


# Changes in Attachment and Commitment in Couples Transitioning to Parenthood

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## Abstract

This study examined whether attachment predicts changes in commitment and whether commitment predicts changes in attachment in both partners during the transition to parenthood. Both partners of 93 couples completed online questionnaires individually at the second trimester of pregnancy and at 4 months postpartum. Autoregressive cross-lagged path analyses based on the Actor–Partner Interdependence Model tested the bidirectional associations between attachment dimensions (anxiety and avoidance) and three modes of commitment (optimal, over-commitment, and under-commitment). Results revealed that for both partners, prenatal attachment avoidance was associated with a decrease in optimal commitment and an increase in under-commitment from pre- to postpartum. Fathers’ attachment anxiety was associated with a decrease in mothers’ under-commitment. Furthermore, prenatal optimal commitment was associated with a decrease in attachment avoidance, whereas under-commitment was associated with an increase in attachment avoidance. Fathers’ prenatal over-commitment was associated with an

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increase in their own attachment anxiety and avoidance. These results highlight how attachment insecurities and relationship commitment interrelate during this major transition.

**Keywords**

relationship commitment, romantic attachment, transition to parenthood, couple

The transition to parenthood (TTP) is a key moment in a couple's life (Simpson & Rholes, 2018) as partners transitioning from being a couple to a family face many challenges (e.g., fatigue, uncertainty, and family–work conciliation). In general, this major change is experienced both as a moment of great joy and as a period of stress and adjustment (Doss & Rhoades, 2017). As such, pioneer studies have revealed a decrease in marital quality for 58% of women and 45% of men during the TTP (Cowan & Cowan, 1995) and nearly a third of couples reaches a clinical level of marital distress within 18 months following the birth of a first child (Cowan & Cowan, 2000). During this particular period, partners' relationship commitment is also susceptible to change (Akçabozan, McDaniel, Corkery, & Curran, 2017; Doss, Rhoades, Stanley, & Markman, 2009; Ferriby, Kotila, Kamp Dush, & Schoppe-Sullivan, 2015). While some studies have shown a decrease in the risk of couple dissolution (e.g., Waite & Lillard, 1991) after the arrival of a first child, others rather show an increase of this risk (e.g., Howard & Brooks-Gunn, 2009). To promote the well-being of the family and to prevent the dissolution of the relationship and its negative consequences for parents (e.g., depressive symptoms, suicidal risk, and chronic health problems; Hughes & Waite, 2009; Marjorie, Anna, & Shorey, 2020; Stack & Scourfield, 2015) and children (Furstenberg & Teitler, 1994; Amato & Sobolewski, 2001), it is important to examine relationship commitment during the TTP as a key indicator of couple stability (Arriaga & Agnew, 2001; Etcheverry & Le, 2005). In addition to being linked to relationship commitment (see Mikulincer & Shaver, 2016, for a review), adult attachment is an individual factor that plays a critical role in the relationship adjustment of couples during the TTP (Doss & Rhoades, 2017; Pepping & Halford, 2012; Simpson & Rholes, 2018). As both commitment (Akçabozann et al., 2017) and attachment (Rholes, Eller, Simpson, & Arriaga, 2020; Girme et al., 2018) have been found to fluctuate during the TTP, we propose to examine whether attachment predicts changes in commitment and whether commitment predicts changes in attachment in couples from pregnancy to the postpartum period.

## Attachment

According to the attachment theory (Bowlby, 1982/1969), children develop a behavioral system to ensure their safety by seeking the proximity of their attachment figure, often a parent, when facing a stressor or a threat. If their attachment figure is available, reassuring and sensitive to their needs, children are more likely to develop positive representations of themselves and others, namely, secure attachment. On the contrary, if the attachment figure responds inadequately or inconsistently to their needs, children are more likely to develop attachment insecurities, doubting their personal value or the trust they can place in others. These internal working models remain relatively stable in adulthood, where the romantic partner is likely to become the primary attachment figure (Hazan & Shaver, 1987). However, across time, individuals may experience fluctuations in their level of attachment insecurities toward their current romantic partner, especially when facing critical events, such as the birth of a first child (Girme et al., 2018).

Adult attachment insecurities are conceptualized as per two continuous dimensions: anxiety and avoidance. Individuals with higher levels of attachment anxiety tend to seek more closeness, are more concerned about their relationships, and are afraid of rejection, while individuals with higher levels of attachment avoidance tend to be more self-reliant and to keep an emotional distance from others (Brassard et al., 2017). When facing threats, individuals higher in anxiety tend to adopt hyperactivation strategies, amplifying their reactions and behaviors to seek reassurance, closeness, and support from their attachment figure. In contrast, individuals higher in avoidance tend to adopt deactivation strategies, denying their needs for closeness and relying almost compulsively on themselves (Mikulincer & Shaver, 2016).

Several situations or stressors can activate an individuals' attachment system. In particular, the TTP is a period of stress and adjustment whereby the attachment system is likely to be activated (Simpson & Rholes, 2018). According to the Attachment Diathesis-Stress Model (Simpson & Rholes, 1994, 2012), three types of events can create distress within the individual: extreme negative events (e.g., potentially dangerous situations); negative relational events (e.g., relational conflict); and cognitive or emotional stress (e.g., imagining a negative event). The distress caused by such events activates the attachment motivations to seek closeness and comfort from an attachment figure. These motivations would influence the perception of the situation and determine attachment behaviors used to regulate distress, which are in constant interaction with the partner's behaviors. Attachment insecurities contribute greatly to the way individuals experience distress, motivations and attachment behaviors, perceptions of the partner and the relationship, and their own well-being (Simpson & Rholes, 1994, 2012). Based on this model, attachment could be a key factor in explaining the

changes in relationship commitment during the TTP (Akçabozan et al., 2017) because it involves numerous events that can activate the attachment system, and commitment can be modulated by partner behaviors and perceptions of the partner and the relationship, which are also linked to attachment insecurities.

