.g., Overall et al., 2022), which further undermines well-being in both partners and perpetuates relationship insecurities. This association is particularly salient during times of stress, since stress activates the attachment system in individuals (Mikulincer & Shaver, 2019), influencing the behaviours each partner enacts (Ben-Naim et al., 2013). From a Behavioral Systems perspective (Bowlby, 1973), once the attachment system is activated, behaviors commonly used include those to seek proximity, support, and protection; on the other hand, the inhibition of proximity, denial of needs, and maintenance of emotional/cognitive distance from others are other responses driven from an activated attachment system.

It has been theorized that emotions play a crucial role in regulating the attachment system and its corresponding behavioral patterns. For example, those with insecure attachment systems can have exaggerated appraisals to threats and actually react to threats before others do (Ein-Dor et al., 2011); these individuals also find it difficult to suppress the negative feelings that arise

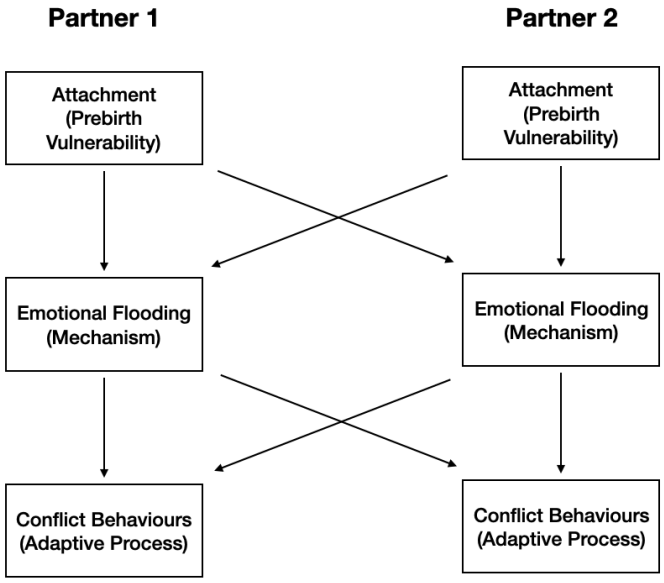
when faced with perceived stress (e.g., Ein-Dor et al., 2011). Insecure attachment can also manifest itself in behavioral distance strategies to deny or suppress negative emotions and its accompanying distress (Berant, Mikulincer & Florian, 2001). In terms of relationship interactions, insecure attachment can make it difficult to suppress negative thoughts/feelings, clouding one's ability to sensitively respond during times of need (e.g., responding empathetically during a conflict; Mikulincer & Shaver, 2005). Insecure attachment can also manifest in an apprehension to disclose distress and its accompanying emotional experiences to one's partner, creating a distance in the relationship (e.g., Shaver & Mikulincer, 2007). In recent years, scholars have begun to emphasize a dyadic approach to studying attachment styles in partners, such that the interplay of attachment styles, and their associated emotion regulatory mechanisms, can help uncover how partners behave during conflict (an inherently dyadic process; Lozano et al., 2021).

Therefore, the prenatal period is a critical window of opportunity to not only examine the attachment-behavior connection, but also examine the underlying emotional mechanisms that might underly this association. The prenatal period serves as a time of heightened vulnerability due to the increased stress of this life stage (e.g., shifting of parental responsibilities), which is necessary when examining the activation of attachment systems in partners. With the accompanying stress associated with expecting a first child, and the novelty of this period to both partners, the attachment system and the behaviors elicited might also offer a new avenue to explore emotions and their regulatory mechanisms. For example, having a baby can be a joyful yet stressful experience, but it can have differing psychological repercussion for some parents (e.g., heightening personal and relational doubts; Mikulincer & Shaver, 2019). Therefore, our study aims to examine the emotional mechanisms that link prebirth vulnerabilities to conflict

behaviours (an adaptive process) during the prenatal time period (see Figure 2). More specifically, this study aims to examine couples at risk by elucidating the connection between attachment insecurity, conflict behaviours, and the proposed mechanism of interpersonal emotion dysregulation connecting the two constructs. In particular, this study utilizes the construct "emotional flooding", which taps into the interpersonal nature of dysregulated emotions within dyads. This study addresses the gaps in the literature by 1) gathering both partners' responses to examine the dyadic association between prebirth vulnerabilities and adaptive processes 2) utilizing observational methods that have scarcely been applied to prenatal family dynamics, and 3) extending the intrapersonal and interpersonal mechanisms of emotion dysregulation in couples.

Figure 2

Conceptual Model examining the Dyadic Effects of Attachment (Prebirth Vulnerability) and Conflict Behaviours (Adaptive Process) Through the Mechanism of Interpersonal Emotion Dysregulation



Literature Review

Prebirth Vulnerability: Adult Attachment

Personal and situational characteristics can contribute to how couples adapt to the transition to parenthood (Karney & Bradbury, 1995; Kluwer, 2010). One characteristic that has been studied less extensively is each partner's attachment style. Especially understudied is how the combination of partners' attachment styles modulates adaptive processes.

Adult Attachment Theory

Bowlby (1973) claimed that humans were born with an innate psychobiological system (the attachment behavioural system) that motivates proximity seeking to significant others (attachment figures). Due to the unreliability of attachment figures, secondary attachment strategies are developed, which can involve hyperactivation or deactivation of the attachment system (Cassidy & Kobak, 1988). Hyperactivation is characterized by efforts to attain proximity to attachment figures and include clinging, controlling, and coercive behaviours (Shaver & Mikulincer, 2002). Deactivating strategies involve the inhibition of proximity-seeking tendencies and include down-regulation of affective states to handle stressors alone.

Hazan and Shaver (1987) extended attachment theory to include adult romantic attachment. In their paper, they identified three styles of adult attachment: secure, anxious/ambivalent, and avoidant. Adult attachment was then conceptualized using a four-category model with the attachment styles of secure, preoccupied, dismissive, and fearful (Bartholomew & Horowitz, 1991). Psychometric research has shown that attachment styles can be measured in two independent dimensions: attachment anxiety and attachment avoidance (Brennan et al., 1998). People with insecure attachment have higher levels anxious attachment or avoidance attachment, or both; whereas individuals with secure attachment fall on the lower ends

of the spectrums for both dimensions (Fraley et al., 2000). In a similar fashion to the hyperactivating/deactivating strategies mentioned, attachment anxiety is characterized by dependence and a need for closeness and reassurance from one's partner. Attachment avoidance is characterized by excessive independence and a desire to maintain emotional distance from one's partner. Based on these strategies for seeking security through the attachment system, different ways of interacting with romantic partners emerges during times of distress and characterize secure, anxious, and avoidant attachment (Mikulincer & Shaver, 2005).

People with anxious attachment fear rejection by their partners due to finding fault within themselves. Anxiously attached individuals are also hypervigilant to threats to the relationship, such as conflict or perceived abandonment (Collins & Read, 1990). To alleviate this distress, individuals with an anxious attachment style seek reassurance from their romantic partner (Mikulincer & Shaver, 2007). People with avoidant attachment perceive others as incapable of alleviating their distress, and are uncomfortable with vulnerability in themselves and with their partners. They are hypervigilant to threats to independence, which protects them from being hurt by a romantic partner (Collins & Read, 1990). To decrease distress, avoidant individuals suppress negative feelings (e.g., feelings of sadness or hurt; Mikulincer & Shaver, 2007).

Interpersonal Attachment Theory

In addition to the strategies employed by both individuals, certain pairings of attachment styles between partners have also been implicated in maladaptive dynamics. Anxious-avoidant pairs might be particularly volatile because each style has conflicting regulation strategies. Avoidant individuals strive to maintain relational distance and independence and utilize deactivating strategies in the face of threats, such as downplaying distress (Beck et al., 2013). Anxious individuals strive to attain relational closeness and use hyperactivating strategies in the

face of threats, leading to an overreliance on their partner for comfort and support (Beck et al., 2013). In a study examining distress in anticipation of and during conflict in newly married couples, it was found that one partner's attachment avoidance interacted with the other partner's attachment anxiety to predict spouses' self-reported distress in anticipation of and during conflict discussions. More specifically, husband's avoidance interacted with their wives' anxiety to predict husbands' distress before and during conflict; avoidant husbands reported feeling more distressed in anticipation of conflict when their wife was high in anxiety. To contrast, husband's anxiety interacted with their wives' avoidance to predict both spouses' self-reported distress during conflict; husbands high in anxiety reported feeling marginally more distressed when their wife was high in avoidance, whereas wives who were high in avoidance reported feeling more distressed when their husband was low in anxiety. It was also found that both partners' levels of anxiety did not interact to predict distress (Beck et al., 2013).

These findings support the complementary hypothesis of attachment, which predicts that partner preference is based on how well partners confirm attachment expectations (Holmes & Johnson, 2009). For example, this theory suggests that anxious individuals should prefer avoidant partners, because this pairing confirms their negative expectations of partners being distant in relationships (Holmes & Johnson, 2009). Avoidant individuals, on the other hand, should prefer anxious partners, confirming their negative expectations of partners being clingy and overly reliant (Holmes & Johnson, 2009).

Recent research has conceptualized a new theoretical framework to explain attachment styles in romantic partnerships. Grounded on the similarity hypothesis, which predicts that individuals will show preference towards partners with a similar attachment style to their own, the dyadic regulation process posits that the similarity in attachment styles seen between partners

is implicated in relationship processes (Holmes & Johnson, 2009). Wang et al. (2022) found that dyads scoring equally high or low in anxiety can possess a better-functioning relationship than dyads where only one individual is high in anxiety. They also found that dissimilarity in avoidance was predictive of better relationship functioning, which is contrary to the similarity hypothesis (Wang et al., 2022).

Interpersonal Attachment Theory at the Prenatal Period

Studies examining attachment styles in couples at the prenatal period are sparce. When studies do examine attachment styles at this period, they typically focus on (in)security and its effects on coparenting. For example, Miscioscia and colleagues (2021) examined whether similarities in attachment styles between partners affected the co-parental alliance in couples without a child. They found that partners' average level of attachment security impacted pre-conception co-parental alliance only when partners were matched on levels of attachment security. They also found that attachment differences between partners negated the positive benefits of attachment security on coparenting behaviours; when parents were discrepant in their reports of attachment styles, attachment security did not lead to increases in the co-parental alliance.

Studies examining attachment at the parenthood period also tend to focus on caregiver-child attachments, rather than partner-partner attachment pairings. For example, the relationship between maternal-infant interactions and attachment quality affecting infant outcomes has been well established (e.g., Tryphonopoulos et al., 2014). Studies have also utilized numerous observational measures to confirm this association, such as the Strange Situation Procedure (Ainsworth et al., 1978), Attachment Q-Sort (Waters & Deane, 1985), and the Risky Situation Procedure (Paquette & Bigras, 2014). However, most of the literature examining caregiver-infant

attachment dynamics have relied solely on maternal observations with their child (Tryphonopoulos et al., 2014), limiting generalizability to differing couple configurations.

Since it has been found that the quality of the marital system can impact the couples' coparenting system (Kuersten-Hogan & McHale, 2021), understanding the risk factors and processes that impact the dyadic relationship is crucial. This is especially salient as the couple transitions from a dyadic to triadic system with the arrival of their child. This has been stressed by Hazen and researchers (2021) who observed expectant couples during a relationship discussion task and found that negative affect during this discussion predicted mothers' and fathers' emotional withdrawal from their infants at 8 months postpartum. This suggests that negative prenatal relationship interactions might spillover into parent-child interactions due to conflict depleting parents' emotional resources and heightening emotional sensitivity postpartum. This spillover could also be attributed to attachment style, such that attachment insecurities in partners predicts more coparenting conflict and less cohesion with their child postnatally (Talbot et al., 2009). This dynamic could lead to the intergenerational transmission of attachment insecurities, based on the modeling of behaviour from parent to child (Paley et al., 2005). Overall, given attachment dynamics having large implications for observed behaviour in all subsets of the family system (e.g., parent-parent, parent-child, etc.), understanding how attachment insecurity might account for risk factors in prenatal couple dynamics is warranted. One such observational paradigm, couple conflict, can help uncover who is at risk prenatally, with implications for postnatal family dynamics.

Adaptive Processes: Couple Conflict Interactions

According to the Transition to Parenthood Model (Kluwer, 2010), individual characteristics (e.g., attachment styles) affect adaptive processes in couples. Adaptive processes

refer to the ways couples deal with relationship difficulties and conflict situations (Karney & Bradburry, 1995). Adaptive processes across the transition to parenthood have typically been studied during conflict interactions, since the way couples handle conflicts are one of the most important determinants of marital quality (Gottman, 1993). Viewed through behavioral theory, marital interactions play a central role in determining which couples will adapt to the new circumstances of childbirth and those that might be at risk of poor adjustment during this period.

Numerous studies have examined adaptive and maladaptive cycles of behaviours shown in couples over the transition to parenthood. Kluwer and colleagues (2002) found that demand/withdraw interactions increased, and constructive interactions decreased across the transition to parenthood, specifically seen between 5 and 14 months postpartum. Crohan (1996) found that new parents reported more negative and less positive behaviours and increased avoidance across the transition to parenthood. They also reported more passive avoidance (pulling away from one's partner), which was not seen in a control group of childless couples (Crohan, 1996). Therefore, the explicit examination of couples across the transition to parenthood might yield findings that are distinct from couples who are not expecting their first child.

In addition to conflictual interaction patterns, positive adaptive processes have also been examined. Termed relationship maintenance behaviours, positive interactions in which partners communicate with each other to create intimacy and closeness have been implicated in relationship satisfaction across the transition to parenthood (Huston & Chorost, 1994). These relationship maintenance behaviours can take the form of discussing problems, expressing needs, and accommodating partners' desires (Kluwer, 2010). It has been found that relationship maintenance behaviours decrease after the transition to parenthood, along with emotional

availability and responsiveness (Curran et al., 2005). Overall, the research has found that marital conflict increases over the transition to parenthood and conflict interactions become more negative and less positive.

(Mal)adaptive Processes and Gottman

Similar to Kluwer's (2010) model on adaptive processes, Gottman (1998) suggested that relationship functioning depended on a mixture of what the individual brought into the relationship (intrapersonal factors such as personality) and the effect of the interaction on each individual in the relationship (interpersonal factors). Gottman's work has largely focused on observable behaviours (e.g., 1993, 1998), much like the adaptive processes outlined by Kluwer (2010). In his work, Gottman (1993, 1998) found strong support for the ratio of positive to negative interactions in behaviour that is crucial to maintain adaptive relationship functioning. Gottman claimed that a ratio of five positive interactions to one negative interaction is required for relationships to succeed. If the ratio favours negative interactions, the couple is at risk for distress and potential dissolution. Two important aspects of couple relationships identified by Gottman as contributing to the stability or distress of intimate relationships are conflict resolution styles and the presence of four relationship distress indicators, also known as the four horsemen of the apocalypse.

Gottman's Four Horsemen

Gottman (1993) researched the cascade of behaviours that predict marital dissolution. He noted that not all negativity was equally corrosive and that four behaviours were more predictive of divorce than others. These behaviours are criticism, defensiveness, contempt, and stonewalling. Criticism refers to attacks relating to someone's personality or character, rather than a specific behaviour (Gottman, 1999). This can involve kitchen sinking, which often takes

the form of "you always do" or statements than include the word "should" (Gottman, 1993). Contempt is an attempt to insult one's partner, often communicating a lack of respect. These behaviours can include eye rolling, dismissive drumming of fingers while a partner is speaking, or any other behaviour that indicates a dismissal of whatever one's partner is saying/doing. Defensiveness is a form of communication that denotes blamelessness. A common phrase is "it's not my fault" (Woodin et al., unpublished). Defensiveness can also take the form of "yes but" responses, which denies or redirects communication rather than responding to the original prompt. Stonewalling involves a lack of attention towards one's partner. It includes a total lack of listening behaviour and can also take the form of actively tuning out one's partner (Woodin et al., unpublished). Gottman (1993) found a discrepancy between one's internal physiological responses and their outward affect; during stonewalling, individuals heart rate and galvanic skin response indicated a high level of arousal even though they may appear outwardly unaffected. Stonewalling, therefore, might be a method to control powerful emotional responses that feel very overwhelming or uncontrollable. While these behaviours are all aversive, Gottman (1993) outlined these behaviours in a process cascade, where criticism leads to contempt, which leads to defensiveness, which leads to stonewalling. Gottman's work suggests that these behaviours are particularly corrosive to marital stability.

Adaptive Behaviours During Conflict

Gottman's research also outlined positive behaviours in the 5:1 ratio that predict highly stable relationships, termed regulated couples. More specifically, these couple types, who handle conflict in adaptive ways, can be further classified as either validating, volatile, and conflict-avoiding (Gottman, 1994). The key variables that distinguish between these groups is the degree to which partners attempt to influence on each other during conflict and the timing of the

attempts to influence. Validating couples handle conflicts openly and cooperatively by incorporating high levels of positive affect. Validation during conflict includes letting one's partner know that their opinions are valued, and their emotions are valid, even if there is a disagreement (Holman & Jarvis, 2003). Volatile couples also address conflicts openly, but are competitive rather than cooperative (e.g., marked by increased negative affect and persuasion attempts; Gottman, 1994). Conflict-avoiding couples attempt to downplay their negative affect and deal with differences in a covert manner (Gottman, 1994).

Recent researchers have identified positive conflict behaviours into two main categories, based on the level of active engagement/emotional intensity they require. These categories include problem-solving behaviours and acts of intimacy. Early couple researchers have emphasized the utility of problem-solving and its associations with adaptive outcomes (Jacob & Margolin, 1986). Problem-solving can include attending to one's partner, offering disclosure, and giving support (Feeney & Karantzas, 2017) and are classified as "constructive engagement" or cooperative behavior. Extant literature suggests that the ability to communicate high-intensity material effectively is important (Jacobson & Christensen, 1996). These behaviours, such as self-disclosure during an argument, repair seeking, and communicating emotional material (Mirgain & Cordova, 2007) are often classified as "intimacy enhancing behaviors". It has also recently been theorized that the absence of these positive types of behaviors during conflict can not only lead to increased conflict (Gottman, 1994), but has been associated with higher rates of divorce (Houts et al., 2008).

Attachment and Conflict During the Prenatal Period

Examining conflict behaviours and attachment styles in couples during the prenatal period is crucial to understand the link between these constructs. For example, because each

parent brings their own childhood history to the transition to parenthood, the attachment representations they draw on during marital interactions can also affect how they establish caregiver-infant attachment representations as well (Miscioscia et al., 2021). This was shown in a longitudinal study that found that partners' representations of their parents' marriage affected how emotionally attuned partners were during triadic interactions with their child (e.g., preparing a snack, changing their child's clothes, etc.; Hazen et al., 2021). More specifically, wives who recalled a highly conflictual parental marriage were more likely to be less emotionally attuned with their partner, demonstrating the intergenerational transmission of negative interaction patterns over time.

In terms of observed behaviours and its relationship with attachment pairings between romantic partners during conflict, Poulsen and colleagues (2019) found that prenatal couples where the husband had an insecure attachment style displayed greater hostility compared with couples with secure husbands. In pairs of secure wives and their insecure husbands, both parents were less sensitive with their infants postnatally. Moreover, prenatal marital affect, assessed via observational coding of positive and negative behaviours, mediated the link between joint attachment pairings of the couple prenatally and the parents' sensitivity and hostility directed towards their child. These findings demonstrate the value in examining the couple as a dyadic system, where combinations of attachment styles in partners also predicts combinations of couple behaviours.

Overall, understanding how attachment styles and behaviours interact during the prenatal period is crucial to identify at-risk couples as they progress across the transition to parenthood. What most of these studies allude to are the emotional mechanisms that are depleted as parents progress through the prenatal period. However, studies have not explicitly examined what these

emotional mechanisms are directly, nor have emotions been studied as extensively through an interpersonal framework (e.g., examining each partner's emotions and how they interact with both attachment styles and conflict behaviours). Therefore, adopting a dyadic point of view when examining the interplay between these constructs might shed light on the associations between attachment theory, conflict behaviours, and interpersonal emotion dysregulation.

Interpersonal Emotion (Dys)regulation Linking Prenatal Vulnerability Factors to Adaptive Processes

As mentioned previously, both individual vulnerabilities (e.g., attachment style) and adaptive processes (e.g., conflict behaviours) have been proposed as factors that predict relationship functioning at the transition to parenthood. What has been examined less extensively are the mechanisms that link how attachment styles relate to adaptive processes, especially during the perinatal period (Brandon et al., 2009). We propose that interpersonal emotion dysregulation is a mechanism that links how attachment insecurity relates to maladaptive conflict behaviours in couple interactions.