## **Commitment**

Relationship commitment is defined by the tendency to maintain one's relationship and to feel psychologically attached to it, and it is strongly and positively linked to relationship persistence (Le & Agnew, 2003; Rusbult, 1983; Rusbult, Johnson, & Morrow, 1986). During the critical period of the TTP, Doss et al. (2009) have found that two relational commitment indicators, the father's personal dedication (i.e., desire to maintain or improve the quality of the relationship for the joint benefit of the partners) and the mother's confidence (i.e., confidence in the future of the relationship), decrease significantly and suddenly after the birth of a first child, resulting in a possible threat to couple persistence. In contrast, other studies have shown that the risk of couple dissolution is reduced after the TTP (Waite & Lillard, 1991; White & Booth, 1985). Specifically, during the first 5 years after the birth of the first child, the probability of divorce is reduced, but when the child is 12 years old or older, this link is reversed (Waite & Lillard, 1991).

These contradicting findings can be explained not only by the various conceptualizations of commitment found in the scientific literature (Arriaga & Agnew, 2001; Rusbult, Martz, & Agnew, 1998; Stanley & Markman, 1992) but also by the fact that the results regarding relationship persistence during TTP do not necessarily take into account the quality of the commitment while staying in a relationship. Parents may stay together for different reasons, which does not guarantee a positive experience of commitment in their relationship, even though it might often be the case considering the strong link between commitment and persistence.

The Multimodal Couples Commitment Model (MCCM; Brault-Labbé, Brassard, & Gasparetto, 2017) is a recent model that can shed light on this matter. This model reflects simultaneously the dynamic nature of three distinct commitment modes: optimal, over-, and under-commitment. Each mode considers the motivational, affective, behavioral, and cognitive aspects of commitment. Optimal commitment refers to enthusiasm, interest, and value that the individuals place on their relationship and partner; persistence of actions and efforts to maintain and develop the relationship despite the difficulties they may face; and the acceptance that commitment has disadvantages that the individuals must reconcile with the benefits it generates. Over-commitment refers to excessive energy and interest toward the relationship at the expense of other areas of life; making many sacrifices for the

relationship while neglecting other important parts of life; and an impression of having an unbalanced life because of the intense investment in the relationship. Under-commitment refers to a lack of energy toward the relationship; a lack of interest in the relationship; and an overwhelming emphasis on the couple's difficulties leading to the intention to end the relationship (Brault-Labbé et al., 2017). Thus, this model has the benefit of measuring both optimal and more problematic modes of commitment, which other unidimensional models of commitment often fail to do.

### *Attachment and Commitment*

Several cross-sectional studies have demonstrated that attachment insecurities are associated with variations in relationship commitment (Dandurand, Bouaziz, & Lafontaine, 2013; Etcheverry, Le, Wu, & Wei, 2013; Slotter & Finkel, 2009). Yet, mixed results were found in studies, showing that attachment anxiety was related to both higher levels of commitment (Joel, MacDonald, & Shimotomai, 2011) and lower levels of commitment (Etcheverry et al., 2013). On the one hand, anxious individuals' dependency behaviors may increase their commitment; on the other hand, their tendency to be easily dissatisfied may explain why they feel less committed to their partner (Joel et al., 2011). Other researchers further suggested that attachment anxiety is related to a higher tendency to commit to one's relationship to both retain the benefits of a relationship, but also to avoid the inconveniences that a separation would entail (Dandurand et al., 2013).

A negative link between attachment avoidance and commitment is already well-established in the scientific literature, as more avoidant individuals would generally perceive their partner as untrustworthy and expect their relationship to fail (see Mikulincer & Shaver, 2016, for a review). For example, attachment avoidance is negatively related to the tendency to commit to a relationship for its benefits (Dandurand et al., 2013).

In addition to the *actor* effects identified in the literature (i.e., the link between one's own attachment insecurities and one's own level of commitment), it is possible that attachment insecurities are associated with variations in the commitment of the partner (i.e., *partner* effects). As suggested by Mikulincer and Shaver (2016), the insistence of (hyperactivated) anxious people and the distance of (deactivated) avoidant people can lead to more dissatisfaction in their partner and a decrease in their relationship commitment.

In the present study, we used the MCCM (Brault-Labbé et al., 2017) because of its theoretical qualities. It is not affected by social desirability and it allows us to provide a more nuanced view of commitment compared to other unidimensional commitment models. Such nuanced perspective on commitment therefore helps us to understand the previous contradictory results regarding the link between attachment anxiety and commitment. The