The attachment system is connected to emotion regulation in the brain. For example, the areas of the brain that are activated during attachment related cognitions (e.g., hypervigilance) appear to be the same areas that are activated during emotion regulation (Coan et al., 2006). This is consistent with Bowlby's theory of attachment in which a caregiver decreases distress and provides a secure base to a child (Bowlby, 1980). It also aligns with adult attachment theory that posits that regulating negative emotions occurs through seeking proximity to and support from attachment partners (Mikulincer & Shaver, 2019). Therefore, it is logical to conclude that the development of an insecure attachment may increase the likelihood of interpersonal emotion dysregulation.

From a theoretical standpoint, the secondary attachment strategies used in romantic relationships could be viewed as dysregulated since support seeking and interdependence of emotions could be rewarding and help an individual maintain their romantic relationship connectedness (Shaver & Mikulincer, 2002). As mentioned, these secondary attachment strategies can include hyperactivating behaviours to maintain proximity to attachment figures (e.g., clinging, controlling, or coercive actions; Shaver & Mikulincer, 2002) or deactivating behaviours to down-regulate affective states alone (e.g., avoidance, suppression; Shaver & Mikulincer, 2002). In addition, these insecure attachment strategies encourage activation or suppression of negative emotions and reliance on distorted cognitions of the self and other's availability, which can impact mental health (Mikulincer & Shaver, 2007). In terms of emotion regulation strategies, it has been found that anxiously attached individuals tend to perceive emotions as aligned with attachment goals, which can even lead to the exaggeration of emotions (known as distress-intensifying appraisals; Mikulincer & Shaver, 2007). Distress-intensifying appraisals are a two-edged sword, where the individual appraises stressful events as threats rather than challenges, and the individual perceives themselves as deficient in coping strategies (Mikulincer & Shaver, 2007). Avoidant people, on the other hand, inhibit emotional states that do not align with the goal of keeping their attachment system deactivated (Mikulincer & Shaver, 2007). Moreover, these strategies are used to inhibit negative emotions, such as fear, sadness, and distress, because these emotions are associated with threats and vulnerability. Deactivating strategies also can cause people to avoid noticing their own emotional reactions (Mikulincer & Shaver, 2007).

Current Methods to Examine Interpersonal Emotion (Dys)regulation

Interpersonal emotion regulation (IER) processes occur when a person attempts to regulate their emotional reactions to external events within the framework of their social relations with others, including intimate relationships (Zaki & Williams, 2013). More specifically, a social interaction can trigger two types of interpersonal emotion regulatory mechanisms: intrinsic and extrinsic processes. Intrinsic mechanisms occur when a person initiates social interactions to modulate their own emotions. These are self-initiated, internal processes, and rely on an individual's abilities and strategies to manage their emotional states. An example includes disclosure of feelings to a romantic partner to alleviate distress in the individual. Extrinsic emotion regulation occurs when a person initiates social interactions to influence the emotional states of another, which indirectly affects them. These are other-initiated, social processes, and rely on external influence to help the individual. An example includes displaying empathy during conflict to alleviate distress in the other partner.

Numerous scales have attempted to capture forms of interpersonal emotion (dys)regulation. However, they differ in their intrinsic/extrinsic focus, or fail to account for this distinction entirely. For example, the Interpersonal Emotion Regulation Questionnaire (IERQ; Hofmann et al., 2016) defines IER as a reliance on others in the regulation of one's own emotions (intrinsic interpersonal emotion regulation). They focus on four factors: enhancing positive affect, perspective taking, soothing, and social modeling. The Difficulties in Interpersonal Regulation of Emotions (DIRE; Dixon-Gordon et al., 2018) scale focuses on difficulties in intrinsic interpersonal emotion regulation and contains interpersonal strategies (venting and reassurance seeking) and intrapersonal strategies (acceptance and avoidance). The Emotion Regulation of Others and Self scale (EROS; Niven et al., 2011) assesses strategies used to deliberately regulate emotions. They contain intrinsic affect-improving (e.g., thinking about

positive aspects of the situation), intrinsic affect worsening (e.g., thinking about one's shortcomings), extrinsic affect-improving (e.g., discussing someone else's positive characteristics), and extrinsic affect-worsening (e.g., telling someone about their shortcomings).

The intimate partner flooding scale (IPFS; Foran et al., 2020) examines the effects of one partner's anger and its intense and overwhelming nature on the recipient. This measure focuses on the dysregulation that occurs based on a partner's behaviour during conflict. Therefore, this measure taps into the alternate side of the interpersonal emotion regulation, examining the recipient of dysregulatory behaviours. It is interpersonal due to the dyadic nature of conflict, but focuses on the recipient of negative conflict exchanges and how that impacts emotion dysregulation. Overall, emotional flooding is a form of dysregulation that is based on a social interaction, where an individual not only feels that their partner's affect/behaviours are intense, cognitively disorganizing, and overwhelming, but also that they do not have the faculties to manage their own emotions in response (Foran et al,. 2020). This scale was grounded in observational studies by Gottman (1993).

The scale assessing emotional flooding was based in observational work by Gottman (1993; 1994), who examined how couples behaved during conflict. He proposed that aversive conflict behaviours, such as the four horsemen (criticism, contempt, defensiveness, and stonewalling), were preceded by flooding. More specifically, he found that flooding initiated the cascade through which partners enact maladaptive conflict behaviours. Emotionally flooded individuals struggle to self-regulate and remain engaged in conflict; sometimes, this dysregulation becomes so intense that the individual will do anything to terminate the interaction. Based on the cognitive and emotional overwhelm that accompanies flooding, individuals might attempt to end the conflict situation by escalating (i.e., hyperactivation), or

running away to escape (i.e., capitulation). These overlearned behaviours and cognitions (e.g., fight or flight) are relied on since individuals are unable to attend to anything but their physiological state. This attempt to escape a situation is often perceived by others as unexpected and disorganized, much like the feeling of flooding in the first place. This destructive pattern has been linked to problematic interpersonal behaviours, such as demand/withdraw patterns, and can lead to conflict escalation and psychological/physical aggression (Foran et al., 2020; Malik et al., 2020). For example, Malik and colleagues (2020) examined whether flooding preceded displays of anger during a couple conflict situation, and whether this association differed between levels of distress and violence. They found that distressed/violent couples reported higher levels of flooding compared to non-violent/non distressed couples.

While emotion regulation has typically been used to examine negative behaviours during conflict, such as the four horsemen of the apocalypse, research has expanded to focus on emotion regulation and positive behaviours during conflict (e.g., Jitaru & Turliuc, 2022). One study found that affection, humor, and validation, which are subsumed under intimacy-promoting and problem-solving behaviours, were related to the regulation of emotions in both partners (Ben-Naim et al., 2013). For example, the study found that when a partner suppressed their emotional responses, both partners expressed less intimacy and problem-solving behaviours (Ben-Naim et al., 2013). This study also examined partner attachment styles and their moderation of emotion regulation strategies. They found the suppression of emotions in one partner led to a more severe decrease in positive affect behaviours when the other? partner was high on attachment anxiety (Ben-Naim et al., 2013).

Overall, utilizing interpersonal emotion dysregulation might aid in understanding the apparent connection between attachment style, with its inherently intrapersonal emotion

regulatory mechanisms, and conflict behaviours, an interpersonal construct. Attachment insecurity, and its association with exaggerated or muted emotional responses, can create difficulties when appraising threats and subsequently down- or up- regulating one's affect. Conflict behaviours, and their emotional antecedents, are dyadically interconnected; individuals in dyadic settings (i.e., interacting with a romantic partner) are constantly choosing how to respond to their partner and communicating an intended message through behaviours. What emotional mechanism could help connect this association? Emotional flooding might help aid in understanding how one's intrapersonal experience as an object of a partner's behaviors during couple conflict affects one's own reactions, ultimately impacting relational outcomes. For example, flooding not only promotes maladaptive behaviours during conflict (e.g., criticism, defensiveness, contempt, and stonewalling), but also taps into the unexpectedness and disorganization it causes the individual (an intrapersonal form of dysregulation).

Emotional flooding, therefore, might help when examining the interplay between intrapersonal and interpersonal emotion regulation, a well-established gap in the literature (Dixon-Gordon et al., 2015). Notably, Dixon-Gordon and colleagues (2015) urged researchers to investigate the myriad of ways where interpersonal emotion regulation problems could arise. This could be due to the connection of intrapersonal to interpersonal regulatory mechanisms. In their conceptual model, the authors suggest a potential difficulty between encoding and decoding emotionally-laden information. Encoding refers to choosing an interpersonal behaviour to achieve one's goals; decoding refers to the interpretation of a partner's behaviour (Dixon-Gordon et al., 2015). Emotional flooding, therefore, might help explain this difficulty, drawing on the attachment and couple conflict literature. Flooding has been hypothesized to serve as a proxy for one's ability to tolerate aversive and stressful triggers (Malik et al., 2020). This intrapersonal

difference in thresholds for flooding could be influenced by intrapersonal vulnerabilities, such as one's attachment insecurity. Flooding is also a function of another person's expressed negative affect, requiring an interpersonal context and input. Therefore, examining attachment insecurity and conflict behaviours through the conjoint intrapersonal and interpersonal paradigms could help uncover the specific emotion dysregulatory mechanisms contributing to this proposed association.

Overall, flooding is a form of interpersonal emotion dysregulation which occurs during couple conflict. Moreover, emotional flooding is based on the subjectivity of the target and their own appraisal of being overwhelmed and cognitively disorganized by their partner's behaviours. Finally, flooding implies that the individual is so overwhelmed that they will do anything to end the aversive interaction, which implies that they do not have the ability to regulate themselves. Given this final point, perhaps emotional flooding might be more common in individuals who have difficulties regulating their emotions intrapersonally, as seen in individuals with attachment insecurities (Ben-Naim et al., 2013). For example, an individual who is insecurely attached might view their partner's behaviour as very overwhelming because conflict signals a separation between partners (which activates attachment anxiety) or an approach behaviour that encroaches on an individual's space (which activates attachment avoidance). Moreover, attachment insecurity might relate to flooding because one's attachment style can affect one's appraisal of coping strategies. An anxious individual might perceive conflict as destabilizing and feel insufficient to properly address it, relying on overlearned strategies (e.g., attempts to re-establish proximity for fear of abandonment). Avoidant individuals might rely on strategies to suppress their feelings, leading to an amplification of emotional overwhelm. Therefore, examining the

appraisal of conflict from the recipient's point of view might shed light on how attachment insecurity acts as a vulnerability factor of flooding during conflict.

Gender Differences

Given the extensive evidence that the transition to parenthood is marked by psychological and behavioural changes for both partners, and that the nature of these changes differ for expectant mothers versus expectant fathers (in the context of a dyadic, heterosexual couple pairing; Kuersten-Hogan & McHale, 2021), examining potential gender differences between the constructs of interest is warranted. For example, Simpson and colleagues (2003) found that wives who perceived their husbands as less supportive and more rejecting prenatally later adopted a more ambivalent attachment style across the transition to parenthood. Husbands who perceived themselves as more supportive to their wives during pregnancy decreased in their avoidant attachment.

Research examining gender differences in attachment styles between partners have yielded largely insignificant results (e.g., Bakermans-Kranenburg & van Ijzendoorn, 2009; Velotti et al., 2016). However, it has been found that gender differences exist when examining attachment insecurities and emotion regulation difficulties. In a study examining premarital heterosexual couples, Velotti and colleagues (2016) found that women reported greater difficulties in the regulation of negative emotions than men. Women had greater difficulties in emotion regulation, accessing adaptive regulatory strategies, and had greater challenges concentrating on tasks while experiencing negative emotions.

In terms of conflict behaviours, integrative research has found gender differences in heterosexual couples. For example, an extensive meta-analysis of 64 studies examining observed conflict behaviours in couples found that women displayed greater behaviors of hostility,

distress, and intimacy, whereas men displayed more withdrawal and problem-solving (Woodin, 2011). This aligns with research examining the demand-withdrawal pattern of heterosexual couple conflict, where women typically demand through emotional requests and criticism, and men typically retreat through defensiveness or passivity (Christensen & Heavey, 1990).

Gottman also outlined gender differences in emotional flooding, such that men are flooded by less intense negative affect and behaviours than women. For example, Gottman hypothesized that men would become flooded by their partner's criticism, whereas women would become flooded only after contempt was expressed by their partner. While Gottman (1994) found that men were more likely to become flooded and subsequently withdraw during conflict, other researchers have found no gender differences for the propensity to become flooded during couple conflict (Malik et al., 2020).

The Current Study

The current study aimed to extend research during the prenatal period by confirming the association between attachment insecurity and conflict behaviours in couples expecting their first child. Through a dyadic framework, the study draws on interpersonal emotion dysregulation as a mechanism that might explain this connection. Utilizing emotional flooding as a proxy for interpersonal emotion dysregulation, the study hopes to: 1) further attachment theory by examining its association with emotional flooding 2) confirm the association between emotional flooding and various adaptive and maladaptive conflict behaviours, and 3) extend emotional flooding as a proposed mechanism linking attachment insecurity to conflict behaviours.

Hypotheses

Attachment to Flooding

The first hypotheses relate each partner's attachment style and emotional flooding, a form of interpersonal dysregulation. For the purposes of replication, we tested Gottman's hypothesis that men would report a higher propensity to flood compared to women. However, our focus was to extend emotional flooding from an attachment lens, examining how the dyadic theories of attachment apply to emotional flooding. Our specific hypotheses were as follows (see Figure 1):

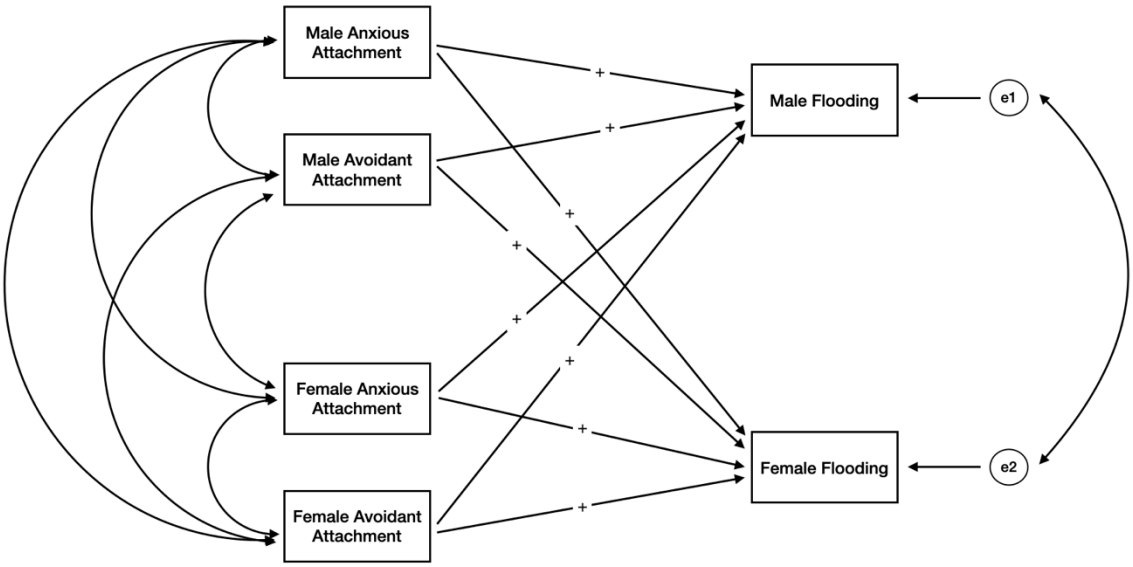
H1: Men's attachment anxiety and avoidance will be positively associated with their own emotional flooding

H2: Women's attachment anxiety and avoidance will be positively associated with their own emotional flooding

H3: Partner effects could contribute to emotional flooding (e.g., women's attachment anxiety predicting men's emotional flooding), but no specific hypotheses are outlined due to a lack of research in this area.

Figure 3

Conceptual Model for Attachment Insecurity and Emotional Flooding



Note. Positive statistical associations are depicted with "+". The model also includes covariances between each partner's anxious and avoidant attachment, as well as residual covariances between the error terms of partners' emotional flooding.

In addition to the actor and partner effects, we also sought to examine the interaction effects between different dyadic attachment pairings. Driven by studies confirming the complementary theory of attachment (e.g., anxious/avoidant pairs are associated with greater distress; Ben-Naim et al., 2013), and the association between the demand-withdraw literature and emotional flooding (Fowler & Dillow, 2011; Roloff et al., 2020), our specific hypotheses were:

H4: Anxious/avoidant interactions will produce greater flooding. More specifically, we hypothesize that the interaction between avoidant men and anxious women will lead to increased emotional flooding in men. The opposite interaction pairing (avoidant woman and anxious man) has no hypothesis.

The above hypotheses relate to the complementarity theory of attachment (Holmes & Johnson, 2009), such that each individual and their partner's attachment dimensions complement (i.e., avoidant males paired with anxious females), and are examined in relation to an outcome variable. This study also sought to examine the similarity theory of attachment, which relates attachment similiarities between partners on both dimensions (i.e., similarities between attachment anxiety or attachment avoidance). Our specific hypotheses for similarity of attachment anxiety were as follows:

H5: Dyads with similar levels of anxiety (e.g., both members reporting either high or low levels of attachment anxiety) will report less emotional flooding as they have a shared understanding of their actions and intentions during conflict.

H6: When dyads are dissimilar in anxiety levels, dyads with a larger discrepancy in anxiety will report higher levels of emotional flooding than dyads with a smaller discrepancy.

Upon further examination of dyads who are similar in anxiety, perhaps high levels of anxiety in each partner are more prone to emotional flooding since lower levels of attachment anxiety reflects an underlying sense of attachment security. Therefore:

H7: When dyads are similar in anxiety, those who are matched at lower levels (both partners report lower ratings of attachment anxiety) will report lower emotional flooding than dyads who are matched at higher levels (both partners report higher ratings of attachment anxiety)

Next, similar hypotheses are made for the similarity of attachment avoidance:

H8: Dyads with similar levels of avoidance (e.g., both members reporting either high or low levels of attachment avoidance) will report greater emotional flooding as they

might be verifying their partner's negative beliefs about their partner not being there for them.

H9: When dyads are dissimilar in avoidance levels, dyads with a larger discrepancy in avoidance will lower higher levels of emotional flooding than dyads with a smaller discrepancy.

Upon further examination of dyads who are similar in avoidance, perhaps high levels of avoidance in each partner are more prone to emotional flooding since lower levels of attachment avoidance reflects an underlying sense of attachment security. Therefore:

H10: When dyads are similar in avoidance, those who are matched at lower levels (both partners report lower ratings of attachment avoidance) will report lower emotional flooding than dyads who are matched at higher levels (both partners report higher ratings of attachment avoidance).

Flooding Mediating the Relationship between Attachment Insecurity and Conflict Behaviours

The next set of hypotheses synthesize attachment, emotional flooding, and conflict behaviours. Current research attempting to relate emotional difficulties to attachment and conflict behaviours have typically employed individual emotion dysregulation measures (i.e., difficulty in emotion regulation scale [DERS]; Gratz & Roemer, 2004). Researchers have found null results in their examination of emotion dysregulation mediating the relationship between attachment insecurity and adaptive processes (i.e., Cheche Hoover & Jackson, 2019). Current research has not utilized emotional flooding, which might help explain how intrapersonal emotion dysregulation (i.e., attachment-related up- or down- regulation of emotions) relates to interpersonal emotion dysregulation (i.e., conflict behaviours). Therefore, we hypothesize that:

H11: Emotional flooding will mediate the association between attachment insecurity and negative conflict behaviours.

Given the attachment-related differences in behaviour (e.g., attachment anxiety related to hypervigilance and distress-intensifying behaviours; attachment avoidance related to withdrawal) and gendered differences (e.g., women displaying greater amounts of hostility and men displaying more conflict withdrawal), we hypothesize that (see Figure 2):

H12: Emotional flooding will mediate the association between attachment anxiety and higher-intensity conflict behaviours (e.g., hostility) in women.

H13: Emotional flooding will mediate the association between attachment avoidance and lower-intensity conflict behaviours (e.g., withdrawal/distress) in men.

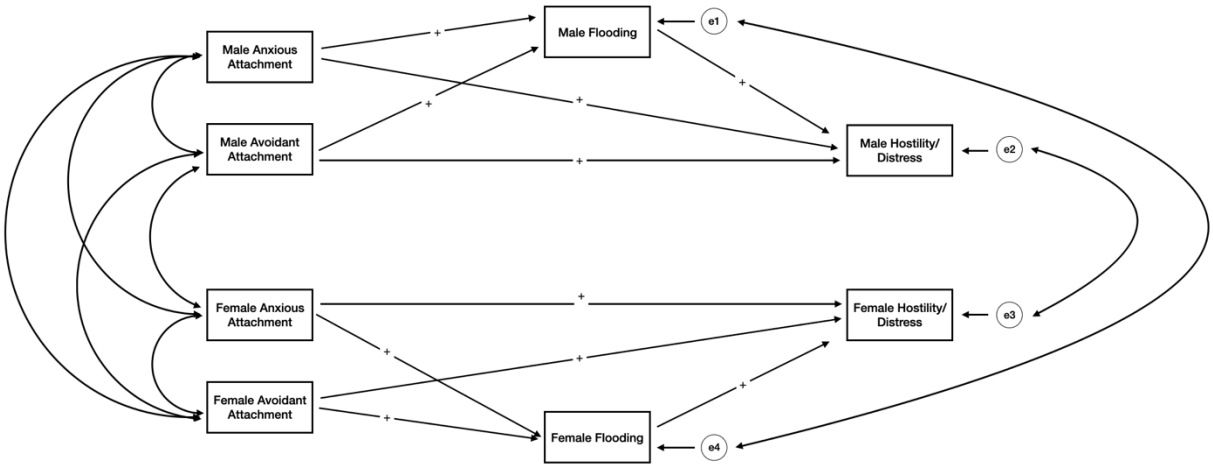
We also sought to explore emotional flooding and its association with decreases in positive behaviours during conflict, such that (see Figure 3):

H14: Emotional flooding will help explain the association between attachment insecurity and a decrease in positive behaviours displayed during couple conflict.

In addition to the direct actor effects, we also sought to explore partner effects of this mediation, but no specific hypotheses were outlined.

Figure 4

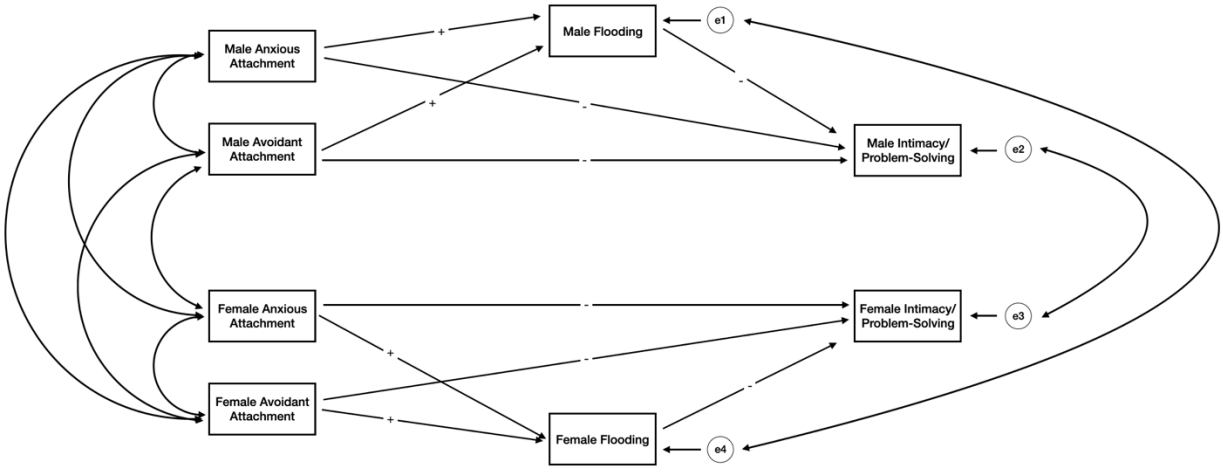
Conceptual Model of Emotional Flooding Mediating the Association between Attachment Insecurity and Negative Conflict Behaviours (Hostility and Distress)



Note. Positive statistical associations are depicted with "+". The model includes covariances between partners' anxious and avoidant attachment styles, as well as residual covariances between the error terms of partners' flooding and partners' conflict behaviours.

Figure 5

Conceptual Model of Emotional Flooding Mediating the Association between Attachment Insecurity and Positive Conflict Behaviours (Intimacy and Problem Solving)



Note. Positive statistical associations are depicted with "+" and negative statistical associations are depicted with "-". The model includes covariances between partners' anxious

and avoidant attachment styles, as well as residual covariances between the error terms of partners' flooding and partners' conflict behaviours.

Methods

Participants

Participants were recruited via public advertisements from a city on the West Coast of Canada. Eligibility criteria required that couples be at least 17 years old, be living together, be in the third trimester of pregnancy with their first child, and be able to read and write in English.

Ninety-eight couples participated in this study and were first assessed during the third trimester of pregnancy. The entire study period spanned from 2008-2014. $50 honorariums were offered to each couple for participating. All procedures were approved by the University of Victoria Human Research Ethics Board (21-0422). For the purposes of this study, only Time 1 (prenatal period) was analyzed.

At Time 1, the average age of participants was 32.03 years for men (*SD*=5.51) and 29.98 years for women (*SD*=5.49). Men had an average of 14.77 (*SD*=2.38) years of education, whereas women had an average of 15.28 (*SD*=2.31) years of education. Couples had been living together for an average of 4.47 years (*SD*=3.23). The average income for men was $51,716 (*SD*=35,254) and $35,019 (*SD*=24,835) for women. In this sample, 69.4% were legally married, whereas 30.6% were unmarried cohabitating. For men, the ethnic composition was predominantly White (89.8%), followed by people of colour (e.g., Asian-Canadian, African-Canadian, and Latin-Canadian; 7.1%), and Indigenous (3.1%). Women's ethnic composition was similar, with individuals identifying as White (87.8%), people of colour (e.g., Asian-Canadian, African-Canadian, and Latin-Canadian; 10.2%), and Indigenous (2.0%).

Procedure

At Time 1, interested couples contacted the laboratory and were screened by phone. Research sessions lasting three hours were scheduled with eligible participants at the University

of Victoria. Participants provided informed consent prior to data collection. Partners were first separated to fill out a series of online, self-report questionnaires. Afterwards, couples completed an Oral History Interview (OHI; Buehlman et al., 1992) with a senior member of the research team. This interview gathered basic information pertaining to the couple's relationship. Finally, each couple engaged in two conflict interactions and two social support interactions for ten minutes each. These interactions were videotaped and observationally coded by trained research assistants.

To determine a topic for the conflict interactions, partners were given a list of potential topics and asked to indicate on a scale (0-100) the degree to which they wanted to change each item in their relationship. Example domains included household chores (e.g., cleaning), finances (e.g., paying bills on time), and showing appreciation for the other. A researcher then collected the forms and asked each partner to describe their highest-scoring item. Random assignment was used to determine which partner would go first. Couples conversed on their highest rated topics for ten minutes each. After ten minutes, a researcher would enter the room and indicate that the other partner should begin their topic, leading to the next ten-minute discussion.

Measures

Attachment

To assess adult attachment style, participants completed the Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). This questionnaire includes 18 items that measure attachment anxiety (α_{Men} = .87, α_{Women} =.89) and 18 items that measure attachment avoidance (α_{Men} =.90, α_{Women} =.86). Example items for anxiety include "I'm afraid that I will lose my partner's love", whereas example items for avoidance include "I find it difficult to allow myself to depend on romantic partners". All items were rated on a 7-point Likert scale from 1 =

disagree strongly to 7 = *agree strongly*. Items measuring anxiety and avoidance are separately averaged to produce two dimensions of attachment. Higher scores on either dimension represent greater attachment insecurity. Lower scores on each dimension represent a more secure attachment style. Scores for the anxiety and avoidance dimensions in the current study were moderately correlated for men $r = .33$, $p < .01$, and women, $r = .45$, $p < .01$.

Flooding

The Intimate Partner Flooding Scale (IPFS; Foran et al., 2020) is a 15-item questionnaire that measures flooding, or the feeling of being overwhelmed by a partner's anger. Participants rated their responses from 1 = *never* to 5 = *almost always*. A higher total score indicates a greater propensity to become flooded by one's partner's anger. Example items include "I feel paralyzed during my partner's angry outbursts" and "My partner's anger leaves me feeling disorganized and stressed". Based on a previous study, only 9 of the 15 items were retained due to construct validity (Foran & Slep, 2007). The reliability in the current study was excellent, with Cronbach's alpha ranging from .91-.93 for men and from .91-.95 for women.

Conflict Behaviours

What actual behaviours constitute negative and positive actions during conflict? Various researchers have attempted to define the behaviours that are damaging or protective during couple conflict. Self-report methods (e.g., Communication Patterns Questionnaire [CPQ]; Christensen & Sullaway, 1984) and observational coding schemes (e.g., Marital Interaction Coding System [MICS]; Weiss et al., 1973) have typically been employed to assess couple interactions in hypothetical or observed situations.

Observational coding schemes have been developed to understand communication interactions during couple conflict, with one example being the Marital Interaction Coding

System (MICS; Weiss et al., 1973). This coding scheme is a reliable and valid observational coding system that originally began with an emphasis on overt, observable behaviour. However, it has been criticized for emphasizing verbal content over affect (Weiss et al., 1973). Therefore, other observational coding systems, such as the Specific Affect (SPAFF; Gottman et al., 1996) extended the early "microanalytic" coding strategies since it codes affect at the construct level. This means that it can incorporate verbal content, facial behaviours, and voice tones to generate positive and negative affect codes, rather than relying on discrete bits of information. The positive codes range from affection, humor, and validation; the negative codes range from criticism, contempt, defensiveness, and stonewalling.

Another extension of the MICS was the Rapid Marital Interaction System (RMICS; Heyman, 2004), that utilizes behaviour broadly defined. These behaviours include all observable actions, such as affective, motor, and linguistic components. Overall, the RMICS contains five negative codes (Psychological Abuse, Distress Maintaining Attributions, Hostility, Dysphoric Affect, and Withdrawal), four positive codes (Acceptance, Relationship Enhancing Attributions, Self-Disclosure, and Humor), one neutral code (Constructive Problem Discussion/Solution), and one other code (discussions not pertaining to personal or relationship topics). A newer observational coding system, the Couples Affect Intensity Rating System (CAIRS; Woodin, 2011) emerged through the meta-analysis of relationship conflict behaviours in couples, attempting to consolidate numerous observational coding systems that have previously been used.

This observational coding system separates communication behaviours using two orthogonal dimensions: valence and arousal. Valence describes the range of negative-to-positive affective behaviours during conflict. This dimension finds its roots in early microanalytic coding

systems, such as the Marital Interaction Coding System (MICS; Weiss et al., 1973). MICS consolidates codes into respective positive and negative domains to capture broad conflict behaviours. The second dimension, intensity, refers to the arousal or force that accompanies certain behaviours. Intensity mirrors the high-intensity negative affect summary codes derived from the SPAFF (i.e., contempt) and the arousal dimension by Watson and Tellegen (1985). This dimension allows researchers to determine what types of behaviours are particularly salient, since the intensity of behaviours might relate to relationship functioning (Woodin, 2011). Overall, this coding scheme consolidates codes into 5 domains: Hostility, Withdrawal, Distress, Problem solving, and Intimacy. Hostility, withdrawal, and distress are negatively valenced but differ in their levels of arousal. Problem-solving and intimacy are positively valenced but also differ in their levels of arousal.

Since this measure has not been used in a study, a Confirmatory Factor Analysis (CFA) was run to confirm the domains. Principal axis factoring was used as the extraction method with oblimin rotation based on the hypothetical correlation between factors. Separate CFA models were run for women and men; factor loading matrices are presented in Table 1. The final CFA solutions were determined by examining scree plots with their corresponding eigenvalues (Gorsuch, 1990). We also took into consideration (a) an efficient number of loadings (>.30) and (b) an interpretable solution. We retained 4 factors for both women and men. Therefore, the final solution contained: Hostility, Distress/Withdrawal (referred to as Distress), Intimacy, and Problem Solving. Factor 1 (Hostility) contained 6 items for both men and women: belligerence, criticism, contempt, domineering, defensiveness, and anger. Factor 2 (Distress/Withdrawal) contained 4 items for men (stonewalling, sadness, avoidance, and tension) and 2 items for women (stonewalling and tension). Factor 3 (Intimacy) contained 3 items for both men and

women: affection, empathy, and humour. Factor 4 (Problem Solving) contained 2 items for both men and women: solution seeking and engagement.

Table 1

Confirmatory Factor Analysis (CFA) Results for CAIRS Codes

CAIRS Code	Factor 1 (Hostility)		Factor 2 (Distress/Withdrawal)		Factor 3 (Intimacy)		Factor 4 (Problem Solving)	
	Men	Women	Men	Women	Men	Women	Men	Women
Belligerence	**0.634**	**0.739**	-0.160				-0.510	-0.257
Criticism	**0.755**	**0.483**	0.250	0.108			-0.224	
Contempt	**0.788**	**0.713**	0.446	0.452	-0.275	-0.346		
Domineering	**0.645**	**0.569**			-0.592	-0.609	0.118	0.109
Defensiveness	**0.708**	**0.413**	0.247	0.160	-0.428	-0.285	0.335	0.156
Stonewalling	0.212	0.105	**0.509**	**0.536**	-0.107			-0.104
Sadness			**0.359**				-0.237	-0.429
Avoidance			**0.231**		0.158		-0.399	
Anger	**0.550**	**0.377**		0.186	-0.407	-0.336	-0.206	
Tension	0.198	0.118	**0.756**	**0.715**	-0.160		0.135	
Solution Seeking	-0.297	-0.341	-0.113	-0.177	-0.130		**0.905**	**0.677**
Engagement	-0.302	-0.297	0.195	0.206	0.299	0.337	**0.764**	**0.755**
Affection	-0.208	-0.238	-0.120		**0.450**	**0.505**		
Empathy		-0.106	-0.194	-0.112	**0.447**	**0.480**	-0.288	-0.343
Humour	-0.136		0.110		**0.576**	**0.566**		

Note. Extraction Method: Principal Axis Factoring. Rotation method: Oblimin with Kaiser Normalization. Bolded factor loadings refer to retained factors.

Data Analysis Plan

Prior to conducting analyses, bivariate correlations were calculated between the main variables and demographic variables (e.g., relationship length, age, income, etc.; see Tables 2 and 3). Paired samples t-tests were used to detect significant gender differences in scores for anxious attachment, avoidant attachment, emotional flooding, and each of the conflict behaviours (e.g., hostility, distress, intimacy, and problem-solving).

For all subsequent analyses, covariance (bidirectional) paths between variables at the same stages in the models were included to account for the inherent interdependence of dyadic data. For example, models included covariance paths between attachment styles for males and females. The models also included covariance paths between error terms of mediator variables (when applicable), also known as residual covariance, as well as between error terms of the outcome variables. Residual covariances were included to account for associations between partners' scores above and beyond what is explained by the model (Olsen & Kenny, 2006).

Actor Partner Interdependence Models (APIM)

Actor partner interdependence models (APIM; Cook and Kenny, 2005) allow dyadic relationships between predictor and outcome variables to be examined. This model takes into account the interdependence between partners in a relationship, incorporating two-person relationships with appropriate statistical techniques to account for this nonindependence. Statistically speaking, APIM allows researchers to examine actor effects (effect of an individual's attachment on his/her own emotional flooding), partner effects (the effect of an individual's attachment on their partner's emotional flooding), and actor-partner interactions (the moderation of each person's attachment on one partner's emotional flooding). This proposed APIM model is shown in Figure 1. Specifically, APIM was used to test the hypotheses that both

men's and women's attachment insecurity (e.g., attachment anxiety and avoidance) will be positively associated with their own emotional flooding (Hypotheses 1 and 2) and their partner's emotional flooding (Hypothesis 3). The actor-partner interactions capable with APIM allowed us to test the hypothesis that men's attachment avoidance and women's attachment anxiety would interact to produce greater flooding (Hypothesis 4).

The hypotheses examining actor and partner attachment styles to emotional flooding were tested using Hierarchical Linear Modelling (HLM; Raudenbush et al., 1995). HLM was chosen due to the unequal time intervals between assessments and the nonindependence typically seen in couples. HLM is adept at handling longitudinal repeated measures data at differing time intervals, even if not all participants complete the procedures on each occasion. HLM is also advantageous because it calculates weighted estimates (Raudenbush et al., 1995). These estimates can account for variation within individuals and couples as well as variation between individuals and couples over time. This is because HLM allows nestedness to be examined, such that repeated measures are nested within individuals, which are nested within couples. To test the hypotheses in this study, a two-level HLM model was applied. More specifically, a two level, two intercepts approach was used.

Polynomial Regression and Response Surface Analysis (RSA)

Overall, APIM analyses are ideal in interpersonal contexts when the researcher is interested in examining how each partner's characteristics are associated with their own and their partner's outcomes. It is also useful to examine the interaction of main effects. However, dyadic attachment theorists posit that the degree of (dis)similarity between partners can also be beneficial. Therefore, dyadic attachment theory typically employs polynomial regression, which uses the fit of characteristics of partners in a dyad (Krasikova & LeBreton, 2012). This allows

researchers to examine the extent to which combinations of predictor variables (i.e., attachment anxiety of both partners) relates to an outcome variable. This is especially helpful when similarity/dissimilarity between predictor variables is of central concern (Shanock et al., 2010). Therefore, examining attachment similarity/dissimilarity between partners might uncover a more nuanced understanding of adult attachment styles and how they relate to emotion dysregulatory processes.

Alternatives to polynomial regression (PR) and response surface analysis (RSA) have been used, such as discrepancy scores and correlation indices. However, discrepancy scores confound the effect of each person's contribution and its relation to the outcome variable. Therefore, there is no way to indicate the extent to which each member's score contributes to the outcome of interest (Shanock et al., 2010). Another limitation of discrepancy scores is when they are used in statistical models. For example, discrepancy scores cannot distinguish between similar scores on a higher level (e.g., 10 - 9 = 1) versus similarity on a lower level (e.g., 3 – 2 = 1). Past research has also used profile correlation indices to determine the degree of (dis)similarity on predictor variables and its association with an outcome variable. This method can also be problematic as it also confounds the effect of each member's scores and uses sums of squared differences (Schönbrodt et al., 2018). Polynomial regression and response surface analysis, however, retains independence of predictor variables between members and help overcome the problem with confounding effects, easing interpretation.

The polynomial equation is used to identify the effect of each person's predictor variable and their interaction in relation to the outcome variable. These terms of the equation refer to the individual predictor variables, their squared values, and the interactive effect of the predictors (Shanock et al., 2010). This is used in tandem with response surface analysis to provide a

graphical representation of the data, allowing both the congruence and discrepancy effects to be examined simultaneously. Using attachment anxiety as an example, these five terms in the polynomial regression equation allow the researcher to identify the effect of each partner's attachment anxiety and their interaction (i.e., male anxiety x female anxiety).

$$Z = b_0 + b_1 * Anxiety_{Male} + b_2 * Anxiety_{Female} + b_3 * Anxiety^2{}_{Male} + b_4 * Anxiety_{Male} Anxiety_{Female} + b_5 * Anxiety^2{}_{Female} + e$$

To assess the congruence and discrepancy between the predictors on the outcome, the polynomial regression coefficients (e.g., b values) cannot be interpreted directly; these coefficients are used to compute response surface analysis coefficients (Shanock et al., 2010). RSA coefficients are calculated based on combinations of unstandardized polynomial regression coefficients (i.e., b_1, b_2, etc.). Overall, there are five response surface values: a_1, a_2, a_3, a_4, and a_5, which are calculated as combinations of polynomial regression coefficients: $a_1 = b_1 + b_2$; $a_2 = b_3 + b_4 + b_5$; $a_3 = b_1 - b_2$; $a_4 = b_3 - b_4 + b_5$; $a_5 = b_3 - b_5$ (Schönbrodt et al., 2018; Shanock et al., 2010). These linear combinations refer to the slope (a_1) and curvature (a_2) along the line of congruence (M=F), and the slope (a_3) and curvature (a_4) along the line of incongruence (M=-F; Ilmarinen et al., 2016). In addition, a three-dimensional response surface is created from the two components and visualized. As mentioned, there are two lines of interest in this graphical depiction: the line of congruence (LOC) and the line of incongruence (LOIC). The line of congruence is formed by the coordinates that represent a perfect match between predictor variables (e.g., when $Anxiety_{Male} = Anxiety_{Female}$). The line of incongruence is formed by the coordinates that represent perfect mismatches between predictor variables (e.g., when $Anxiety_{Male} = -Anxiety_{Female}$).

More specifically, coefficient a_1 refers to the slope of the LOC and whether congruence at different mean levels of the predictors has a linear effect on the outcome measure. For our example, as attachment anxiety increases for both men and women, is there a significant linear increase or decrease in emotional flooding? A significant positive a_1 value indicates that the outcome is highest when predictors are congruent at high mean levels, whereas a significant negative a_1 value indicates that the outcome is highest when predictors are congruent at low mean levels. Our hypothesis that higher reports of attachment anxiety and avoidance would predict higher reports of emotional flooding would indicate a positive a_1 value.

Coefficient a_2 assesses the curvature along the LOC (Shanock et al., 2010). More specifically, are there curvilinear effects between different mean levels of the predictors on the outcome? A significant positive value of a_2 indicates that the outcome variable is highest when predictors are congruent at extreme levels, whereas a significant negative a_2 value indicates the outcome is highest when predictors are congruent at midrange levels. No curvature was hypothesized for this study.