MCCM also seems particularly interesting in the context of the TTP because it may shed light on previous disparities regarding commitment in this period. That is, this model might allow us to identify decreases in certain aspects of partners' commitment during the TTP while also allowing us to pinpoint specific aspects of commitment that are maintained or increased when welcoming the newborn. So far, one study by [Bergeron, Brassard, Mondor, and Pélouin \(2019\)](#) has examined attachment insecurities and commitment using the MCCM in a sample of mixed-sex couples experiencing significant relational distress. The researchers found that in women, attachment avoidance was negatively linked to their own over-commitment and attachment anxiety was positively linked to both their own over- and own under-commitment. In men, attachment anxiety was only linked to their own higher over-commitment, while their higher level of attachment avoidance was related to their own higher level of under-commitment and lower level of optimal commitment. Partner effects were also found. Individuals' own higher attachment anxiety was associated with their partner's higher under-committed and lower optimal committed. Individuals' own higher avoidance was also associated with their partner's higher over-commitment ([Bergeron et al., 2019](#)). These results add nuance to the conflicting links between attachment anxiety and commitment. Although the results of this cross-sectional study are not generalizable to all couples as they are based on distressed couples, they emphasize the relevance of exploring these links with other couples dealing with stressors and whose attachment system is also likely to be activated, such as couples going through the TTP. Indeed, when the couples are adjusting to the arrival of a first child, they must deal with many challenges, novelty and tensions, as well as face countless decisions, which increases the chances of feeling overwhelmed by difficulties, tests perseverance, and strains the ability to reconcile the positive and the negative aspects of their relationships, all aspects that the MCCM takes into account.

Although research suggests that changes are likely in new parents' relationship commitment, only one study investigated the links between attachment and changes in commitment during TTP, but this study used a different theoretical model. Indeed, [Ferriby et al. \(2015\)](#) have found that fathers with a higher level of attachment anxiety experienced an increase in their feeling of relationship constraint between the third trimester and the third month post-partum. Parents who had a higher level of attachment avoidance also experienced a decrease in their confidence and dedication in the relationship. Additionally, partners who had a higher level of attachment anxiety experienced a decrease in their confidence and dedication and an increase in their constraint during the TTP. Yet, the generalization of this study's results is limited because it only included married couples. In addition, using the third trimester of pregnancy may not accurately represent the pre-pregnancy commitment because

men's commitment was found to increase during the pregnancy (Fernández-Carrasco et al., 2019). Measuring commitment earlier in pregnancy, for example, in the second trimester, could be more adequate to assess changes in commitment from pre- to postpartum. The study of changes in commitment and its predictors is essential to protect the family (parents and children) from the risk of separation and its deleterious consequences, whether economic, psychological, social, or physical (e.g., Hetherington, 2005; see Amato, 2010, for a review). Yet, recent findings also suggest that attachment anxiety and avoidance can fluctuate during the TTP as a result of couple processes such as couple support (Rholes et al., 2020). In addition, Girme et al. (2018) have found that greater fluctuations in attachment insecurities during the TTP are associated with a decrease in relationship satisfaction and an increase in relationship distress. It is thus necessary to examine changes in commitment and attachment using a bidirectional approach to understand whether attachment can predict changes in commitment and whether commitment can predict changes in attachment in both partners transitioning to parenthood.

## Objective and Hypotheses

The aim of this study was to examine whether attachment insecurities predict changes in relationship commitment and whether relationship commitment predicts changes in attachment insecurities in both partners during the TTP. Four hypotheses were formulated. First, it was expected that attachment insecurities (anxiety and avoidance) would be linked with a decrease in optimal commitment and an increase in over- and under-commitment over the TTP. More precisely, mothers and fathers with a higher level of attachment anxiety were expected to experience a decrease in their optimal commitment (H1) and an increase in their over-commitment and under-commitment (H2). Similarly, mothers and fathers with a higher level of attachment avoidance were expected to experience a decrease in their optimal commitment (H3) and an increase in their under-commitment (H4). In addition, partner effects were examined (Q1). Because little data are available on how attachment insecurities might predict changes in the partners' three modes of commitment, no a priori hypotheses were put forward. The reverse associations between commitment and changes in attachment insecurities were also examined in an explorative way (Q2).

## Method

### *Participants*

The sample was drawn from an ongoing larger prospective study on the TTP and consisted of 93 French-Canadian mixed-sex couples expecting their first child. To participate in the study, the couples had to be in their second

trimester of pregnancy and carrying their first child, be 18 years old or older, be living together, have daily access to internet, have a good understanding of French, and both partners had to agree to participate in the study. Experiencing an at-risk pregnancy was an exclusion criterion for the study. (49 couples were excluded based on this criterion during the screening procedure.) Table 1 presents the participants' demographic characteristics.

### Procedures

Participants were recruited via social media (Facebook), posters in hospitals and birth centers, and in-person meetings in maternity/family fairs. If people showed interest in the study, they were invited to complete a short online screening questionnaire. Eligible participants were then contacted by a research assistant to confirm their interest and explain the course of the study. The overall study consisted of four time points, but the present study only used data from the first two time points. Each participant filled out a consent form explaining the terms and conditions of confidentiality. Participants responded individually to the baseline questionnaires (T1) via the secure online platform *Qualtrics Research Suites*. Four months after the birth (T2), a second series of questionnaires was completed by each member of the couple. The study was approved by the ethics committee of the researchers' institution. A financial compensation of CAN\$10 was offered to each participant at T1 and at T2.

### Measures

**Attachment.** Attachment-related anxiety and avoidance were assessed with an abridged 12-item version of the *Experiences in Close Relationships scale* (ECR-12; Lafontaine et al., 2016). Each item is answered on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The mean score of anxiety is made up of six items (e.g., I worry about being alone) and the mean score of avoidance (e.g., I don't feel comfortable opening up to my partner) is calculated from the other six items. Factorial structure and internal consistency were demonstrated among five samples (Lafontaine et al., 2016), including couples from the general population (anxiety  $\alpha$  from .78 to .87; avoidance  $\alpha$  from .74 to .83).