Coefficient a_3 refers to the LOIC and its linearity and whether the direction of incongruence predicts the outcome (Shanock et al., 2010). For example, do high levels of attachment anxiety in men and low levels of attachment anxiety in women predict higher levels of the outcome than the reverse? A positive a_3 coefficient indicates that the higher levels of the X-axis, compared to the Y-axis component, is associated with a higher outcome; a negative a_3 coefficient predicts the reverse association. We did not hypothesize a direction of effect in this study.

Coefficient a_4 assesses the curvilinearity of the LOIC, or whether the overall degree of incongruence significantly predicts the outcome (regardless of the direction; Shanock et al.,

2010). More specifically, does the outcome increase or decrease as the discrepancy increases? A positive a_4 coefficient indicates that the outcome is highest when incongruence is maximized at both directions of discrepancy (e.g., predictor 1 > predictor 2 and predictor 2 > predictor 1). On the response surface analysis, this is shown as a U-shape along the LOIC. A negative a_4 coefficient indicates an inverted-U shape along the LOIC where outcomes are lowest at extreme discrepancy values at both directions. We hypothesized a positive a_4 component for anxiety, such that discrepancy would predict higher emotional flooding.

In addition to examining the RSA coefficients, other values are needed to determine a congruence/incongruence effect. When the graph of the model is shaped like a dome or saddle, one must examine the first principal axis. The first principal axis is also referred to as the "ridge" of the surface (Humberg et al., 2019). To determine a congruence effect, one must determine if the ridge of the response surface occurs right along the LOC. If this is not violated, the first principal axis (p_{10}) and slope (p_{11}) should have the same intercept and slope as the LOC, which are 0 and 1, respectively. If the LOIC is of concern, then the second principal axis (p_{20}) and slope (p_{21}) should have the same intercept and slope as the LOIC, which are also 0 and 1, respectively. When it is hypothesized that congruence maximizes an outcome, the intercept of the first principal axis should not significantly differ from 0, and the slope should not differ significantly from 1. This is substituted for the second principal axis and slope when incongruence is of importance (Edwards, 1994; Humberg et al., 2019). These values are automatically calculated via the "RSA" package (Shönbrodt & Humberg, 2023), but can also be inspected using the a_5 coefficient, and whether it is not significantly different than 0.

Overall, following Humberg and colleagues' (2019) checklist, when p_{10} is not significantly different than 0, p_{11} includes 1, a_4 is significantly negative, a_3 is not significant, and

there it is theoretically justified to allow a non-constant LOC, then the RSA results indicate a congruent effect. To test the "reverse" congruence hypothesis, such as whether the outcome is lower for more congruent predictors, the first four conditions must be replaced by (1) $p_{20} = 0$, (2) $p_{21} = 1$, (3) a4 >0, and $a_3 = 0$.

Once the coefficients have been determined, the results can be graphically displayed using the response surface analysis. Multiple models can be determined, based on the best-fitting polynomial model (Schönbrodt, 2016). These models allow for the presence of fit effects (where there is a hypothesized increase or decrease in the outcome variable based on the matching levels of two predictor variables) and/or mean-level effects (where there is an expected increase or decrease in the outcome based on the average of the predictors).

Each of these models have names to denote their composition. For example, a flat ridge model allows for only fit effects and not mean-level effects. Therefore, only the match between levels of predictors matters, rather than the actual level themselves are examined. The basic squared difference model (SQD) is a flat ridge that assumes each predictor variable is "matched" on the actual values of that scale (e.g., both male and female attachment anxiety is grand-mean centred to reflect a meaningful zero). The shifted squared difference (SSQD) and shifted and rotated squared difference models (SRSQD) allow for shifts (e.g., recentering of predictor variables) and rotations (e.g., rescaling of predictor variables) to occur. Given our hypotheses, these models were not expected to fit the data well.

A rising ridge (RR) allows both fit and mean-level effects to be examined simultaneously, which aligns with our hypotheses. This model allows the concurrent examination of whether high levels of attachment anxiety predict greater flooding (mean-level effects), and whether the matching of each partner's attachment anxiety predicts greater flooding

(fit-effects). We hypothesized that increased attachment anxiety (Hypothesis 7) and attachment avoidance (Hypothesis 10) would predict greater flooding in each partner (e.g., mean-effects). We also hypothesized that partners would report greater flooding when they were matched on levels of avoidance (Hypothesis 8 and 9) and would report less flooding when they were matched on levels of anxiety (Hypothesis 5 and 6; fit effects). Therefore, it was hypothesized that the data would fit the rising ride (RR) model. In addition to the basic RR model, more complex models allow for shifts (shifted rising ridge [SRR]) and rotated versions (shifted and rotated rising ridge [SRRR]). Overall, the full constrained polynomial model was tested, as well as nested models, which drop terms from the full polynomial model (e.g., removing quadratic effects, removing interaction effects, etc.). Therefore, all models were compared to arrive at the most parsimonious model.

Model comparisons were conducted via the "RSA" package in R (Schönbrodt & Humberg, 2023), which compares based on the sample-corrected Akaike Information Criterion (AICc; Shönbrodt, 2016). More specifically, models with <2 ΔAICc were interpreted as plausible alternative models, and models with <2 ΔAICc were compared to the best-fitting model as candidates, following protocols established by previous researchers (e.g., Burnham et al., 2011). Overall model fit indices of comparative fit index (CFI) and standardized root-mean-squared residual (SRMR) values were also considered to identify the best model overall (CFI > .95, SRMR < .08; Hu & Bentler, 1999).

Actor Partner Interdependence Models extended to Mediation (APIMeM)

Actor Partner Interdependence Models extended to Mediation (APIMeM; Ledermann et al., 2011) are an extension of the typical APIM models, allowing actor and partner effects to be examined in the context of a mediating variable. The most basic form of APIMeM consists of

three pairs of variables, which include the predictor variables for each partner, the outcome variables for each partner, and the proposed mediating variables. Mediation is determined by examining direct effects, indirect effects, and total effects (Ledermann et al., 2011). Direct effects refer to the extent that the dependent variable (e.g., conflict behaviours) change when the independent variable (e.g., attachment anxiety) increases by one unit. Indirect effects measure the extent to which the dependent variable changes when the independent variable is held fixed, and the mediator variable (e.g., emotional flooding) changes by the amount that it would have changed had the independent variable increased by one unit (Pearl, 2012). Total effects refer to the sum of the direct and indirect effects (Pearl, 2012). This approach allows us to determine whether emotional flooding mediates the association between attachment insecurity and varying conflict behaviours (Hypotheses 11-14).

Given the statistical complexity of APIMeM models, we first sought to determine whether dyads should be analyzed as distinguishable (i.e., keeping men and women separate) or indistinguishable (i.e., collapsing gender to maintain parsimony and conserve power). Using APIM_SEM (Stas et al., 2018), structural equation modeling using the R program "lavaan" (Rosseel, 2012) was employed to determine whether the dyads should be analyzed as distinguishable or indistinguishable for the subsequent analyses. Several models were compared, either constraining paths between gender or freely estimating pathways by gender (see Table 4). To compare models, chi square test, Root Mean Square Error of Approximation (RMSEA), and Sample Size Adjusted Bayesian Information Criterion (SABIC) were used. A RMSEA value of less than 0.08 and smaller SABIC values indicate better fitting data. The comparison between the mean values for each variable was statistically significant ($\chi^2(7) = 165.38$, $p<.001$), demonstrating that there were unequal means between men and women in the sample. In

addition, the comparison of correlation between pairs of variables between genders was statistically significant ($\chi^2(42) = 214.86$, $p<.001$), providing evidence that the correlations were unequal. Lastly, the test that the variances are equal between men and women was significant ($\chi^2(7) = 456.07$, $p<.001$), providing evidence that the variances are unequal. Since the models had poor fit in terms of both the chi-square test and the RMSEA value, and the SABIC values is lowest for the model of complete distinguishability, there is sufficient evidence to suggest that dyad members are distinguishable.

After specifying the mediation models, we will use Comparative Fit Index (CFI), Root Mean Square Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) as fit indices to test model fit, and to compare nested models. The CFI compares the sample covariance matrix with a null model (assuming that variables are uncorrelated). CFI values range between 0.0 and 1.0 with values >=.96 indicating good model fit (Olsen & Kenny, 2006). The SRMR is the square root of the difference between the residuals of the sample covariance matrix and a null model. Values of <= .08 indicate adequate model fit (Kenny, 2015). The RMSEA evaluates discrepancies between observed and predicted covariances. Values <.06 indicate adequate model fit for the data (Olsen & Kenny, 2006).

In order to test potential mediating effects, the significance levels of indirect effects for each model will be tested using bootstrapping (number of bootstrap draws = 5,000). Standardized indirect effects were computed for each of the 5,000 bootstrapped subsamples, and a 95% CI was computed.

Results

Preliminary Analyses

Prior to conducting analyses, measures were examined for outliers, missing data, and potential kurtosis. For both men and women, the sampling distributions for attachment anxiety, attachment avoidance, and flooding were positively skewed. All measures were evidenced as being kurtotic in their distribution. However, the decision to forego transformation to correct skewedness and kurtosis in the data was made based on most of the measures being within the acceptable limits (Kline, 2011) and to assist with meaningful interpretation of the results.

Zero-order correlations were computed for all variables, separated by men and women (see Tables 2 and Table 3). For men, attachment avoidance and anxiety were moderately correlated (r =.33, p <.01). Attachment anxiety (r =.54, p <.01) and avoidance (r =.35, p <.01) were positively associated with emotional flooding. Hostility was not associated with attachment insecurity or flooding. Distress was positively associated with flooding (r =.20, p <.05). Problem solving was negatively associated with attachment anxiety (r =-.25, p <.05). Intimacy was not associated with attachment insecurity or flooding. In terms of demographic variables, only level of education was positively associated with attachment insecurity (avoidance; r =.22, p <.05). Flooding was not associated with any demographic variables. Level of education was negatively associated with distress (r =-.21, p <.05).

For women, attachment avoidance and anxiety were moderately correlated (r =.45, p <.01). Attachment anxiety (r =.68, p <.01) and avoidance (r =.40, p <.01) were positively associated with flooding. Hostility was positively associated with attachment anxiety (r =.22, p <.05), attachment avoidance (r =.21, p <.05), and flooding (r =.30, p <.01). Distress and problem solving were not associated with attachment style or flooding. Intimacy was negatively

associated with flooding in women (r =-.36, p <.01). In terms of demographic variables, level of education was negatively associated with attachment anxiety (r =-.21, p <.05), flooding (r =-.26, p <.01), and positively associated with problem solving (r =.25, p <.05). Length of relationship was negatively associated with intimacy (r =-.21, p <.05). Income was positively associated with problem solving (r =.33, p <.01).[1]

[1] We also conducted paired sample t-tests to determine potential gender differences of predictor variables at time 1 (third trimester of pregnancy). Women reported higher attachment anxiety (t(97) = 3.35, p<.001) and men reported higher avoidant attachment (t(97) = 3.53, p<.001). Flooding did not differ between men and women at the third trimester (t(97) = -1.29, p=.11). However, men reported greater flooding 1 year postpartum (t(74) = 2.46, p<.05), 2 years postpartum (t(69) = 2.39, p<.05), but not 4 years postpartum (t(36) = 2.00, p=.24). Men reported higher hostility (t(95) = 11.89, p<.001), distress (t(95) = 16.96, p<.001), problem solving (t(95) = 57.10, p<.001), and intimacy (t(95) = 18.97, p<.001) during conflict behaviours.

Table 2

Means, standard deviations, and correlations with confidence intervals for men (N=98)

Variable	*M*	*SD*	1	2	3	4	5	6
1. Anxiety	39.11	15.04						
2. Avoidance	32.48	14.69	.33** [.14, .49]					
3. Flooding	17.39	7.21	.54** [.38, .67]	.35** [.17, .51]				
4. Hostility	5.65	4.25	.20 [-.00, .39]	.06 [-.15, .25]	.20 [-.00, .38]			
5. Distress	5.03	2.66	.01 [-.19, .21]	.15 [-.05, .34]	.20* [.00, .39]	.24* [.04, .42]		
6. Problem Solving	14.00	2.42	-.25* [-.43, -.05]	-.05 [-.25, .15]	-.11 [-.30, .09]	-.19 [-.38, .01]	-.07 [-.27, .13]	
7. Intimacy	5.78	2.97	-.14 [-.33, .07]	-.09 [-.29, .11]	-.08 [-.28, .12]	-.32** [-.49, -.12]	-.09 [-.28, .12]	.02 [-.18, .22]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table 3

Means, standard deviations, and correlations with confidence intervals for women (N=98)

Variable	*M*	*SD*	1	2	3	4	5	6
1. Anxiety	46.35	17.59						
2. Avoidance	26.64	9.94	.45** [.27, .59]					
3. Flooding	16.10	7.01	.68** [.55, .77]	.40** [.22, .55]				
4. Hostility	2.82	2.30	.22* [.02, .40]	.21* [.01, .39]	.30** [.11, .47]			
5. Distress	2.56	1.56	.13 [-.08, .32]	-.06 [-.26, .14]	.10 [-.10, .29]	.13 [-.08, .32]		
6. Problem Solving	6.85	1.29	-.14 [-.34, .06]	-.14 [-.33, .06]	-.06 [-.26, .14]	-.25* [-.43, -.05]	-.19 [-.38, .01]	
7. Intimacy	2.75	1.59	-.19 [-.37, .01]	-.12 [-.31, .09]	-.20* [-.39, -.00]	-.36** [-.52, -.17]	-.01 [-.21, .19]	.03 [-.17, .23]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Actor Partner Interdependence Models (APIM)

Actor-Actor Moderation of One's Attachment Anxiety and Avoidance

To examine whether one's attachment avoidance interacted with one's attachment anxiety to predict more flooding, or vice versa, a simple actor-actor moderation was conducted. Results revealed no interaction effects for men (β= -0.0005, p >.05) or women (β= -0.0004, p >.05).

Unconditional Model

Next, a dyadic model was created by fitting each participant's data with an intercept. These intercepts were modeled separately for men and women within couples, to examine whether or not there were differences in flooding between genders. Equation 1 demonstrates the general form of this two-level model:

$$\text{Level 1: } FLO_{ij} = \pi_{1j}*(\text{male partner}) + \pi_{2j}*(\text{female partner}) + \varepsilon_{ij}$$

$$\text{Level 2: } \pi_{1j} = \beta_{10} + r_{1j}$$

$$\pi_{2j} = \beta_{20} + r_{2j}$$

Where FLO_{ij} is the level of emotional flooding for an individual partner of a specific couple. π_{1j} is the initial level for the male partner of couple j. π_{2j} is the initial level for the female partner of couple j. ε_{ij} refers to the residual specific for dyad, j. The level 2 equations specify the between dyad variations in the coefficients found in the level 1 equations.

Both random effects for level-2 intercepts were significant (τ_{1jmale} = 36.57, p<.001; $\tau_{1jfemale}$ = 34.76, p<.001), meaning that we reject the assertion that men and women between dyads are equal in their intercept values. Additionally, we conducted a hypothesis test to examine potential gender differences in average flooding at the birth of their child (intercept). Men's emotional flooding was significantly higher than women's at the time of birth (χ^2 = 7.76, *p* <.05). This is consistent with the hypothesis that men have a higher propensity to flood compared to women.

Actor Effects, Partner Effects, and Anxiety/Avoidance Interactions

We then modelled the relationship between actor attachment insecurity (avoidance and anxiety) and partner attachment insecurity (avoidance and anxiety) with demand-withdraw interactions (anxiety/avoidance and avoidance/anxiety). Both individual's attachment anxiety, avoidance, and the interaction terms were added to the model after being grand mean centred to create a meaningful zero. The equation is shown below:

Level 1: $FLO_{ij} = \pi_{1j}$*(male partner)

$+ \pi_{2j}$*(female partner)

$+ \varepsilon_{ij}$

Level 2: $\pi_{1j} = \beta_{10} + \beta_{11}$ (male anxiety) $+ \beta_{12}$ (male avoidance) $+ \beta_{13}$ (female anxiety) $+ \beta_{14}$ (female avoidance) $+ \beta_{15}$ ($M_{anxiety}$ x $F_{avoidance}$) $+ \beta_{16}$ ($M_{avoidance}$ x $F_{anxiety}$) + r_{1j}

$$\pi_{2j} = \beta_{20} + \beta_{21}\text{ (female anxiety)} + \beta_{22}\text{ (female avoidance)} + \beta_{23}\text{ (male anxiety)} + \beta_{24}\text{ (male avoidance)} + \beta_{25}\ (M_{anxiety} \times F_{avoidance}) + \beta_{26}\ (M_{avoidance} \times F_{anxiety}) + r_{2j}$$

Each of the actor and partner attachments styles were added to examine the unique contribution of each person's attachment dimension (either anxiety or avoidance) while controlling for one's other attachment dimension and one's partner's attachment. There were significant partner effects, such that men's anxiety was associated with higher flooding in women ($\beta_{13} = 0.18$, $p = .002$). In addition, partner anxiety was associated with emotional flooding in men ($\beta_{13} = 0.17$, $p = .021$). Only one actor effect was observed, such that avoidance was associated with flooding in men only ($\beta_{12} = 0.27$, $p = .023$). There was a significant interaction term for men between the combination of avoidant men and anxious women ($\beta_{16} = 0.004$, $p = .031$). Results are shown in Table 4. We then conducted simple slope tests (e.g., Aiken et al., 1991) to better understand the interaction. This test examines differences in emotional flooding patterns for prototypical partner pairings. Values were plotted so that high corresponded to 1 standard deviation above the grand mean and low corresponded to 1 standard deviation below the grand mean.

Table 4

Actor and Partner Effects with Avoidance/Anxiety and Anxiety/Avoidance Interactions

Predictor	Estimate	*SE*	*t (df)*	*p*
Fixed Effects				
Male Flooding				
Intercept	18.01	0.55	32.97 (91)	<.001
Males' avoidance	0.27	0.12	2.31 (91)	.023
Males' anxiety	0.17	0.09	1.81 (91)	.074
Females' avoidance	-0.15	0.16	-0.93 (91)	.354
Females' anxiety	0.17	0.07	2.35 (91)	.021
Males' avoidance x females' anxiety	0.004	.002	2.19 (91)	.031
Males' anxiety x females' avoidance	0.001	.003	0.579 (91)	.564
Female Flooding				
Intercept	15.93	0.48	33.00 (91)	<.001
Females' avoidance	-0.01	0.07	-0.16 (91)	.875
Females' anxiety	0.04	0.08	0.458 (91)	.648
Males' avoidance	0.03	0.13	0.22 (91)	.824
Males' anxiety	0.18	0.06	3.11 (91)	.002
Females' avoidance x Males' anxiety	0.001	0.001	0.809 (91)	.420
Females' anxiety x Males' avoidance	0.0001	0.002	0.038 (91)	.969
Random Effects	Variance	SD	χ^2 (*df*)	*p*
Level-1 Variance	17.66	4.20	-	-

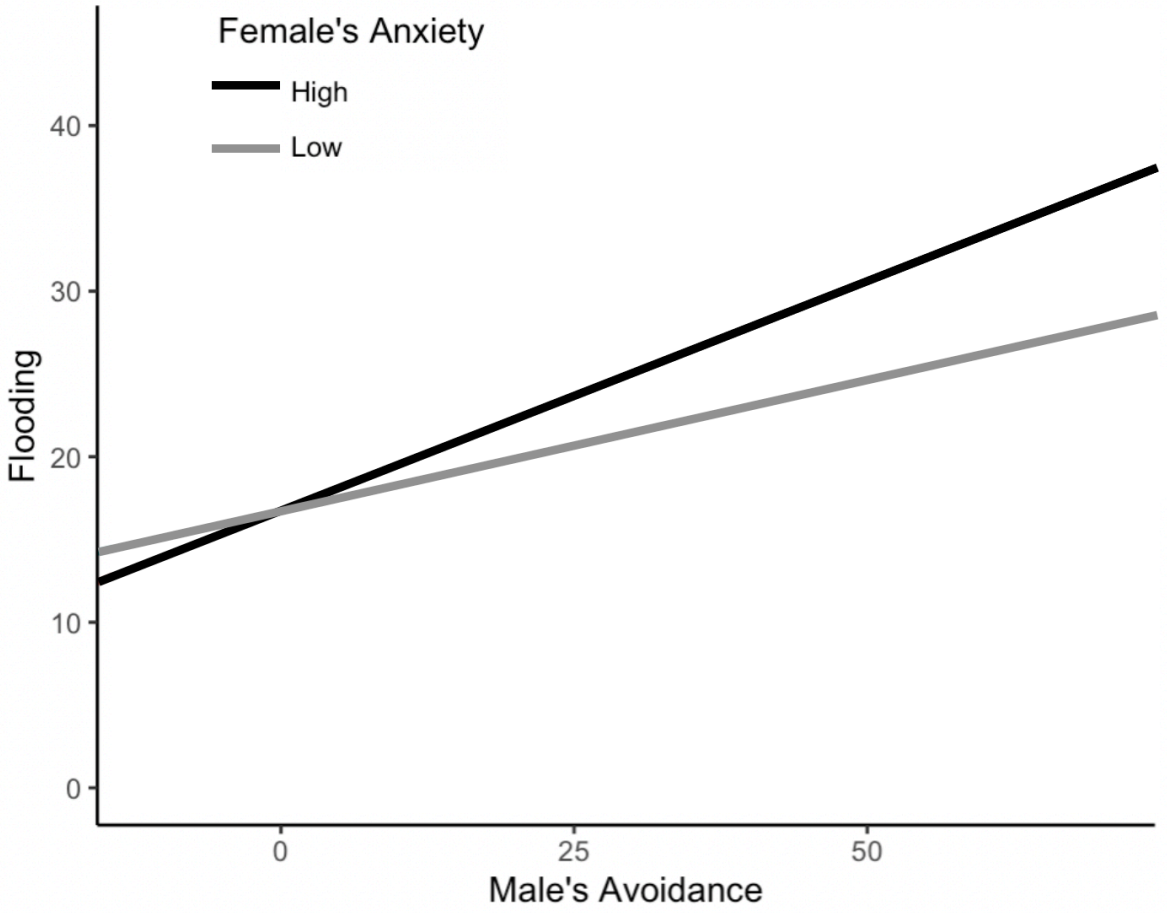
Male Intercept	21.77	4.67	443.88 (91)	<.001
Female Intercept	16.28	4.04	368.52 (91)	<.001

Interaction of Male Avoidance and Female Anxiety

As shown in Figure 6, although men who were high in avoidance generally reported greater emotional flooding, this association was amplified when their partner was high in anxiety ($\beta = 0.24$, $p < .05$), compared to when their partner was low in anxiety ($\beta = 0.10$, $p = .03$).

Figure 6

Interaction between Male Attachment Avoidance and Female Attachment Anxiety Predicting Male Emotional Flooding



Note. Female anxiety is plotted 1 standard deviation above (high) and below (low) the mean.

Polynomial Regression (PR) and Response Surface Analysis (RSA)

In line with previous research (Schönbrodt et al., 2018), measures of attachment anxiety and avoidance were grand mean centred to reflect a meaningful 0 (based on dyadic sample and caution of similarities between attachment anxiety and avoidance). As mentioned in the previous analysis, covariates were controlled for (e.g., female and male education). In addition to covariates, the alternate attachment measure was also controlled for in each model (e.g., attachment anxiety was controlled for when examining attachment avoidance as predictors). Mahalanobis Distance test detected and removed 2 outliers. To check multicollinearity, variance inflation factors (VIFs) were computed for the variables. All VIFs were below five, indicating an acceptable degree of association between predictors (O'brien, 2007).

Model Selection

Model comparison information for initial models predicting flooding for men and women are shown in Table 5. Of the models considered for avoidance predicting female flooding, 3 emerged as candidates (based on <2 ΔAICc). In order of best to worst, these were the RR, Only Men^2, and SRR. Of the models considered for avoidance predicting male flooding, two emerged as candidates. Since the null model was similar to the Only Men^2 model (based on <2 ΔAICc), this model was not analyzed since it was not meaningfully different than the intercept only model. Of the models considered for anxiety predicting female flooding, two emerged as candidates (based on <2 ΔAICc). In order from best to worst, these were the only women and only $women^2$ models. Of the models considered for anxiety predicting male flooding, three emerged as candidates (based on <2 ΔAICc). In order from best to worst, these were only men, additive, and only men^2.

Table 5

Model Comparison Information for Anxiety/Anxiety and Avoidant/Avoidant Parameters

Model	AICc	CFI	SRMR	R^2
Male and female attachment avoidance, predicting female flooding				
RR	**561.74**	0.97	0.01	0.53
Only Men^2	**561.83**	0.97	0.02	0.53
SRR	**563.17**	0.98	0.01	0.54
SRSQD	564.35	0.95	0.02	0.53
SRRR	564.44	0.98	0.01	0.54
Only Men	564.58	0.90	0.02	0.50
Full	564.48	1.00	0.00	0.56
Interactions only	564.50	0.95	0.01	0.53
Additive	564.82	0.92	0.02	0.52
Null	565.10	0.87	0.02	0.49
Only Women	565.57	0.89	0.02	0.50
Only Women^2	567.46	0.88	0.01	0.50
SQD	567.50	0.86	0.02	0.49
SSQD	568.71	0.86	0.02	0.50
Male and female attachment avoidance, predicting male flooding				
Only Men^2	**592.25**	1.00	0.01	0.34
Null	**592.58**	0.96	0.01	0.31
SRSQD	594.52	1.00	0.01	0.35
Only Men	594.58	0.94	0.02	0.31
SQD	594.74	0.93	0.01	0.31
Only Women	594.97	0.92	0.01	0.31
SSQD	595.33	0.96	0.01	0.32
RR	596.26	0.93	0.01	0.32
SRR	597.00	0.96	0.01	0.33
Additive	597.03	0.90	0.02	0.31
SRRR	597.05	1.00	0.01	0.35
Only Women^2	597.12	0.90	0.01	0.31
Full	598.93	1.00	0.00	0.35
Interactions only	599.18	0.88	0.02	0.31
Male and female attachment anxiety, predicting female flooding				
Only Women	**562.76**	1.00	0.01	0.51
Only Women^2	**563.91**	1.00	0.01	0.52
Additive	564.82	1.00	0.01	0.52
SRSQD	565.96	1.00	0.01	0.52
SRR	566.68	1.00	0.01	0.52
Interactions only	567.31	1.00	0.01	0.52
SRRR	568.10	1.00	0.00	0.53
Full	570.414	1.00	0.00	0.53
SSQD	581.01	0.85	0.03	0.42
SQD	581.13	0.83	0.03	0.41
Null	592.08	0.70	0.06	0.31
Only Men	592.21	0.70	0.06	0.32
Only Men^2	596.58	0.69	0.06	0.32
Male and female attachment anxiety, predicting male flooding				

Only Men	**595.53**	1.00	0.02	0.30
Additive	**597.03**	1.00	0.01	0.31
Only Men²	**597.14**	1.00	0.01	0.31
Interactions only	598.98	1.00	0.01	0.31
SRSQD	598.38	1.00	0.01	0.32
SRR	599.40	1.00	0.01	0.31
SRRR	600.54	1.00	0.00	0.32
Full	602.86	1.00	0.00	0.32
SSQD	615.11	0.74	0.04	0.16
Null	617.43	0.67	0.05	0.09
SQD	618.42	0.67	0.05	0.10
Only Women²	618.54	0.69	0.05	0.13
Only Women	619.13	0.67	0.05	0.10

Note. AICc = sample-corrected Akaike Information Criterion; CFI = comparative fit index; SRMR = standardized root-mean-squared residual; RR = rising ridge; SRRR = shifted and rotated rising ridge; SRR = shifted rising ridge; SRSQD = shifted and rotated squared difference models. Bolded text indicates models with <2 ΔAICc compared to the best fitting model.

Model Interpretation

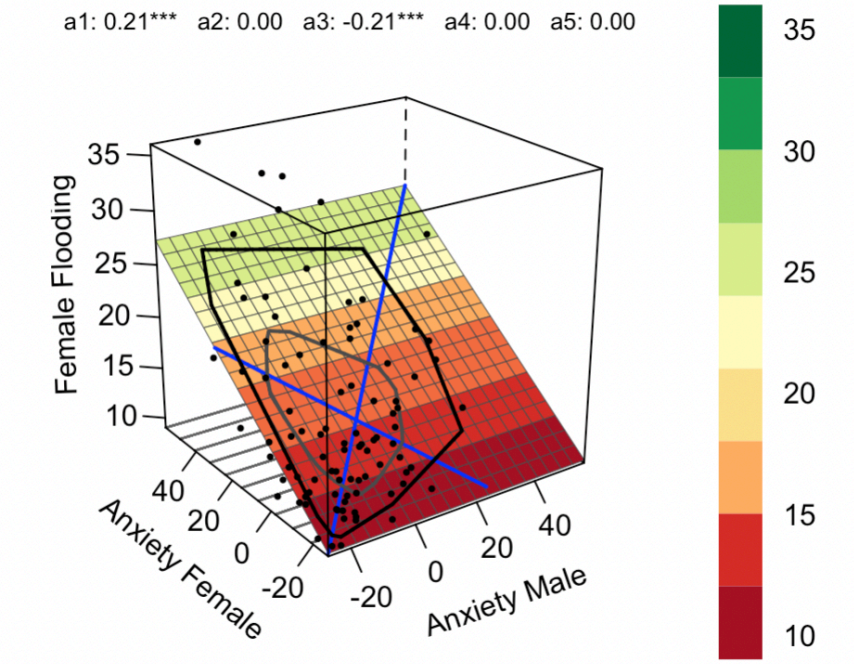
Figures 7, 8, and 9 visually show the best-fitting models for each attachment pairing and outcome. Regression parameters for all plausible candidate models are found in Table 6, and response surface parameters in Table 7. For anxiety, models generally suggested linear main effects. Specifically, only anxiety for women (b_2=0.21, p<.001) was associated with increased flooding in themselves; this was the same for men (significant b_1= 0.23, p<.001). These findings are shown in Figure 1. There appears to not be any more complex associations regarding attachment anxiety and emotional flooding.

For attachment avoidance, on the other hand, there was evidence of more complex effects. In the best-fitting model for flooding in females, there were significant linear, quadratic, interactive, and fit effects. Prior to interpretation, as per Humberg and colleagues (2019) suggestions, after establishing a significant a_4 coefficient, other factors are necessary to establish a fit effect. For a congruent effect, which was indicated by the significant negative value of a_4, p_{10} should not significantly be different from 0, p_{11} should not be statistically different from 1,

and a_3 should not be significantly different from 0. These effects are fixed to be true in the RR model. As seen in Figure 9, there was a mean-level effect, suggesting that combinations of predictor variables at high levels of avoidance were associated with higher reports of flooding in women. In addition, the combination of a significant positive a_1 and significant negative a_4 coefficient follows the rising ridge graphical depiction. Therefore, more congruent scores of attachment avoidance were associated with more emotional flooding. However, this should be interpreted with caution since the next model suggests only men's levels of anxiety predicting women's emotional flooding.

Figure 7

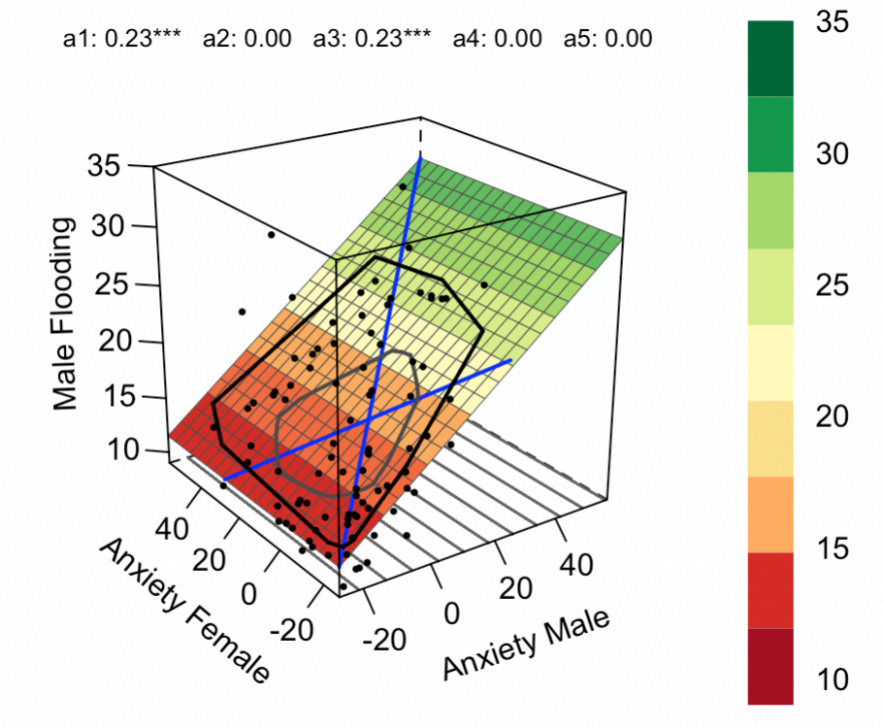
Response Surface Analysis of Female Flooding Predicted by Attachment Anxiety in Males and Females



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

Figure 8

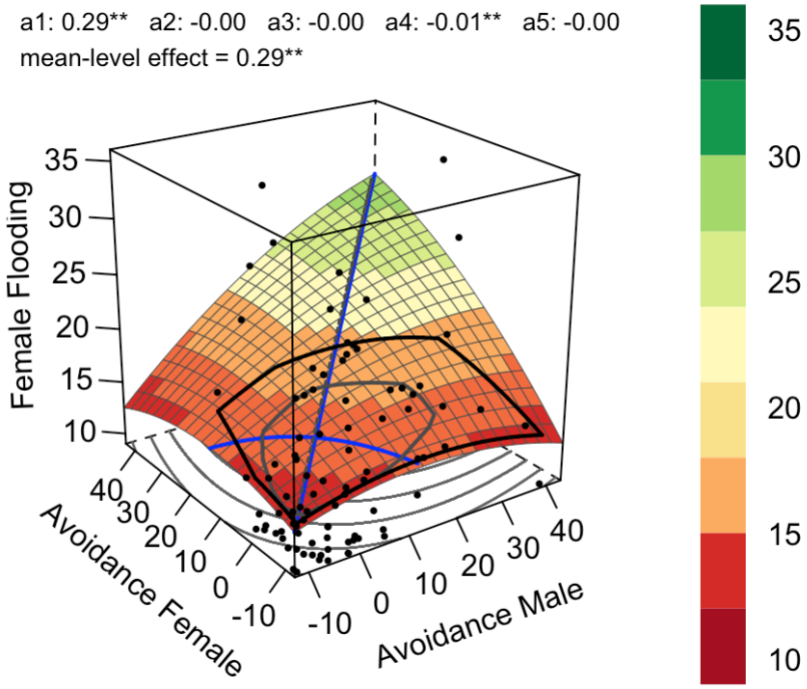
Response Surface Analysis of Male Flooding Predicted by Attachment Anxiety in Males and Females



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

Figure 9

Response Surface Analysis of Female Flooding Predicted by Attachment Avoidance in Males and Females



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

Table 6

Regression Parameters for all Plausible Candidate Models

Model	b_1 (SE)	b_2 (SE)	b_3 (SE)	b_4 (SE)	b_5 (SE)
Male and female attachment avoidance, predicting female flooding					
RR	0.14** (0.05)	0.14** (0.05)	-0.003** (0.001)	0.01** (0.002)	-0.003** (0.001)
Only Men^2	0.21** (0.07)		-0.007** (0.002)		
SRR	0.20** (0.08)	0.09 (0.09)	-0.004* (0.002)	0.008* (0.003)	-0.004* (0.002)
Male and female attachment anxiety, predicting female flooding					
Only Women		0.21*** (0.04)			
Only Women^2		0.18*** (0.04)			0.002 (0.001)
Male and female attachment anxiety, predicting male flooding					
Only Men	0.23*** (0.04)				
Additive	0.23*** (0.04)	0.04 (0.04)			
Only Men^2	0.24*** (0.04)		-0.003 (0.002)		

Note. Bolded models indicate the best-fitting models. SRR = shifted rising ridge; RR = rising ridge. *SE* = standard error
*$p < .05$. **$p < .01$. ***$p<.001$.

Table 7

Response Surface Parameters for all Plausible Candidate Models

Model	a_1 (SE)	a_2 (SE)	a_3 (SE)	a_4 (SE)	a_5 (SE)
Male and female attachment avoidance, predicting female flooding					
RR	0.29** (0.09)			-0.01** (0.004)	
Only Men^2	0.21** (0.07)	-0.007** (0.002)	0.21** (0.07)	0.007**(0.002)	-0.007** (0.002)
SRR	0.28** (0.10)		0.12 (0.13)	-0.02* (0.01)	
Male and female attachment anxiety, predicting female flooding					
Only Women	0.21*** (0.05)	-	-0.13* (0.07)	-	-

Only Women^2	0.18 *** (0.04)	0.002 (0.001)	-0.18*** (0.04)	0.002 (0.001)	-0.002 (0.001)
Male and female attachment anxiety, predicting male flooding					
Only Men	0.30*** (0.06)		0.17* (0.01)		
Additive	0.27*** (0.05)		0.19*** (0.06)		
Only Men^2	0.24*** (0.04)	-0.003 (0.002)	0.24*** (0.04)	-0.003 (0.002)	-0.003 (0.002)

Note. Bolded models indicate the best-fitting models. SRR = shifted rising ridge; RR = rising ridge. *SE* = standard error

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

Actor Partner Interdependence Models extended to Mediation (APIMeM)

In order to arrive at the most parsimonious model for each conflict behaviour (e.g., hostility, distress, intimacy, and problem-solving), we first fit a fully saturated model (e.g., including all actor and partner effects). If the saturated model did not converge, we compared nested models, starting with actor-only effects, and then adding partner effects from predictor and mediator and then from mediator to outcome. Chi-square tests were used to determine if the less constrained model was a better fit than the actor-only model. The model was chosen based on adequate model fit and theory.

The saturated model with hostility as the outcome failed to converge. Therefore, a bottom-up approach was taken, first fitting the data with actor-only effects. Subsequent models were compared by including partner effects from attachment to flooding or from flooding to the outcome measure. The actor-only model for hostility produced suboptimal model fit parameters ($\chi^2(10) = 19.55$, p=.03; CFI = .971; RMSEA = .100; SRMR = .099). Adding partner attachment predictors increased model fit compared to the actor-only model ($\chi^2(2) = 8.68$, p=.01). Adding partner flooding predictors to hostility also increased model fit compared to the actor-only model ($\chi^2(8) = 16.70$, p<.05). Based on model fit indices, the partner flooding to hostility was the best

fitting model ($\chi^2(8) = 10.87$, p=.21; CFI = .991; RMSEA = .061; SRMR = .049). Therefore, this model was retained.

The full model for distress also failed to converge, so a bottom-up approach was also conducted. The actor-only model fit was an adequate fit ($\chi^2(10) = 10.57$, p=.39; CFI = .998; RMSEA = .024; SRMR = .060). After adding partner attachment dimensions, the model failed to converge. Adding only partner flooding dimensions, the model converged, but was not a better model fit than the actor-only model ($\chi^2(2) = 1.51$, p=.47). Therefore, the final model was actor only.

The full model for intimacy also failed to converge. The actor-only model was an adequate fit ($\chi^2(10) = 9.80$, p=.46; CFI = 1.00; RMSEA = .000; SRMR = .067). After adding partner attachment dimensions, the model failed to converge. Adding only partner flooding dimensions, the model converged, but was not a better model fit than the actor-only model ($\chi^2(2) = 3.47$, p=.18). Therefore, the actor-only model was retained.

Finally, the full model for problem solving also failed to converge. The actor-only model was an adequate fit ($\chi^2(10) = 13.79$, p=.18; CFI=.991; RMSEA=.063; SRMR=.081). Adding partner attachment dimensions ($\chi^2(8) = 12.77$, p=.12) and partner flooding ($\chi^2(2) = 0.77$, p=.68) was not a better model fit than the actor-only model. Therefore, the final model was actor only.

APIMeM: Hostility

Both men's ($\beta = 0.46$, $p<.001$) and women's ($\beta = 0.60$, $p<.001$) attachment anxiety were associated with levels of actor flooding. Women's flooding was associated with their own hostility ($\beta = 0.29$, $p<.05$) and their male partner's hostility ($\beta = 0.28$, $p<.05$). After bootstrapping, indirect effects were found between women's attachment anxiety and their own hostility through flooding ($\beta = 0.17$, 95% CI [0.016, 0.326]). Indirect effects were also found

between women's attachment anxiety and their partner's hostility through women's flooding (β = 0.17, 95% CI [0.025, 0.306]). Standardized results with both significant and nonsignificant paths are shown in Figure 10. Table 8 provides the standardized coefficients, standard errors, and significance levels whereas Table 9 provides the direct, indirect, and total effects.

Table 8

Path Analysis for Attachment Insecurity and Emotional Flooding as Predictors of Hostility

	Women			Men		
Variable	β	*SE*	*p*	β	*SE*	*p*
Actor flooding on						
Actor anxious attachment	0.60***	0.09	<.001	0.46***	0.08	<.001
Actor avoidant attachment	0.16	0.09	.082	0.19	0.11	.081
Actor Hostility on						
Actor flooding	0.29*	0.13	<.05	0.09	0.13	.500
Partner flooding	0.04	0.13	.757	0.28*	0.11	<.05
Actor anxious attachment	-0.05	0.08	.511	-0.02	0.07	.786
Actor avoidant attachment	0.08	0.06	.153	0.05	0.05	.238

Note. β = standardized estimates; *SE* = standard error; *p* = significance level. *p <.05. **p <.01. ***p < .001.