**Commitment.** The *Multimodal Couples Commitment Model questionnaire* (MCCM; Brault-Labbé et al., 2017) assessed the three commitment modes. The 27 items of this questionnaire use a 9-point scale ranging from 0 (does not characterize me at all) to 8 (characterizes me quite well). The MCCM demonstrated an adequate internal consistency for optimal commitment (e.g.,



**Table 1.** Demographic Characteristics of the Participants ( $N = 93$  couples).

Characteristics	Women		Men	
	<i>M</i> or %	<i>SD</i> or <i>n</i>	<i>M</i> or %	<i>SD</i> or <i>n</i>
Age (years)	27.71	4.06	29.74	4.68
Cohabitation length (years)	2.84	2.24	—	—
Relationship length (years)	4.06	2.60	—	—
Marital status				
Married	21.5	20	—	—
Cohabiting/not married	78.5	73	—	—
Annual income (CAN\$)				
Less than 19 999	10.8	10	12.1	11
Between 20 000 and 39 999	34.4	32	19.8	18
Between 40 000 and 59 999	36.5	34	30.8	28
Between 60 000 and 79 999	11.9	11	16.5	15
More than 80 000	5.4	5	18.7	17
Prefer not to respond	1.1	1	2.2	2
Highest level of education				
Elementary school	2.2	2	6.5	6
High school diploma	16.1	15	31.2	29
Pre-university degree	24.7	23	23.7	22
Undergraduate degree	34.4	32	29.0	27
Graduate degree	19.4	18	5.4	5
Other	3.2	3	4.3	4
Cultural background				
Canadian	86.0	80	83.9	78
European	6.5	6	2.2	2
Haitian	2.2	2	4.3	4
African	1.1	1	4.3	4
Asian	0.0	0	2.2	2
First nations	0.0	0	1.1	1
Other	4.3	4	2.2	2

My romantic relationship is what interests me most in my life;  $\alpha = .89$ ), over-commitment (e.g., I have trouble limiting the time I spend with my partner, even when it interferes with my other obligations;  $\alpha = .86$ ), and under-commitment (e.g., The obstacles that arise in my life as a couple makes me want to let go of the relationship;  $\alpha = .95$ ) (Brault-Labbé et al., 2017). The MCCM is not affected by social desirability and has excellent convergent validity with measures of commitment and relationship stability (Brault-Labbé et al., 2017).

## Results

### Preliminary Analyses

Descriptive and correlational analyses were computed using SPSS 25.0 to describe sample characteristics and associations between the main variables. Descriptive analyses and Cronbach's alpha coefficients for attachment dimensions and commitment modes are presented in Table 2. Results of a multivariate repeated measures Gender X Time ANOVA showed that, on average, optimal commitment decreased from T1 to T2 for both partners,  $F(1,92) = 4.20, p = .043, \eta^2_p = .04$ . Although women's over-commitment scores tended to decrease through the TTP whereas men's tended to increase slightly, there was no significant Time X Gender interaction,  $F(1,92) = 2.28, p = .134$ . Yet, on average, men's over-commitment was higher than women's,  $F(1,92) = 10.53, p = .002, \eta^2_p = .10$ . In addition, under-commitment increased between T1 and T2,  $F(1,92) = 15.05, p < .001, \eta^2_p = .14$ , but more so for women than men, as suggested by a significant Gender X Time interaction,  $F(1,92) = 4.85, p = .030, \eta^2_p = .05$ . Another multivariate repeated measures Gender X Time ANOVA showed that, on average, attachment did not significantly change from T1 to T2 for both partners,  $F(2,92) = .42, p = .661$ .

Table 2 presents Pearson correlations between all main variables for women and men at T1 and T2. Attachment anxiety and avoidance in women and men at T1 were highly correlated with their own attachment anxiety and avoidance at T2. Similar results were observed for optimal commitment, over-commitment, and under-commitment of women and men, suggesting a relative stability over time. As demonstrated in previous studies (Cameron, Finnegan, & Morry, 2012), attachment-related anxiety and avoidance were significantly correlated with each other at each time point within the same individual. Additionally, attachment anxiety in women at T1 was significantly correlated with their higher over-commitment and their higher under-commitment at T1 and negatively correlated with their optimal commitment at T2. For men, attachment anxiety at T1 was significantly correlated with their higher over-commitment at T1 and at T2.

Based on preliminary Pearson correlations, planned pregnancy (0 = unplanned and 1 = planned) was retained as a covariate in the main analysis. In fact, men's over-commitment at T1 was significantly related to the women's report ( $r = -.30, p = .003$ ) and the men's report ( $r = -.27, p = .009$ ) that the pregnancy was planned. In addition, the planning of the pregnancy was related to higher optimal commitment ( $r = .28, p = .006$ ) and lower under-commitment ( $r = -.24, p = .02$ ) in women at T2. Marital status, however, was not associated with the main variables ( $ps > .05$ ).