Table 9

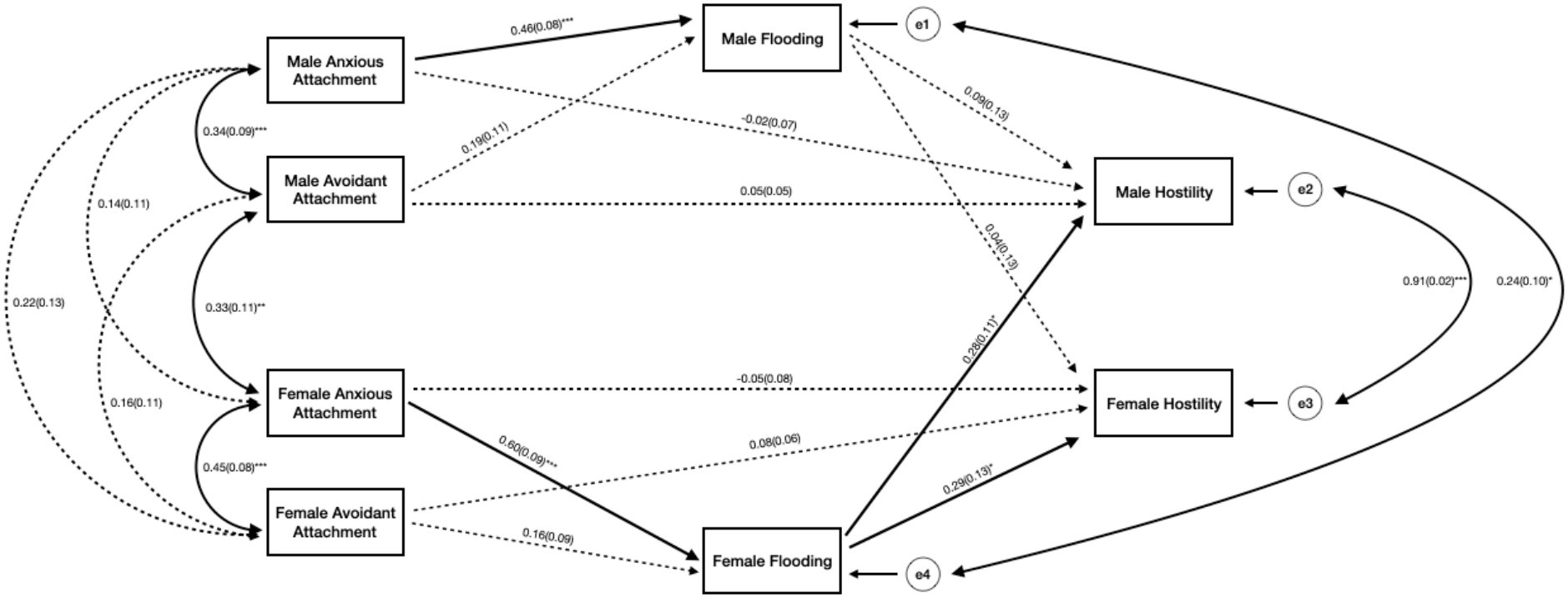
Decomposition of Effects of Emotional Flooding as a Mediator of Attachment Insecurity and Hostility

	Women			Men		
Effects	β	*SE*	*p*	β	*SE*	*p*
Actor hostility on actor anxious attachment						
Direct	-0.05	0.08	.511	-0.02	0.07	.786
Indirect (actor flooding)	0.17*	0.08	<.05	0.04	0.06	.504
Total	0.12	0.10	.221	0.02	0.08	.784
Actor hostility on actor avoidant attachment						
Direct	0.08	0.06	.153	0.05	0.05	.238
Indirect (actor flooding)	0.05	0.03	.144	0.02	0.03	.503
Total	0.12	0.07	.055	0.08	0.05	.130
Actor hostility on actor anxious attachment						
Indirect (partner flooding)	0.02	0.08	.757	0.13*	0.06	<.05
Actor hostility on actor avoidant attachment						
Indirect (partner flooding)	0.01	0.02	.764	0.05	0.04	.177

Note. Analyses based on 5,000 bootstrapped draws. β = standardized estimates; *SE* = standard error; *p* = significance level. *p <.05. **p <.01. ***p < .001.

Figure 10

Mediation Model with Hostility as the Outcome



Note. Full lines indicate significant paths (*p<.05, **p<.01, ***p<.001) and dotted lines indicate nonsignificant paths.

APIMeM: Distress

Both men's ($\beta = 0.46$, $p<.001$) and women's ($\beta = 0.60$, $p<.001$) attachment anxiety were associated with levels of actor flooding. Men's flooding was associated with their own distress ($\beta = 0.14$, $p<.05$). After bootstrapping, indirect effects were found between men's attachment anxiety and their own distress through flooding ($\beta = 0.06$, 95% CI [0.006, 0.123]). No other paths were significant in this model. Standardized results with both significant and nonsignificant paths are shown in Figure 11. Table 10 provides the standardized coefficients, standard errors, and significance levels whereas Table 11 provides the direct, indirect, and total effects.

Table 10

Path Analysis for Attachment Insecurity and Emotional Flooding as Predictors of Distress

	Women			Men		
Variable	β	*SE*	*p*	β	*SE*	*p*
Actor flooding on						
Actor anxious attachment	0.60***	0.09	<.001	0.46***	0.08	<.001
Actor avoidant attachment	0.16	0.09	.090	0.19	0.11	.075
Actor distress on						
Actor flooding	0.07	0.08	.425	0.14*	0.06	<.05
Actor anxious attachment	-0.03	0.09	.715	-0.04	0.06	.533
Actor avoidant attachment	-0.12	0.07	.093	0.02	0.07	.815

Note. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .001.

Table 11

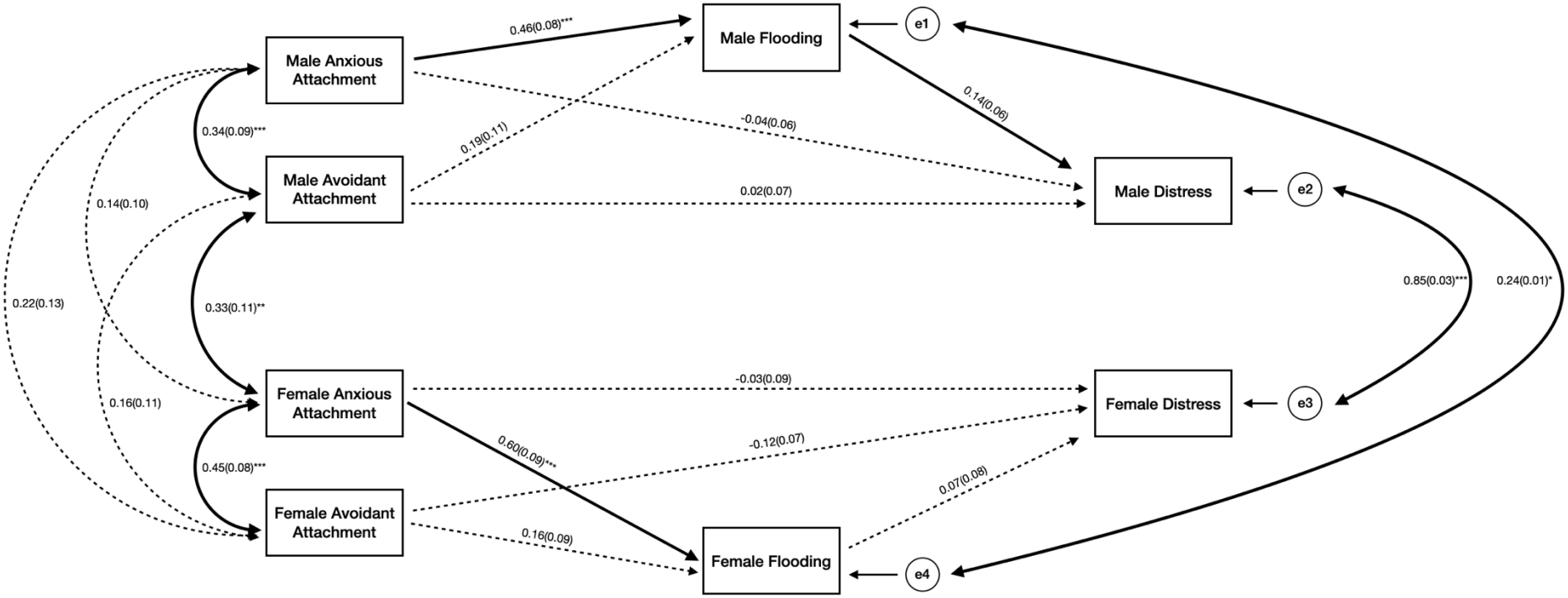
Decomposition of Effects of Emotional Flooding as a Mediator of Attachment Insecurity and Distress

	Women			Men		
Effects	β	*SE*	*p*	β	*SE*	*p*
Actor distress on actor anxious attachment						
Direct	-0.03	0.09	.712	-0.04	0.06	.542
Indirect (actor flooding)	0.04	0.05	.423	0.06*	0.03	<.05
Total	0.01	0.07	.926	0.03	0.06	.637
Actor distress on actor avoidant attachment						
Direct	-0.12	0.07	.088	0.02	0.07	.811
Indirect (actor flooding)	0.01	0.02	.477	0.03	0.02	.152
Total	-0.11	0.07	.114	0.04	0.06	.488

Note. Analyses based on 5,000 bootstrapped draws. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .00

Figure 11

Mediation Model with Distress as the Outcome



Note. Full lines indicate significant paths (*p<.05, **p<.01, ***p<.001) and dotted lines indicate nonsignificant paths.

APIMeM: Intimacy

Both men's ($\beta = 0.46$, $p<.001$) and women's ($\beta = 0.60$, $p<.001$) attachment anxiety were associated with levels of actor flooding. Flooding was not significantly associated with intimacy for men ($\beta = -0.05$, $p=.30$) or women ($\beta = -0.03$, $p=.51$). Therefore, there was no evidence to suggest that flooding mediated with relationship between attachment insecurity and intimacy. Standardized results with both significant and nonsignificant paths are shown in Figure 12. Table 12 provides the standardized coefficients, standard errors, and significance levels whereas Table 13 provides the direct, indirect, and total effects.

Table 12

Path Analysis for Attachment Insecurity and Emotional Flooding as Predictors of Intimacy

	Women			Men		
Variable	β	*SE*	*p*	β	*SE*	*p*
Actor flooding on						
Actor anxious attachment	0.60***	0.09	<.001	0.46***	0.08	<.001
Actor avoidant attachment	0.16	0.09	.084	0.19	0.11	.080
Actor Intimacy on						
Actor flooding	-0.03	.0.05	.508	-0.05	0.04	.295
Actor anxious attachment	0.02	0.04	.713	-0.07	0.05	.140
Actor avoidant attachment	-0.03	0.05	.478	0.01	0.04	.857

Note. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .001.

Table 13

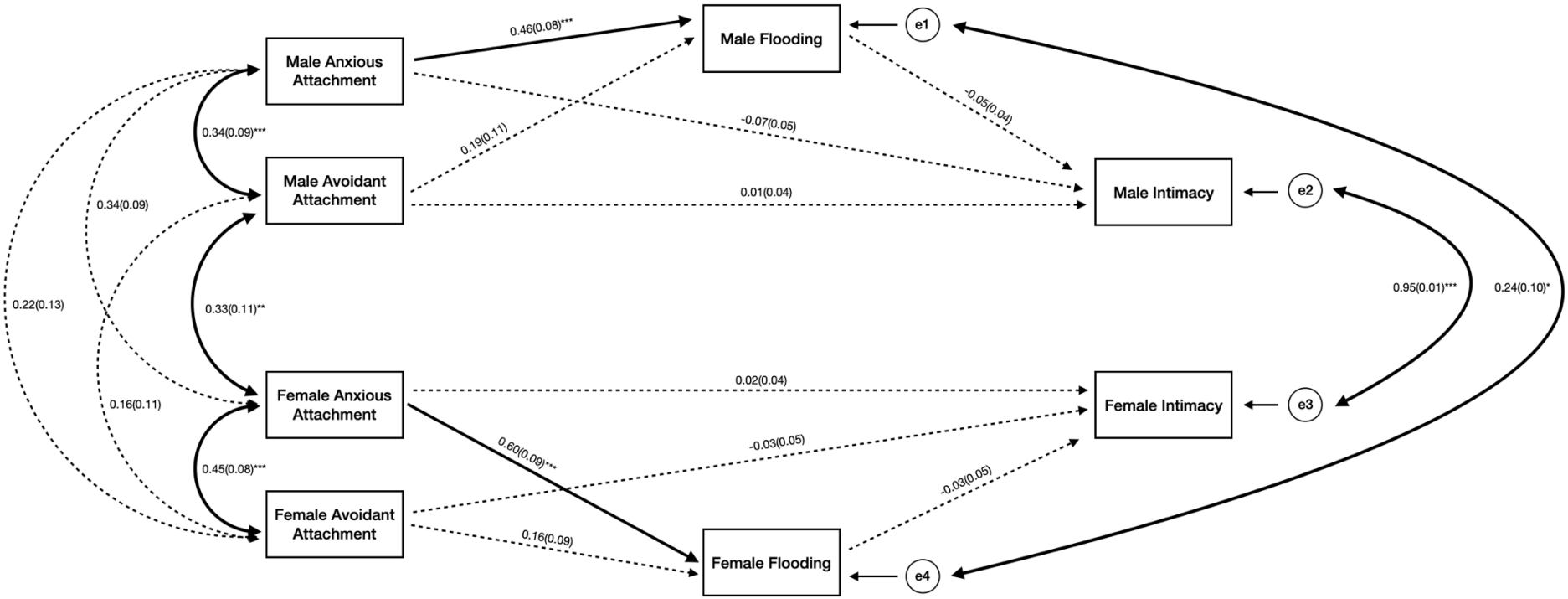
Decomposition of Effects of Emotional Flooding as a Mediator of Attachment Insecurity and Intimacy

	Women			Men		
Effects	β	*SE*	*p*	β	*SE*	*p*
Actor intimacy on actor anxious attachment						
Direct	0.02	0.04	.713	-0.07	0.05	.140
Indirect (actor flooding)	-0.02	0.03	.524	-0.02	0.02	.312
Total	-0.004	0.05	.930	-0.09*	0.05	<.05
Actor intimacy on actor avoidant attachment						
Direct	-0.03	0.05	.478	0.01	0.04	.857
Indirect (actor flooding)	-0.01	.01	.501	-0.01	0.01	.355
Total	-0.04	0.05	.387	-.002	0.03	.954

Note. Analyses based on 5,000 bootstrapped draws. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .001.

Figure 12

Mediation Model with Intimacy as the Outcome



Note. Full lines indicate significant paths (*p<.05, **p<.01, ***p<.001) and dotted lines indicate nonsignificant paths.

APIMeM: Problem Solving

Both men's ($\beta = 0.46$, $p<.001$) and women's ($\beta = 0.60$, $p<.001$) attachment anxiety were associated with levels of actor flooding. Flooding was not significantly associated with problem solving for men ($\beta = -0.03$, $p=.33$) or women ($\beta = -0.05$, $p=.18$). Therefore, there was no evidence to suggest that flooding mediated with relationship between attachment insecurity and problem solving. Standardized results with both significant and nonsignificant paths are shown in Figure 13. Table 14 provides the standardized coefficients, standard errors, and significance levels whereas Table 15 provides the direct, indirect, and total effects.

Table 14

Path Analysis for Attachment Insecurity and Emotional Flooding as Predictors of Problem Solving

	Women			Men		
Variable	β	*SE*	*p*	β	*SE*	*p*
Actor flooding on						
Actor anxious attachment	0.60***	0.09	<.001	0.46***	0.08	<.001
Actor avoidant attachment	0.16	0.09	.088	0.19	0.11	.08
Actor Problem Solving on						
Actor flooding	-0.05	0.04	.181	-0.03	0.03	.328
Actor anxious attachment	-0.004	.04	.911	-0.05	0.04	.181
Actor avoidant attachment	0.05	0.06	.430	0.05	.03	.111

Note. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .001.

Table 15

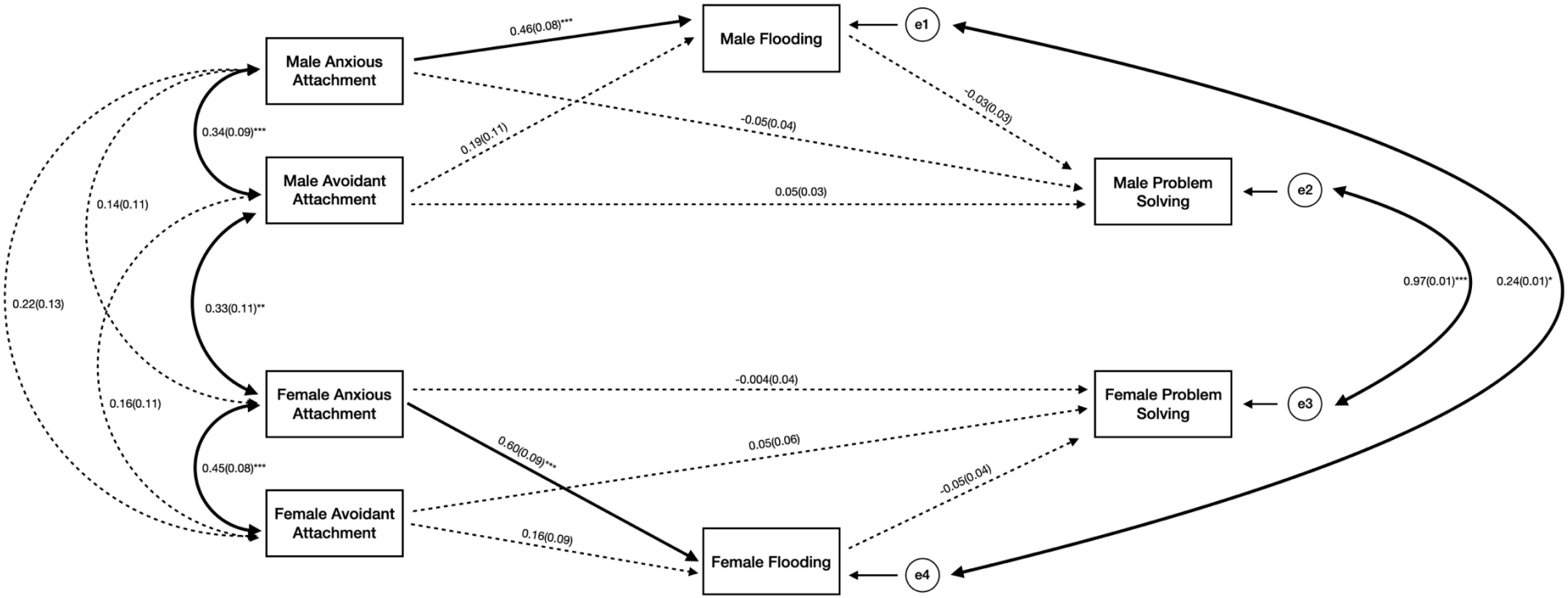
Decomposition of Effects of Emotional Flooding as a Mediator of Attachment Insecurity and Problem Solving

	Women			Men		
Effects	β	*SE*	*p*	β	*SE*	*p*
Actor problem solving on actor anxious attachment						
Direct	-0.004	0.04	.911	-0.05	0.04	.181
Indirect (actor flooding)	-0.01	0.02	.375	-0.01	0.02	.756
Total	-0.01	0.04	.784	-0.06	0.03	.053
Actor problem solving on actor avoidant attachment						
Direct	0.05	0.06	.430	0.05	0.03	.111
Indirect (actor flooding)	-0.002	0.01	.744	-0.01	0.01	.375
Total	0.04	0.06	.439	0.04	0.03	.147

Note. Analyses based on 5,000 bootstrapped draws. β = standardized estimates; *SE* = standard error; *p* = significance level.
*p <.05. **p <.01. ***p < .001.

Figure 13

Mediation Model with Problem Solving as the Outcome



Note. *Full lines indicate significant paths (*p<.05, **p<.01, ***p<.001) and dotted lines indicate nonsignificant paths.*

Discussion

The present study examined the complex associations between attachment style, emotional flooding, and conflict behaviours in couples expecting their first child. Through the various statistical approaches utilized, we were able to examine the dyadic nature of these constructs, providing research evidence of the emotional mechanisms that might explain the connection between attachment insecurity and observed behaviours during couple conflict. Our findings that emotional flooding is associated with attachment combinations in couples (e.g., main effects and interactions), as well as certain conflict behaviours (e.g., hostility and distress), provides additional support for the intrapersonal and interpersonal nature of emotion dysregulation and its implications for couple functioning at the prenatal period.