**Table 2.** Descriptive Statistics, Reliability Coefficients, and Correlations among Attachment and Commitment Variables for Women and Men.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>Attachment</i>																				
1. Anxiety W T1		<b>.43</b>	.12	.03	<b>.69</b>	<b>.30</b>	.15	.05	-.16	<b>.35</b>	<b>.42</b>	.02	.19	.10	-.29	.13	.09	-.06	.18	<b>.21</b>
2. Avoidance W T1	.10	-.06	<b>.33</b>	-.06	<b>.33</b>	<b>.55</b>	.17	.20	-.16	<b>.23</b>	<b>.37</b>	-.15	-.03	.13	-.28	.06	<b>.27</b>	-.14	.06	.11
3. Anxiety M T1		<b>.21</b>	.004	<b>.23</b>	.004	<b>.23</b>	<b>.57</b>	.17	-.19	.16	<b>.33</b>	-.09	<b>.29</b>	.15	-.10	.04	-.05	-.08	<b>.26</b>	.11
4. Avoidance M T1			.04	<b>.22</b>	.04	<b>.22</b>	.11	<b>.48</b>	-.02	<b>.25</b>	.09	-.26	.14	.16	-.03	<b>.24</b>	.02	-.34	.14	<b>.28</b>
5. Anxiety W T2				<b>.21</b>	.04	<b>.21</b>	.16	-.01	-.05	<b>.23</b>	<b>.23</b>	-.03	<b>.25</b>	.06	-.21	.07	.16	.01	<b>.22</b>	.10
6. Avoidance W T2					<b>.26</b>	<b>.26</b>	<b>.26</b>	<b>.21</b>	-.23	<b>.25</b>	<b>.42</b>	-.22	.16	.18	-.38	.11	<b>.37</b>	-.29	<b>.21</b>	.17
7. Anxiety M T2						<b>.36</b>	<b>.36</b>	<b>.36</b>	-.09	.13	<b>.29</b>	-.03	<b>.45</b>	.14	-.27	-.13	<b>.21</b>	-.07	<b>.38</b>	<b>.25</b>
8. Avoidance M T2							-.11		-.11	.17	.14	-.14	<b>.30</b>	<b>.23</b>	-.18	.01	.14	-.29	<b>.26</b>	<b>.34</b>
<i>Commitment</i>																				
9. Optimal W T1										.18	-.41	.11	-.21	-.19	<b>.50</b>	-.06	-.35	.12	-.12	-.19
10. Over W T1										<b>.26</b>	-.10	.15	<b>.22</b>	.03	<b>.69</b>	.04	-.29	.06	<b>.24</b>	
11. Under W T1											-.20	.07	<b>.26</b>	-.53	.02	<b>.44</b>	-.07	.12	<b>.27</b>	
12. Optimal M T1												.07	-.28	.14	-.06	.04	<b>.28</b>	-.07	-.22	
13. Over M T1													<b>.45</b>	-.15	.05	<b>.26</b>	-.10	<b>.73</b>	<b>.38</b>	
14. Under M T1														-.17		<b>.27</b>	<b>.23</b>	-.40	<b>.28</b>	<b>.62</b>
15. Optimal W T2																<b>.27</b>	-.59	.03	-.13	-.21
16. Over W T2																	-.04	-.21	.06	.03
17. Under W T2																		-.16	<b>.22</b>	<b>.33</b>
18. Optimal M T2																			-.03	-.54
19. Over M T2																				<b>.39</b>
20. Under M T2																				
M	3.78	1.91	3.12	2.50	3.60	2.01	3.08	2.35	6.96	3.43	0.75	6.82	3.86	0.99	6.69	3.34	1.23	6.81	3.99	1.14
SD	1.46	.89	1.42	1.25	1.53	.86	1.41	.96	1.04	1.21	.90	.97	1.34	.98	1.09	1.27	1.35	.83	1.25	1.15
Cronbach's $\alpha$	.87	.81	.86	.84	.90	.77	.89	.81	.90	.78	.85	.85	.75	.80	.88	.79	.90	.80	.75	.87

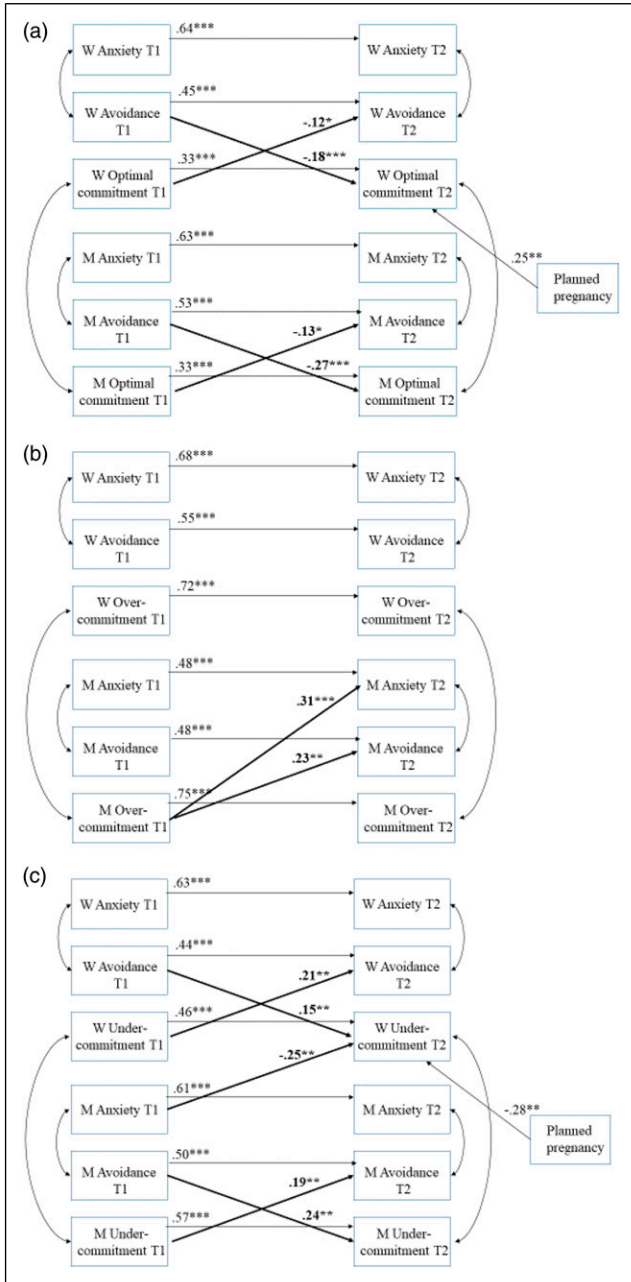
Notes. W = women, M = men. Bolded coefficients are significant at  $p < .05$ .

## Main Analyses

Three autoregressive cross-lagged (ARCL) models were computed using AMOS 25 software to examine the direction of the prospective associations between attachment and commitment. This type of analysis is used to see if a given variable has an effect on itself (autoregressive effect) or on another variable (cross-lagged effect) later in time. These models were computed according to the Actor–Partner Interdependence Model (APIM; [Kenny, Kashy, & Cook, 2006](#)) to examine the effect of one's own attachment insecurities on one's own commitment and vice versa (actor effect) and the effect of one's own attachment insecurities on the partner's commitment and vice versa (partner effect). The APIM also enables controlling for the non-independence of data between members of the same couple. For each model, we performed an omnibus test of distinguishability of the dyads, comparing a model where all effects between women and men were constrained to be equal (constrained model) to a model where these effects were left free to vary (non-constrained models). To test the model fits, we used the chi-square value ( $p$  values  $>.05$  indicate good fit), the comparative fit index (CFI, values  $>.90$  indicate good fit), and the root mean square error of approximation (RMSEA, values  $<.08$  indicate good fit).

**Optimal commitment.** The first ARCL model examined the bidirectional dyadic associations between attachment and optimal commitment, allowing us to examine H1 (link between attachment anxiety and optimal commitment) and H3 (link between attachment avoidance and optimal commitment). Prior to analyzing the main results, the distinguishability of dyads test revealed the absence of gender differences in actor and partner effects ( $\Delta\chi^2(12) = 12.94$ ,  $p = .373$ ). The constrained model was therefore retained and it showed an adequate fit to the data ( $\chi^2(57) = 72.84$ ,  $p = .077$ , CFI = .938, RMSEA = .055, 90% CI [.000; .089]). Although the unconstrained model also presented an adequate fit ( $\chi^2(45) = 59.90$ ,  $p = .068$ ; CFI = .941; RMSEA = .060, 90% CI [.000; .097]), the constrained model was retained because it allowed for a higher statistical power. As shown in [Figure 1\(a\)](#), women and men reporting a higher level of attachment avoidance during pregnancy (T1) experienced a decrease in their optimal commitment at 4 months postpartum (T2). These results lend support to H3 but not to H1 as no significant associations were found for attachment anxiety. In addition, men and women reporting a higher level of optimal commitment at T1 experienced a decrease in their attachment avoidance at T2 (Q2).

**Over-commitment.** The second ARCL model examined the bidirectional dyadic associations between attachment and over-commitment, allowing us to examine H2 (link between attachment anxiety and over-commitment). The



**Figure 1.** Autoregressive cross-lagged models for (a) optimal, (b) over-, and (c) under-commitment.

distinguishability of dyads test revealed the absence of gender differences in partner effects ( $\Delta\chi^2(12) = 16.65, p = .163$ ). Yet, the model constraining all associations to be equal presented a poorer fit to the data ( $\chi^2(54) = 76.72, p = .023, CFI = .934, RMSEA = .068, 90\% CI [.026; .100]$ ) than the model with no constraints ( $\chi^2(42) = 60.065, p = .035; CFI = .951; RMSEA = .068, 90\% CI [.019; .105]$ ), so the latter was retained. As shown in [Figure 1\(b\)](#), attachment did not predict changes in over-commitment from pre- to postpartum, infirming H2. In fact, the only significant cross-lagged effects were that men reporting a higher level of over-commitment during pregnancy (T1) experienced an increase in their attachment-related anxiety and avoidance at 4 months postpartum (T2) (Q2).

*Under-commitment.* The third ARCL model examined the bidirectional dyadic associations between attachment and under-commitment, allowing us to examine H2 (link between attachment anxiety and under-commitment) and H4 (link between attachment avoidance and under-commitment). The distinguishability of dyads test pointed to the absence of gender differences in actor and partner effects ( $\Delta\chi^2(15) = 24.92, p = .051$ ). Yet, the model constraining all associations to be equal presented a poorer fit to the data ( $\chi^2(60) = 95.35, p = .002, CFI = .890, RMSEA = .080, 90\% CI [.048; .109]$ ) than the model with no constraints ( $\chi^2(45) = 70.43, p = .009; CFI = .921; RMSEA = .078, 90\% CI [.040; .112]$ ). A partially constrained model was retained as it allows significant gender differences to emerge, shows an adequate fit ( $\chi^2(55) = 79.31, p = .018; CFI = .925; RMSEA = .069, 90\% CI [.030; .101]$ ), and does not differ from the original model ( $\Delta\chi^2(10) = 8.887, p = .543$ ). As shown in [Figure 1\(c\)](#), women and men reporting a higher level of attachment avoidance in the second trimester of pregnancy (T1) experienced an increase in their under-commitment at 4 months postpartum (T2). These results lend support to H4, but not to H2 because no significant associations were found for attachment anxiety. In addition, a partner effect was found in which women paired with a male partner reporting a higher level of attachment anxiety at T1 experienced a decrease in their under-commitment at T2 (Q1). Furthermore, women and men reporting higher under-commitment at T1 experienced an increase in their attachment avoidance at T2 (Q2).