The study's findings are consistent with previous literature reporting that men have a greater propensity to flood compared to women. Gottman (1993) posited that men are flooded by less intense negative affect and behaviours from their partners. However, recent studies have found no such gender differences (Foran et al., 2020). In fact, Foran and colleagues (2020) found that men's and women's scores on emotional flooding were nearly identical. Perhaps the differences in findings could be due to the sample composition. The study conducted by Foran and colleagues (2020) also examined heterosexual couples, but couples already had a child between the ages of 3 and 7 years. We conducted follow-up analyses in the current study and found that the gender differences in flooding extended to 2 years postpartum, but then were not significant 4 years postpartum. This provides evidence that expecting a child, and the years that follow, might de-stabilize the couple's relationship, increasing the frequency and severity of conflict. It also might be that the threshold for experiencing aversive experiences could be lowered based on the increased stress, lack of sleep, and other factors that accompany the arrival

of a child. Emotional flooding, especially for expectant fathers, might be demonstrative of the utilization of maladaptive coping strategies to deal with emotions; along with poor regulation strategies, it has been found that expectant fathers also report greater irritability and more negative affect during the prenatal period compared to postpartum (Condon et al., 2004). This combination of factors could potentially explain the heightened flooding in our male sample.

We also found that men's attachment avoidance was associated with their own tendency to become emotionally flooded. Attachment avoidance has been associated with a reduced ability to regulate negative affect (Creasey et al., 1999), which could be why men high in avoidance might become flooded based on their partner's reactions during conflict. In addition, past research has demonstrated that individuals high in avoidance make greater negative attributions about their partners' behaviour (Gallo & Smith, 2001). This could explain avoidant men's propensity to become flooded, based on the overwhelming nature of conflict and the misattribution of intentions of their partner. Velotti and colleagues (2016) examined the association between attachment insecurity and emotion dysregulation and found that attachment avoidance was positively associated with an unwillingness to tolerate negative emotions; this association was only significant for males. Similar to distress tolerance, this gender effect suggests that men in our sample might have a lower threshold for experiencing a partner's negative affect as aversive.

We also observed partner effects in this model, with partner anxiety associated with increased flooding in both men and women. A partner's attachment insecurity can impact one's ability to regulate emotions. Attachment anxiety has been negatively associated with one's ability to manage negative emotions during conflict (Creasey et al., 1999) and the tendency to escalate conflict beyond the original issue (Campbell et al., 2005). Therefore, perhaps individuals

who have partners high in anxiety become flooded due to the escalation of conflict and their partners' inability to manage emotions during conflict. This escalation could, in turn, lead to feelings of being overwhelmed and finding a partner's behaviours to be unexpected and cognitively disorganizing. In addition, even the mere perception of a partner's attachment anxiety has implications for emotion regulation. Lemay and Dudley (2011) found, in a sample of married or dating couples, that an individual's ability to perceive their partner's attachment anxiety was associated with increased vigilance and affect exaggeration. Using daily diary methods, it was found that being paired with an anxious partner led the target individual to fear upsetting their partner, leading to a concealment of their negative emotions. Other studies have confirmed this association, finding that partners of anxiously attached individuals suppress their emotions instead of pursuing their own needs (Brandão et al., 2020). This suppression of negative feelings could become cognitively taxing over time. In the context of conflict, therefore, an individual's regulatory abilities may be depleted, leading to feeling overwhelmed or cognitively dysregulated by a partner's emotional responses.

In addition, attachment avoidance in men interacted with attachment anxiety in women to predict men's greater emotional flooding. This could be explained by competing emotion regulatory strategies typically employed by differing attachment styles. While emotional suppression facilitates the goal of disengagement and detachment, it also limits one's emotional awareness and clarity. This fits with research showing that while avoidant individuals might not be able to directly label their feelings, their internal physiologies indicate contrary. Mikulincer (1998) demonstrated that avoidant people do not report feeling anger about relational events, but their physiological recording are indicative of intense anger. Perhaps, then, that conflict might not explicitly be mentioned as an aversive experience, but the disconnect between thinking and

feeling might lead avoidant individuals to feel overwhelmed in response to their partner's affect; this would be heightened if their partner had an opposing attachment style that is associated with emotional amplification. It has also been found that when involved with avoidant partners, anxiously attached individuals increase emotional suppression, which suggests an override of their preferred emotion regulatory strategies (Winterheld, 2015). This could result in compensatory negative affect expression from the anxious individual after trying to suppress, leading to an exacerbated emotional response and increasing the aversiveness of conflict and its overwhelming nature in avoidant individuals. This interaction could also be due to the subconscious perception of one's partner. As mentioned previously, even the mere perception of attachment anxiety in one's partner was associated with maladaptive emotion regulatory processes.

Examining only main effects and simple interactions provides a less-than-clear picture of the intricate attachment dynamics and their emotional mechanisms in partners. When considering not only main effects and interactions but also (mis)matches on attachment dimensions between partners, we found no complex associations between levels of attachment anxiety. On the other hand, associations with attachment avoidance were more complex for women, not men. The results suggest that women experienced more emotional flooding in a non-constant manner, depending on the matching between attachment avoidance. Emotional flooding was highest when both partners were similar in their attachment avoidance; in addition to this similarity pattern, there was an effect on the level of similarity. Partners who were both high in avoidance had higher emotional flooding than partners who were both low in avoidance. Research examining avoidant-avoidant pairs are scarce in the literature. However, Winterheld (2015) found that highly avoidant partners suppressed emotions more frequently when their partner was

also high on avoidance. This combination of partners is most likely to utilize deactivating strategies, encouraging greater expressive suppression. This "pull" effect, where one partner's avoidance encourages greater suppression in the other partner, could leave the individual feeling powerless. This could be amplified during time periods where social and gender scripts are being challenged/reconsolidated, such as for couples during the prenatal period. Previous research has found that becoming a parent is associated with shifts toward more traditional viewpoints (e.g., division of household labor; Perales et al., 2018). Since women are typically socialized to be expressive of their emotional needs, along with the shift to more traditional viewpoints during the prenatal time period, perhaps gender socialization is interacting to explain the association between flooding and avoidance in women. Avoidant women, whose emotional suppression might be atypical of traditional social scripts, are already feeling incongruence between their gender socialization and emotional regulation strategies. Therefore, when one's partner also endorses avoidance, this could exacerbate this incongruence, leading women to feel dysregulated by their partner's actions. This disorganization could also be reflective of inherent power differentials between heterosexual couples. The transition to parenthood could also shift couples' viewpoints on power imbalances inherent to the relationship. Therefore, avoidant women might feel disorganized by their partner's affect based on feeling powerless during the conflict situation, irrespective of their own emotion regulatory strategies.

In addition to the dyadic nature of attachment and flooding, the inclusion of observed conflict behaviours provided insight into the connection between intrapersonal and interpersonal emotion regulatory mechanisms in couples. When examining attachment, emotional flooding, and conflict behaviours in succession, the interplay of attachment styles between partners became less important than the interplay between each partner's emotional flooding and their

observed behaviours during conflict. For example, our results showed that women's flooding mediated the relationship between women's anxious attachment and displays of hostility in both men and women; partner's attachment styles were insignificant to this association. These findings mirror research examining coercion theory (Patterson, 1982), which explains conflict through positive and negative reinforcement schedules and interpersonal contingencies. For example, coercion theory posits that individuals will utilize aversive behaviours as an attempt to end conflict interactions. It was found that women who were flooded not only displayed hostile behaviours themselves, but their male partners matched their behaviours. These findings are in line with the "match and step up" process. In an attempt to end conflict, each partner might escalate their own behaviours until one partner capitulates, thereby negative reinforcing these dynamics. Recent expansion to coercion theory has focused on a complementary "match and step down" process where dyads might de-escalate conflict through displayed behaviour (Slep et al., 2016). This process might begin by each partner matching aversive behaviours (e.g., both partners displaying hostility, as seen earlier). At some point, one partner might decrease the intensity of behaviour (e.g., demonstrating distress rather than hostility). This reduction is doubly reinforced, as it might influence one's partner to also decrease the intensity of their behaviour (e.g., negative reinforcement) and reduce the intensity of one's own internal state (e.g., negative reinforcement). This pattern could be evidenced by flooding mediating the relationship between attachment anxiety and distress in men. While men were seen displaying hostility in relationship to their partner's flooding, they also displayed distress to their own feelings of flooding. However, coercion theory only touches on the emotional mechanisms at play.

As mentioned previously, emotional flooding mediated the relationship between attachment insecurity and differing forms of conflict behaviours for men and women. The

mediating effects of flooding is consistent with the idea that flooding can facilitate coercive exchanges where aversiveness from a partner leads to flooding, which elicits a fight/flight response with the goal of ending a partner's aversiveness (Slep et al., 2016). Literature examining the interpersonal nature of emotions (and their corresponding behaviours) might uncover the additional mediating potential of flooding from intra- to inter-personal emotion dynamics. For example, partner 1, being anxiously attached, brings into the relationship a working model that is prone to hypervigilance and emotional amplification in the face of conflict (Dixon-Gordon et al., 2015). During a conflict, an anxiously attached individual might be predisposed to difficulties with decoding a partner's behaviour, due to this hypervigilance or hypersensitivity. This difficulty in decoding a partner's behaviour can impact the individual's ability to emotionally regulate themselves in the face of stress, which can be problematic to emotion regulatory goals (e.g., attempts to end conflict, display positive behaviours, etc.). This can manifest in difficulties encoding, or choosing an interpersonal behavioural strategy to achieve one's goals, leading to either excessive attempts to regulate others' emotions or failure to regulate one's own emotions through others. Therefore, the connection between attachment-flooding and flooding-behaviour can explain how intrapersonal deficits in emotion regulation (evidenced through attachment insecurity) might manifest in maladaptive conflict behaviours displayed in couples (e.g., displays of hostility and/or distress when flooded).

Taken together, the act of displaying negative conflict behaviours might be the result of inaccurately decoding a partner's behaviours through the inaccurate appraisals associated with attachment insecurity; this association later influences choosing suboptimal encoding strategies to achieve one's goal of emotion regulation. This could create a cycle that is reinforced by both members of the couple, leading to increasingly aversive conflict dynamics and perpetuating the

feelings of flooding in both members. While these results confirm the findings of attachment anxiety, they do not address the gender differences in behaviours (e.g., flooding being associated with distress in men, not women).

As mentioned earlier, expectant couples become more traditional in their gender roles on average. In addition to the changes in roles at the transition to parenthood, it has been found that conflict behaviours are also gendered, with women typically in the demanding role and men subsequently withdrawing (Roloff & Reznik, 2020). However, there are notable moderators of this effect, such as who is pursuing change and the severity of conflict topic (Christensen & Heavey, 1990). In our sample of heterosexual individuals expecting their first child, we might see a greater endorsement of traditional gender roles, highlighting the prototypical demand-withdraw literature found in heterosexual dyads.

In terms of attachment avoidance, there are a few reasons why our results may have been insignificant. Researchers examining the connection between intra- and inter-personal emotion regulation have stressed the importance of motives. For example, one's regulatory motive might be to improve how the target feels or to worsen the target's feelings (Niven et al., 2012). Therefore, in the context of the types of negative behaviours examined (hostility and distress), these behaviours might not tap into the intent behind avoidant individuals' distancing strategies. The distress factor, while including a measure of withdrawal, also includes feelings of tension and sadness, which might not align with avoidant individual's motives of using behaviours in proactive ways to avoid addressing feelings. This factor also included stonewalling, which might reflect a more passive-aggressive behaviour of intentionally tuning a partner out during conflict. Additional statistics were run including only avoidance as an outcome, and it was found that both attachment avoidance and avoidant behaviours were each associated with flooding in men.

However, there was not enough power to reach a statistically significant relationship. This provides some evidence that avoidant individuals might enact behaviours for the purpose of regulating their own emotions rather than attempting to influence their partner through their actions, however higher-powered replications are necessary to determine if this is a true effect.

In addition to negative conflict behaviours, there were no direct or indirect effects between measures of attachment insecurity, flooding, and positive conflict behaviours (e.g., intimacy and problem solving). The lack of findings might highlight the reactionary nature associated with emotional flooding. Gottman likened it to a "fight or flight" emotional response. Therefore, the individual will fall on their prototypical ways of handling conflict. In partners who do become flooded during conflict, this might distinguish them from other couples who could enact cognitive change or adaptive response modification. Perhaps other forms of emotion dysregulation, such as co-brooding or co-rumination, might help explain decreases in intimacy and problem-solving. These forms of emotion dysregulation are also interpersonal in nature (e.g., both partners are engaging in the emotional mechanism together) and have been found to relate to poor adjustment and depressive symptoms, above and beyond intrapersonal emotion regulation strategies (Horn & Maercker, 2016). This could affect how couples navigate conflict, such that co-brooding takes the place of more adaptive resolution strategies, such as intimacy or problem solving.

Clinical Implications

The findings of the current study aid our understanding of the complex dynamics between attachment insecurity, emotional flooding, and conflict behaviours in couples, and can be used to inform theory and clinical interventions with couples at the prenatal time period. Utilizing transition to parenthood frameworks, this study confirmed the association between

prenatal vulnerability factors and their associations with conflict behaviours, which have been documented in the literature (e.g., Kluwer, 2010). However, the current study stresses the importance of the emotional mechanisms that link these constructs; studying the direct association between attachment insecurity and conflict behaviours yielded insignificant results. Therefore, the emotional mechanisms linking these constructs expands transition to parenthood models that suggest intrapersonal vulnerabilities directly impact interpersonal processes in couples expecting their first child.

Utilizing theories of emotion regulation to help explain this association provides a more comprehensive approach to studying the dyadic influences of vulnerability factors and how they affect behaviours through emotional flooding. Taken together, this study suggests that attachment insecurities, and the relationships between attachment and flooding from both partners, should be taken into account when examining conflict dynamics. Intervention approaches to address problematic conflict patterns should account for this reciprocity and dyadic interplay between predictors and mechanisms. This aligns with intervention strategies that incorporate both members of a couple, understanding problematic behaviours through a dyadic lens. Emotionally Focused Couple Therapy (EFT) is a framework grounded in adult attachment theory that has proven useful for addressing couple dysfunction (e.g., entrenched conflictual patterns, etc.; Greenberg & Johnson, 1988). Its theoretical underpinning and focus on emotion dynamics at the couple level integrate well with the current study's findings.

The study's findings allude to the cyclical pattern of couple conflict, where difficulties decoding a partner's behaviour can lead to ineffective encoding strategies based on underlying insecurities. EFT not only addresses these intrapersonal difficulties, but also the pattern that emerges based on the interplay of each partner's attachment insecurities. Therefore, EFT can

effectively address intrapersonal insecurities by working with each partner to help them develop emotional awareness and increase effective emotion regulation strategies. If conflict does arise, intervening prior to emotional flooding can offer a corrective experience to facilitate effective conflict management strategies. EFT focuses on identifying interactional patterns in couples (e.g., demand-withdrawal) and then deconstructing the antecedents of the behaviour. Therefore, EFT could address the underlying attachment insecurities in both partners that might underly problematic conflict dynamics. For example, prior to partner 1 becoming flooded during conflict, the therapist can intervene and encourage emotional expression to one's partner, thereby facilitating a proactive conflict experience. Since attachment difficulties might make it difficult to actively appraise one's partner's motives, stopping the conflict pattern and encouraging emotional expression could be an explicit form of explaining one's needs and perceptions.

Given that the sample was composed of couples expecting their first child, these findings stress the importance of emotion regulation not only at the relationship level, but also at the family level. Research has demonstrated the intergenerational transmission of attachment styles between caregivers and their children. For example, Paley and colleagues (2005) demonstrated that fathers' insecure attachment assessed during relationship conflict prenatally predicted less positive and more negative whole family interactions postnatally. The association between attachment insecurities in partners extends to how couples coparent after their child is born, with greater insecurity predicting more coparenting conflict and less cohesion (Talbot et al., 2009). Therefore, providing corrective experiences at the prenatal period is crucial to foster adaptive intergenerational transmission of attachment security from caregiver to child. Screening couples at risk of problematic conflict behaviours could highlight those in need of interventions at the

prenatal period, with the effectiveness of interventions extending to the entire family longitudinally.

Limitations and Future Directions

While there were notable strengths in the study, it is not without limitations. As we discuss the cyclical nature of the predictors, it is important to note that the data used were cross-sectional. Therefore, the causal directions of these variables cannot be defined. However, the finding that attachment insecurity was not directly related to conflict behaviours provides incremental validity to emotional flooding mediating this association. Given that the sample was composed of relatively affluent, heterosexual couples expecting their first child, we are cautious about the generalizability of the findings. In addition, the participants endorsed rather moderate levels of attachment anxiety and avoidance. Given that the ECR scale measures attachment along a spectrum, it is worth noting that our participants did not score at the extreme levels of either attachment dimension, indicating more secure attachment styles; this could reflect the insignificant findings of attachment avoidance predicting conflict behaviours in our sample. The ECR also did not explicitly ask participants to indicate their attachment style in reference to their current relationship partner, which might have further confounded the results. In addition to the self-report measures, the observed conflict behaviours were low base rate, especially for withdrawal and stonewalling. This likely affected the factor structure of the CFA, as evidenced by avoidance failing to load for women in the sample. This limitation could explain why the association between flooding and distress was only significant for men, and no partner effects were observed. The relationships between these constructs could have produced different results if participants had endorsed higher levels of attachment insecurity and more implicit behaviours during conflict were detected.

The relatively small sample size limits the power in detecting statistical significance, especially given the complexity of the dyadic models. Future studies should examine these constructs and other individual- and couple-level factors that might influence this association, such as level of couple distress, pre-existing mental health concerns, and demographic variables that might be of interest. Given the dyadic nature of these constructs, including measures of one's own attachment insecurity and emotional flooding alongside the perception of one's partner on the same variables could provide additional insight into this association. For example, how one perceives their partner's attachment insecurity and propensity to become flooded could help explain how individuals respond during conflict. If an individual perceives their partner as easily flooded, perhaps they might employ emotional suppression in fear of escalating their partner, leading to amplified feelings of emotion dysregulation.

In the context of couple conflict, including psychophysiological measures alongside self-reported emotional flooding could elucidate the potential discrepancy between physiology and cognition. Since this discrepancy is apparent in avoidant individuals (Gottman, 1993), perhaps these individuals were under-reporting their tendency to become emotionally flooded, which could be corroborated by heart rate variability, skin conductance, and other measures to assess dysregulation. While the conflict paradigm assessed conflict dynamics in a semi-naturalistic format, allowing each partner to reflect on their motives after the conflict could provide additional insights into the goals associated with the observed behaviours. For example, avoidance could be used to influence one's partner negatively (as an attempt to invalidate a partner's feelings by drawing away), downregulate one's own emotional reactions (avoiding as a form of escape from one's own emotions), or both.

Conclusion

The study provides a glimpse into the complex dynamics of attachment insecurity and its association with flooding and conflict behaviours at the prenatal period. The dyadic nature of the study allowed the interpersonal emotional mechanisms linking attachment style and conflict behaviours to be examined within and between partners. Attachment insecurity was associated with increased flooding in avoidant men and women when examining the associations with their partner's attachment style. While these patterns did not hold when including conflict behaviours, they provide evidence for the complexity of attachment pairings and the need to confirm relevant attachment theories in the future (e.g., similarity vs. complementary hypotheses of attachment). When examining conflict behaviours, it was found that flooding mediated the relationship between attachment anxiety and hostility for women, and attachment anxiety and distress for men. These gender differences in behaviour and flooding were notable and provided greater support for the demand-withdrawal conflict dynamic and its emotional antecedents. These findings suggest that increasing one's ability to effectively regulate emotions during conflict may decrease aversive behaviours in couples, especially in those with attachment vulnerabilities.

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Appendix A: Instruments

Experiences in Close Relationships Scale

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.