## Discussion

This study used a dyadic and prospective design to examine whether attachment insecurities predict changes in the three modes of commitment in couples transitioning to parenthood and whether relationship commitment predicts changes in attachment during the TTP. Using a cross-lagged approach, our findings support both types of prospective associations. On the one hand, attachment avoidance during pregnancy predicted a decrease in

optimal commitment and an increase in under-commitment for both partners (actor effects), whereas only men's attachment anxiety predicted a decrease in women's under-commitment after birth (partner effect). On the other hand, high optimal commitment during pregnancy predicted a decrease in attachment avoidance at T2, whereas high under-commitment during pregnancy predicted an increase in attachment avoidance at T2 for both partners (actor effects). Also, in men only, higher over-commitment during pregnancy predicted an increase in both anxiety and avoidance at T2 (actor effects). These results corroborate and expand the results of previous studies revealing associations between attachment insecurities and relationship commitment (Dandurand et al., 2013; Etcheverry et al., 2013; Ferriby et al., 2015; Slotter & Finkel, 2009). They also support the relevance of the Multimodal Model of Couple Commitment (Brault-Labbé et al., 2017) to understand the experience of first-time parents.

### *Attachment Insecurities Predicting Changes in One's Own Relationship Commitment*

Our results revealed that prenatal attachment-related avoidance predicted a decrease in optimal commitment (H3) and an increase in under-commitment (H4) at 4 months postpartum for both mothers and fathers. These results are consistent with many cross-sectional studies demonstrating that attachment avoidance is widely associated with lower relationship commitment (see Mikulincer & Shaver, 2016 for a review). Bergeron et al. (2019) also obtained the same cross-sectional associations in their study using relationally distressed couples. Our prospective results suggest that the unique and stressful period of the TTP could intensify the negative consequences of one's attachment avoidance by reducing optimal commitment and increasing under-commitment. They also corroborate the findings of Ferriby et al. (2015) who found that higher attachment avoidance was associated with decreases in commitment during the TTP, notably in terms of personal confidence and dedication. Theoretically, attachment avoidance is characterized by denial of closeness needs, a negative perception of conflicts, and difficulty regulating negative emotions and stress (Brassard et al., 2017; Mikulincer & Shaver, 2016). Attachment avoidance has been related to lower relationship satisfaction and parental alliance during the postpartum period (Gingras et al., 2020), suggesting that parents who are high in avoidance could feel that their relationship is on the verge of failing because they are less satisfied and feel more alone in their new role. As proposed by Gingras et al. (2020), they may be less prone to ask for help when needed, have an amplified view of difficulties, withdraw from these difficulties, and remain passive—while dissatisfied—toward the reduction of time invested in the couple.

However, our results revealed no significant actor associations between attachment-related anxiety and changes in commitment, beyond the key role of attachment avoidance. Therefore, H1 and H2 were not supported. Possibly, our relatively small sample did not allow us to find small effects, beyond the stronger effect of avoidance. This suggests that attachment avoidance may play a more important role than anxiety in predicting changes in commitment in couples expecting their first child. This is consistent with other studies (e.g., [Gingras et al., 2020](#)) that have found that attachment avoidance explains a greater part of the variance in postpartum relationship functioning than attachment anxiety.

### *Attachment Insecurities Predicting Change in the Partner's Relationship Commitment*

Although attachment anxiety was not associated with changes in the individual's own commitment, our findings suggest that attachment anxiety would rather relate to the changes in their partner's commitment. Precisely, women whose partner had a higher level of prenatal attachment anxiety experienced a decrease in their under-commitment at 4 months postpartum (Q1). This result appears inconsistent with that of [Ferriby et al. \(2015\)](#) who found that individuals whose partner reported a higher level of attachment anxiety in the third trimester of pregnancy experienced a higher level of felt constraint at 3 months postpartum. It is possible that anxiously attached fathers-to-be would try to be more present for their partner during the TTP (i.e., help more with medical visits and household chores) because they fear rejection and seek closeness in this period characterized by marked relational changes ([Mikulincer & Shaver, 2016](#)). These caring characteristics may be positive for the relationship because mothers can perceive fathers' behaviors as supportive and helpful. It may facilitate mothers' reconciliation of the positive and negative aspects of the relationship and allow them to have more energy and time to invest in the couple, thus reducing their under-commitment over this period.

### *Relationship Commitment Predicting Changes in One's Own Attachment Insecurities*

Interestingly, our results also revealed that prenatal relationship commitment predicted changes in attachment insecurities at 4 months postpartum. In both mothers and fathers, a higher level of prenatal optimal commitment was associated with a decrease in their attachment avoidance at T2 (suggesting an increase in attachment security). This is consistent with [Rholes et al.'s \(2020\)](#) dyadic longitudinal study that found that positive relational processes, such as providing and receiving support, was related to declines in attachment avoidance across the TTP. Theoretically, optimal commitment is characterized



by interest and energy invested in the relationship, efforts to maintain the relationship, and an acceptance of the positive and negative aspects of the relationship (Brault-Labbé et al., 2017). It seems possible that experiencing an optimal commitment before the first baby is born can foster both security and closeness during a highly sensitive and demanding time. This could limit one's tendency to withdraw from intimate situations and provides opportunities to rely on one's partner, thus decreasing attachment avoidance.

In contrast, both mothers and fathers who reported higher levels of prenatal under-commitment experienced an increase in their attachment avoidance after their first child was born. This result can also be interpreted in light of Rholes et al.'s (2020) study, as negative perceptions of one's relationship and low motivation to preserve it at such a critical time is likely to fit and reinforce the negative model of others developed by avoidant individuals. Indeed, the multiple challenges faced by couples during the TTP (Simpson & Rholes, 2018) can easily create an exacerbation of the couple's difficulties, thus reinforcing the perception that the partner is not reliable or that the relationship cannot succeed. Possibly, under-committed partners may already feel that they will never satisfy their partner. Because they expect to be criticized, as a partner and eventually as a parent, avoidant partners who are under-committed may protect themselves by detaching from the relationship even more and hence become more avoidant.

Lastly, fathers who reported a higher level of prenatal over-commitment experienced an increase in their attachment insecurities (anxiety and avoidance) at 4 months postpartum. Although Bergeron et al. (2019) found that attachment anxiety was correlated with over-commitment in men, our prospective results seem to suggest that this excessive mode of commitment may lead to a reinforcement of both negative models of the self (anxiety) and of others (avoidance). Theoretically, over-commitment is characterized by the feeling of investing too much energy in one's relationship at the expense of other domains of one's life (Brault-Labbé et al., 2017). It is possible that fathers who are more over-committed have been more disappointed in the past because they perceive that their partner does not necessarily invest as much time and energy as they do. Since the TTP is a moment of considerable demands, particularly for mothers, it is possible that the lack of attention fathers get from their partner leads them to feel neglected, thus increasing their insecurity toward the relationship and fear of rejection. Also, because the energy fathers invested in the couple before birth was already considerable, it is possible that they feel a lack of appreciation from their partner, while they struggle to adjust to their new life (Marjorie et al., 2020). Fathers may protect themselves by withdrawing from their partner, as a result of frustration, which can also increase their attachment-related avoidance.

In sum, our results highlight four main patterns of importance for first-time parents. First, our results seem to suggest that lower avoidance (i.e., higher security) can foster optimal relationship commitment in both partners during the TTP and vice versa, suggesting the presence of a positive feedback loop between lower avoidance of intimacy and more positive forms of commitment. Second, the findings also appear to suggest that higher attachment avoidance can worsen under-commitment in both partners over time and vice versa, suggesting the presence of a negative feedback loop between avoidance and this more negative form of commitment. Third, our results suggest that over-commitment in fathers-to-be could be a risk factor for attachment insecurities in the early postpartum period. This finding extends previous research that has not considered this other negative form of commitment and the role that overinvesting in a relationship could play in major life transitions such as the TTP. Fourth, our findings highlight that anxiety in men could have positive features for the relationship during the TTP because these men are likely to be highly involved in the relationship, which may help to reduce their partners' under-commitment in this critical period.

### *Limitations and Future Research*

Despite its many strengths, including the use of a dyadic prospective design, this study had some limitations. First, the convenience sample and the correlational data do not allow for detecting causal effects. Second, the representativeness of the sample is limited since it is predominantly composed of educated heterosexual French-Canadian Caucasian couples who live together and have daily internet access. Third, although the second trimester of pregnancy is a better period for indicating pre-pregnancy relationship commitment, it is possible that responses obtained during this period are biased by the effects of the pregnancy in itself, thus not adequately representing commitment and attachment levels of the partners before the pregnancy. Fourth, the sole use of self-report questionnaires can be affected by social desirability, lack of introspection, or memory recall biases. Fifth, not having a control group of non-parents limits our capacity to ascertain whether our results are only applicable to new parents. Finally, since we did not gather information about each participant's mode of recruitment (online vs. in-person), we cannot ascertain whether there are demographic differences between them. In addition, we cannot verify whether our sample differs demographically from excluded participants (e.g., participants having an at-risk pregnancy).

To overcome these limitations, future studies may aim to recruit more diverse samples, in terms of cultural background and sexual or gender diversity. Adding pre-pregnancy measures would help in establishing a baseline level of attachment insecurities and commitment in partners and in

better examining when changes occur during the TTP. Indeed, the sole idea of becoming parents could potentially affect attachment and commitment. A longer-term study with more time points would also provide a better understanding of the directionality of the associations between attachment and commitment over time and whether the observed changes are only temporary and resolve after a certain period of time or whether they are long-lasting. Also, the use of a non-parent control group would assess whether the changes observed in this study apply only to couples crossing the TTP. Finally, future studies should investigate the role of potential mediators of the longitudinal links between attachment insecurities and relationship commitment during the TTP, such as relationship satisfaction, conflicts, and support provision.

### *Implications*

This study contributed to the identification of attachment insecurities as a predictor of the variations in relationship commitment during the TTP. Innovatively, our results demonstrated that relationship commitment also predicts variations in attachment insecurities after the birth of a first child. These findings may help practitioners working with future or current parental couples to acquire a better understanding of how commitment and attachment in both partners can fluctuate altogether during the TTP. Addressing expectations and perceptions stemming from attachment insecurities and relationship commitment may ease the transition for both partners. Therefore, interventions may focus on education and promotion for increasing security and connection as well as optimal commitment within couples of future and new parents. This knowledge has the potential to help couples maintain a stable relationship, thus preventing dissolution and its related deleterious consequences.

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