	QUESTION	1=Strongly Disagree.....7=Strong Agree						
1.	I'm afraid that I will lose my partner's love.	1	2	3	4	5	6	7
2.	I often worry that my partner will not want to stay with me.	1	2	3	4	5	6	7
3.	I often worry that my partner doesn't really love me.	1	2	3	4	5	6	7
4.	I worry that romantic partners won't care about me as much as I care about them.	1	2	3	4	5	6	7
5.	I often wish that my partner's feelings for me were as strong as my feelings for him or her.	1	2	3	4	5	6	7
6.	I worry a lot about my relationships.	1	2	3	4	5	6	7
7.	When my partner is out of sight, I worry that he or she might become interested in someone else.	1	2	3	4	5	6	7
8.	When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.	1	2	3	4	5	6	7
9.	I rarely worry about my partner leaving me.	1	2	3	4	5	6	7
10.	My romantic partner makes me doubt myself.	1	2	3	4	5	6	7
11.	I do not often worry about being abandoned.	1	2	3	4	5	6	7
12.	I find that my partner(s) don't want to get as close as I would like.	1	2	3	4	5	6	7
13.	Sometimes romantic partners change their feelings about me for no apparent reason.	1	2	3	4	5	6	7
14.	My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
15.	I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.	1	2	3	4	5	6	7
16.	It makes me mad that I don't get the affection and support I need from my partner.	1	2	3	4	5	6	7
17.	I worry that I won't measure up to other people.	1	2	3	4	5	6	7
18.	My partner only seems to notice me when I'm angry.	1	2	3	4	5	6	7
19.	I prefer not to show a partner how I feel deep down.	1	2	3	4	5	6	7
20.	I feel comfortable sharing my private thoughts and feelings	1	2	3	4	5	6	7

	with my partner.							
21.	I find it difficult to allow myself to depend on romantic partners.	1	2	3	4	5	6	7
22.	I am very comfortable being close to romantic partners.	1	2	3	4	5	6	7
23.	I don't feel comfortable opening up to romantic partners.	1	2	3	4	5	6	7
24.	I prefer not to be too close to romantic partners.	1	2	3	4	5	6	7
25.	I get uncomfortable when a romantic partner wants to be very close.	1	2	3	4	5	6	7
26.	I find it relatively easy to get close to my partner.	1	2	3	4	5	6	7
27.	It's not difficult for me to get close to my partner.	1	2	3	4	5	6	7
28.	I usually discuss my problems and concerns with my partner.	1	2	3	4	5	6	7
29.	It helps to turn to my romantic partner in times of need.	1	2	3	4	5	6	7
30.	I tell my partner just about everything.	1	2	3	4	5	6	7
31.	I talk things over with my partner.	1	2	3	4	5	6	7
32.	I am nervous when partners get too close to me.	1	2	3	4	5	6	7
33.	I feel comfortable depending on romantic partners.	1	2	3	4	5	6	7
34.	I find it easy to depend on romantic partners.	1	2	3	4	5	6	7
35.	It's easy for me to be affectionate with my partner.	1	2	3	4	5	6	7
36.	My partner really understands me and my needs.	1	2	3	4	5	6	7

Intimate Partner Flooding Scale

Instructions: Please use the following scale to rate how often you feel this way when you have conflicts with your partner.

	Almost Always	Often	Sometimes	Rarely	Never
1. I find my partner's anger to be overwhelming.	1	2	3	4	5
2. My partner tends to explode without warning signs.	1	2	3	4	5
3. I get all jumbled when my partner is angry with me.	1	2	3	4	5
4. I get so stressed when my partner blows up at me that I shut down.	1	2	3	4	5
5. My brain short-circuits when my partner gets angry.	1	2	3	4	5
6. My partner's anger seems to come out of nowhere.	1	2	3	4	5
7. My partner's anger overpowers me.	1	2	3	4	5
8. Anger from my partner makes me unable to focus.	1	2	3	4	5
9. The intensity of my partner's anger catches me off guard.	1	2	3	4	5
10. I feel flooded by my partner's anger.	1	2	3	4	5
11. I can't predict when my partner will blow up at me	1	2	3	4	5
12. I feel paralyzed during my partner's angry outbursts.	1	2	3	4	5
13. I'm taken aback by how angry my partner gets during an argument.	1	2	3	4	5
14. My partner's anger leaves me feeling disorganized and stressed.	1	2	3	4	5
15. I can't think straight when my partner is angry with me.	1	2	3	4	5

All items are reversed scored. Replace "partner" with husband or wife for spouse-specific versions.

Couples Affect-Intensity Rating System
CAIRS

Erica Woodin & Tara Galaugher
University of Victoria

2012

Version 1.0

TABLE OF CONTENTS

HOSTILITY CODES

GENERAL CODING GUIDELINES

Hostility codes are characterized by high negative affect. If a hostility behavior is present, it is impossible to code any problem-solving or intimacy behaviors.

BELLIGERENCE

Belligerence is provocative. The belligerent person disagrees with or contests whatever her partner is saying, seemingly regardless of content. This person appears to be provoking a response in her partner, as if trying to start a fight. She may present her partner with a challenge or appear to delight in her partner's discomfort.

Attributes

1) **Taunting Questions** – Questions that serve only to confuse and irritate one's partner for one's amusement. The belligerent person may be struggling to repress a smile as he asks these questions, while his spouse becomes enraged.
2) **Unreciprocated Humor** – The belligerent person may think she's being funny, but her partner obviously thinks otherwise. This can include teasing which is neither playful, fun and shared (humor) nor sarcastic, mocking and insulting (contempt).
3) **Interpersonal Terrorism / The Dare** – Here the belligerent person attempts to test the agreed limits or fundamental rules of the relationship. It is likewise daring one's spouse to keep the rules from being broken. Questions like "so?" and "what would you do if I did?" and "what are you going to do about it?" fall into this category.

CRITICISM

Criticism involves attacking someone's personality or character, *rather than a specific behavior*, often coupled with blame. Criticism is very different from complaining. A complaint is a specific statement of anger, distress, displeasure or other negativity. Criticism is much less specific.

Attributes

1) **Blaming** – Assigning fault to one's spouse with a personal attack or accusation. "The reason the car blew up is because you never put oil in it."
2) **Character Attacks** – Statements that are critical of the spouse's character. Often expressed in "you always/you never" kinds of statements or in statements including the word "should." Examples might include statements like "You don't care," "You always put yourself first," or "You should know better than to leave the porch light on all day."
3) **Kitchen Sinking** – A long list of complaints. Even though each item in the list may be expressed as a complaint, when the complaints begin to pile up they become overwhelming to the spouse on the receiving end and are to be considered criticism. An example might be

"I don't feel listened to by you, and you don't touch me very often. I asked you to do certain chores, but you didn't. I'm just not having any fun."

4) **Betrayal Statements** – Much the same as blaming, this kind of statement is more specific to trust. It implies (or states directly) that one spouse betrayed the other. "I trusted you to balance the checkbook and you let me down." "How could you *do* that when you know how much this means to me?"
5) **Negative Mindreading** – A mindreading statement is any attribution that the partner makes about the other's feelings, behaviors, or motives. These statements often include the phrases, "you always…" or "you never…" Mindreading statements are coded criticism only when delivered with negative affect.

CONTEMPT

Contempt is the attempt to insult or otherwise communicate a lack of respect toward one's partner. Its expression is considered to be very powerful, and as such it takes precedence over any other code witnessed simultaneously. Contempt is entirely different than a simple disagreement. There is a distance with contempt – an icy quality with a suggestion of superiority – as if looking down one's nose at one's partner.

FACS CUES

14 (dimpler)

Attributes

1) **Sarcasm** – Derisive laughter or a ridiculing comment regarding something the subject's partner has said. Can be comments as short as "Sure!" or "I'll bet you did!" when the meaning of the statement is obviously the reverse of its words.
2) **Mockery** – Repeating something that one's partner has said with an exaggeration intended to show a lack of respect for the statement or the individual to whom the statement is attributed.
3) **Insults** – An active communication of disrespect for one's partner through verbal cruelty. It is intended to humiliate the partner with the suggestions that the partner is foolish, incompetent, ugly or otherwise without virtue.
4) **Hostile Humor** – Humor that is sarcastic, mocking, or insulting. Even if the partner laughs along, still code the speaker as contempt. An exception is good-natured teasing, which is coded Humor.

DEFENSIVENESS

This code communicates an innocent victim kind of stance – a communication of blamelessness – as if to say "Leave me alone. What are you picking on me for?" Also there is an implicit message that seems to say, "It's not my fault, I didn't do anything wrong." These statements can also be communicated in an aggressively defensive manner.

Attributes

1) **Yes-But** – The statement starts off sounding like an agreement, but ends up being a disagreement. There must be a "yes," "yeah, I know," or some other kind of agreement immediately followed by a disagreement in the same statement.
2) **Cross-Complaining** -- This involves meeting a complaint directly with a counter-complaint. One partner complains about Subject A and the other partner immediately complains about Subject B. This is a way of deflecting the blow of the initial complaint.
3) **Excuses** – Instead of meeting a complaint with "yes, I know," an excuse always seems to find another place to rest the ultimate blame in a given situation.

4) **Rubber man/woman** – The partner is defending his/herself from attack but also blames the partner. The person tries to suggest guilt or blame actually rests with the other partner or outside influence. It is as if to say, "whatever you say bounces off of me and sticks to you."
5) **Counter-Criticism** – There is a juvenile quality to this kind of response. The speaker acts pouty and victimized. The response to a complaint is saying, "Well, you don't either."
6) **Aggressively Defensive** – The intensity is high. The individual does not back away, but rather vehemently or assertively defends themselves. Most often, this initial defensive response will be accompanied by domineering. An example is "No, I did not do that!"

DOMINEERING

The goal of an individual displaying this affect is to dominate the other person in no uncertain terms. Domineering individuals will try to control the conversation. These partners are trying to force compliance, to get the other person to withdraw, retreat, or submit to their own views.

FACS CUES

2 (outer brow raise)
1+2 (inner brow raise + outer brow raise)
4 (brow lowerer)
5 (upper lid raise)
7 (lids tight)

Attributes

1) **Low Balling** -- In salesmanship there is a strategy called low balling in which one tries to get unwary customers to say "yes" to the simplest of facts that most people agree on. Then the statements slowly escalate and customers continue to agree even though the statements are far different from their own point of view.
2) **Invalidation** – The partner actively denies the validity of previously expressed feelings of their partner. Note that invalidation is not the absence of validation, but rather the presence of a statement that says, in effect, "you are wrong."
3) **Lecturing** – Picture a mother shaking her finger at a son who has run off to a friend's house without asking permission. She will be telling him as a figure of authority that he was wrong, why she is right, and lay down the rules. In domineering people, look for platitudes, cliches and quotes from authorities or the ambiguous "everyone" (as in "everyone knows") to support their point of view. Lecturing also includes talking over the partner in an attempt to actively control or dominate the conversation.
4) **Patronizing** – Lecturing in a distinctly patronizing quality, as if doing one's best to talk patiently to a child.
5) **Incessant Speech** – This is one tool the domineering person may use to maintain the floor at all times. There is a repetitious, steady, almost rhythmic quality to it. By doing this, the domineering person may repeatedly summarize her own views while paying little, if any, attention to the views of her partner.
6) **Threats** – Statements such as "if you ever do that again, I'll…" that are intended to scare the partner by promising negative consequences if they engage in a certain activity.

7) **Ultimatums** – A statement such as “if you don’t improve, I’m leaving.” Ultimatums serve as an extreme threat. They are all-or-nothing statements that tell the partner that this is the last straw and that if something doesn’t happen, dire consequences will result.

WITHDRAWAL CODES

GENERAL CODING GUIDELINES

Withdrawal codes are characterized by intent to pull away from or avoid discussion. These codes can include verbal defensiveness or sadness if clearly part of"withdrawal" behaviour.

STONEWALLING

Individual ceases to attend to what their partner is saying. Look for this behavior only as a response to something aversive the partner is doing. The partner is complaining, blaming, criticizing, raising an issue, or otherwise upset or expressing negative affect. The partner may be talking about doing something the spouse views as irresponsible. There is a total lack of listening-behavior and an active tuning out of the partner.

Attributes

1) **Away Behavior** – The individual focuses on something trivial in order to avoid eye contact with the partner. *Auto-manipulation* includes playing with hair or hands (e.g., cleaning nails, looking for split ends) when the partner is expressing negative affect. The listener is conveying to the speaker, "I'd rather not be here right now."
2) **No Backchannels** – There are no vocal or nonverbal backchannels, no head nods, rigid neck, no verbal or vocal assents ("umm-hmm," "yeah," "uh-huh," "mmm," etc), no verbal response. There is no facial movement, no facial mirroring, little eye contact or monitoring gaze (looking away and back, away and back rapidly). It may include leaving the conversation abruptly. Individuals behave as if they actively want to become a wall to back what they are hearing. There is a total lack of listening behavior.
3) **Monitoring Gaze –** This consists of the same general behavior stated above in "No Backchannels," although here the stonewalling person frequently glances at his partner, each time quickly looking away.

AVOIDANCE

Individual attempts to avoid the topic being discussed without entirely ceasing communication (i.e. still displays listening behaviour and continues to respond to partner). Focus is turned away from the topic of conflict.

Attributes

1) **Changing Subject –** Individual may briefly acknowledge what their partner has said, but responds in a way to redirect the conversation to a different topic.
2) **Vagueness –** Individual tries to appease their partner with vague responses that do not address specific concerns or issues.

DISTRESS CODES

GENERAL CODING GUIDELINES

Distress codes include "soft" negative emotions and displays of vulnerability. The intent is to express distress or hurt. Distress behaviours are generally free of any hostile codes, but can include withdrawal if clearly part of "distress" behaviours.

TENSION

Tension is an uncomfortable feeling that results from feeling worried or anxious when an undesirable topic is introduced into the conversation. The tense person often has a hard time speaking coherently, spends a lot of time biting their lip or nails and may behave as if they are feeling embarrassed.

FACS CUES

1+2+4 (inner brow raise + outer brown raise + brow lowerer)
5 (upper lid raise)
7 (lids tight)
20 (lip stretch)

Attributes

1) **Speech Disturbances** – The speaker is obviously having a difficult time expressing what it is they want to say. This may include several incomplete or unfinished thoughts within one speaking turn, repetitive uhs or ahs within a sentence and stuttering repeatedly (non-baseline behavior).
2) **Fidgeting** – Excessive or repeated plucking at clothes and/or hands. Rubbing areas of the face such as the temple or the chin or mouth. Also lip biting where the upper or lower lip appears to be "swallowed." This is not the same as the lip disappearing due to a lip press, which is a tightening of the lips and is coded anger.
3) **Shifting** – When individuals are nervous, the phrase "they're in the hot seat" is meant to explain this kind or tension. Partners cannot seem to sit still, almost as if their chair is on fire. There is the sense that individuals feel like an insect squirming on a pin.
4) **Nervous Laughter** -- Often laughing or smiling will act as an icebreaker when a situation becomes very tense. These smiles or attempts at laughter look very forced and often do not "fit in" with the context of the conversation (there was no joke told, no humorous event). A listener may smile when a partner is discussing a very sensitive issue. The smile looks pasted on as if it were an effort, not a revelation of happiness.

SADNESS

Sadness is characterized by a marked decrease in energy and a passive, resigned countenance. It can be expressed in a very subdued, quiescent state or in a plaintive, poignant way.

FACS Cues

1+4 (inner brow raise + brow lowerer)
15 (lip corner depress)
17 (chin raise)
6+20 (cheek raise + lip corner stretch)

Attributes

1) **Passivity** – The person behaves as if resigned or hopeless. They may appear unable to cope with their partner's behavior, family, and so on. They lack energy, may be sorry for themselves, feel a minor loss, or miss something or someone. Listen for long pauses between phrases or words – as if it takes an extra effort to speak.
2) **Sighing** – All slow sighing (as opposed to the rapid exhalations of anger) are to be coded sadness. Look for the deep intake of breath and slow droop to the shoulders as they let the air go. They may appear tired.
3) **Pouting/Sulking** – The individual feels hurt or dejected and is actively showing it as opposed to behaving passively. Look for a sad facial expression and a dejected, droopy stance.
4) **Crying** – Code all tears sadness if the context suggests grief, remorse or regret, rejection, or hopelessness.
5) **Feels Hurt** – The individual shows grief, remorse, or desolation. They have a quavering voice tone and it may be either abnormally high or low in pitch. There may be a sense of depression or hopelessness.

ANGER

The angry person sounds like they are fed-up, like they've "had it up to here." In this code, voice tone, facial expressions, gestures, and the content of the communication are all important. Words may be biting or abrupt with one word or syllable more strongly stressed.

FACS CUES

4 (brow lowerer)
5 (upper lid raise)
17 (chin raise)
23 (lip tight)
24 (lip press)

Attributes

1) **Irritation/Annoyance** – The speaker is very frustrated and will often employ changes in the rhythm of speech and the way certain words are stressed.
2) **Raising Voice** – This is an open anger, often with a loud voice tone, while in the midst of confronting, scolding, or accusing the partner. The speaker may sound irrational or show evidence of being upset with involuntary twitches or jerks.
3) **Constrained Anger** – Attempts made to control being angry. An example is the lowering of the voice and speaking in an even, staccato rhythm, as if to communicate to the partner that the speaker is at the end of their rope. Look particularly for AUs 4, 5, 7 and tight jaws and clenched teeth in the lower face.
4) **Direct Anger** – Statement of anger ("I am angry..") or complaints with angry affect such as yelling or raising the voice.

PROBLEM SOLVING CODES

GENERAL CODING GUIDELINES

Constructive communication with neutral affect. Intent is to find solution to problem in a constructive manner. If positive affect is clearly included, code as an Intimacy behaviour. If Hostility is present, do not code Problem Solving behaviors.

SOLUTION SEEKING

Solution seeking is coded when an individual attempts to discuss problems by focusing on resolving the conflict with constructive solutions. Affect is neutral.

Attributes

1) **Describing the problem –** This is coded when the individual describes or attempts to define the problem in a neutral fashion. Do not code if any criticism, blaming, etc., is occurring at the same time.
2) **Suggesting solutions –** This is coded when the individual suggests one or more possible solutions to the problem being discussed
3) **Repair attempts –** This is coded when the individual tries to get the conversation back on track in some manner. May include meta-communication ("we're starting to get off topic") or clarifications ("actually, I was trying to say that…"). Do not code if any negative affect is present during the statement.

ENGAGEMENT

Engagement is coded when the individual actively demonstrates listening and encourages their partner to express his or her thoughts and feelings. Distinguished from Intimacy codes by intensity of affect.

FACS CUES

1+2 (inner brow raise + outer brow raise)
6 (cheek raise)
12 (lip corner pull)

Attributes

1) **Backchannels** – This indicates the individual is listening to the partner in an affirmative fashion by using paralinguistic cues, such as head nods, "umm-hmms," or other physical and vocal assenting behaviors. *There must be eye contact* for backchanneling behavior to be coded validation.
2) **Paraphrasing** –Individual repeats back what their partner has just said in a slightly different style. Think of the "so what you're saying is…" format. If the individual paraphrases in a question format, however, code interest.

3) **Agreeing –** the individual indicates that they agree with their partners statement or opinion.

INTIMACY CODES

GENERAL CODING GUIDELINES

Intimacy-enhancing positive affect and communication behaviours with the intent of enhancing closeness or understanding with the partner. Can include some problem-solving if clearly part of "intimacy" behaviour. Will not include any hostility codes, but may have an occasional distress code as well.

AFFECTION

This is a direct expression of caring. The voice sometimes slows, with a drop in amplitude, yet even then there remains a definite intensity or energy in its expression. There may be a romantic feel to their conversation due to the warmth of their voices and sharing of intimate moments.

Attributes

1) **Tenderness/Closeness** – Reminiscing, sharing a moment that brings them close together. There is often a sort of warm dreamy quality to this kind of interaction. The affectionate spouse appears peaceful, mellow, contented, and friendly.
2) **Loving/Caring Statements** – Statements such as "I love you," "I care about you."
3) **Compliments** – Statements that communicate pride in one's partner.
4) **Common Cause** – A perhaps less intuitive form of affection, here one spouse expresses anger (perhaps even contempt) for some third party, and the other spouse joins in a sort of verbal mirroring. Think of it as "we-against-others". It needn't be the sharing of negative thoughts or feelings; positive things can be shared too.

EMPATHY

Mirroring a partner's feelings. Not necessarily verbal (partner makes sad face, then individual mirrors sad face back). This sort of mirroring let's people know that their feelings are understood and shared. This is more than validation, it is validation coupled with affect that mirrors that of the partner.

Attributes:

1) **Understanding/Acceptance** – This includes direct expressions of understanding and/or acceptance of the partner's point of view. It also includes explicit expressions of respect or agreement and the paraphrasing of the partner's viewpoint.
2) **Apology** – Acceptance of the partner's point of view coupled with an apology.
3) **Finishing Sentences** – The individual places an ending to the sentence the partner has begun. This is a way to let the partner know the individual is "on the same page" and can follow the partner's train of thought.
4) **Self-Disclosure -** Attempts to promote intimacy by disclosing sensitive information or to communicate empathic understanding of the partner's feelings.

HUMOR

Moments of shared laughter that are not tense. The laughter here is characterized by an underlying feeling of shared happiness.

FACS CUES

6 (cheek raise)
12 (lip corner pull)

Attributes

1) **Joking/Good Natured Teasing** – Jokes and teasing that *both partners* think is funny enough to laugh at.
2) **Wit** – Mutual recognition of absurdity that causes laughter. It is a sort of "we-against-other" thing where the partners are laughing at someone or something else's behavior or nature. Think of it as shared deviance.
3) **Giggling/Private Joke** – Though elusive to outside observers, something is going on that both partners think is entirely funny.
4) **Fun/Exaggeration** – The couple are thoroughly enjoying themselves and are actively trying to make each other laugh by using exaggerated, animated or imitative behavior. More energy, and often a deeper laughter, accompanies this.