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parenting self-efficacy moderates
the link between partner
dissatisfaction and avoidant
infant-mother attachment

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Under revision

ABSTRACT

The early infant-mother attachment relationship is part of a network of meaningful relationships of which the partner relationship may be considered of particular importance. Findings on satisfaction with the partner relationship and its association with infant-mother attachment have been mixed. The current study tested whether associations between partner relationship dissatisfaction and infant-mother attachment quality were buffered by mothers' positive or exacerbated by mothers' negative perceptions of their own parenting abilities. The bivariate effect of partner relationship dissatisfaction on infant-mother attachment as well as moderation of this effect by parenting self-efficacy was tested in a sample of 270 infant-mother dyads one year after birth. There was no direct effect of partner dissatisfaction on attachment. Unexpectedly, for high parenting self-efficacy, greater partner dissatisfaction increased the odds of an avoidant attachment (compared to a disorganized) whereas, for low parenting self-efficacy, greater partner dissatisfaction decreased the odds of an avoidant attachment (compared to secure, resistant, and disorganized). The role of mothers' partner relationship dissatisfaction in the attachment relationship with their infant appeared therefore to be conditional on their parenting cognitions.

Infant-mother attachment relationships are embedded within a network of relationships (e.g., Hopkins, Gouze, & Lavigne, 2013). Specifically the relationship with the partner is considered important as “the marital relationship may be viewed as a first-order source of support for parenting” (Gable, Belsky, & Crnic, 1992, p. 281). The partner relationship may directly enhance but may also undermine the relationship with the child depending on the quality (George & Solomon, 2008). The extent and mechanisms through which the evolving attachment relationship and partner relationships affect each other during the first year of parenthood are ill-understood (Cowan, 1997; Gable et al., 1992; Zimet & Jacob, 2001). According to Coleman and Karraker (1998), parenting self-efficacy is involved in the ways in which people respond to stressors in the parenting context. This study tested potential associations between dissatisfaction with the partner relationship and quality of infant-mother attachment at the end of the first year as a function of parenting self-efficacy.

Individual Differences in Infant-Mother Attachment

An insecure attachment relationship puts children at risk for developing internalizing (Groh, Roisman, van IJzendoorn, Bakermans-Kranenburg, & Fearon, 2012) and externalizing (Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, & Roisman, 2010) problems as well as lower social competence (Groh et al., 2014). Research on the development of the infant-mother attachment relationship has highlighted the importance of maternal functioning, specifically maternal sensitivity, on individual differences in the quality of attachment (De Wolff & van IJzendoorn, 1997). Well-timed and appropriate responses to infant signals, unavailability and inattentiveness towards infant signals, rejection of infant signals, and more generally insensitivity have been associated with secure, resistant, avoidant (Ainsworth, 1985), and disorganized (Van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999) mother-infant attachment classifications, respectively. Maternal sensitivity only explains a minor portion of the individual differences in attachment security (e.g., De Wolff & van IJzendoorn, 1997). Contextual factors may not only impact maternal functioning, but also provide additional social experiences of children that may shape the quality of dyadic relationships (Cowan, 1997; Hopkins et al., 2013; Sette, Coppola, & Cassibba, 2015; Van IJzendoorn & Bakermans-Kranenburg, 1997).

Partner Dissatisfaction and Infant-Mother Attachment: Bivariate Associations

Studies that examined associations between satisfaction with the partner relationship and infant-mother attachment have shown complex and mixed findings. A meta-analysis showed a small but significant effect of higher maternal social-marital support on infant-parent attachment security (Atkinson et al., 2000). A closer look at some of the findings showed that, more marital

dissatisfaction (Howes & Markman, 1989), less marital harmony (Teti, Sakin, Kucera, Corns, & DasEiden, 1996), and less marital quality (Lucas-Thompson & Clarke-Stewart, 2007) were related to infant insecurity measured with the Attachment Q-sort. Also, Wong, Mangelsdorf, Brown, Neff, and Schoppe-Sullivan (2009) found a negative association between a continuous score for security of attachment in the Strange Situation Procedure and marital quality. Only a few studies included subcategories of attachment quality. Moss, Cyr, Bureau, Tarabulsky, and Dubois-Comtois (2005) found that a qualitative change from secure attachment at age 3.5 to insecure attachment 2 years later was associated with a decline in marital satisfaction, with the largest decline found for a change from secure to disorganized attachment. Owen and Cox (1997) found an effect of marital conflict on disorganized attachment, which was also found by Solomon and George (1999) in a sample of divorced parents. Spieker and Booth (1988) found more infant disorganization for mothers with low partner support in a high-risk sample.

Other studies did not find effects of partner factors on infant-mother attachment. Using the Attachment Q-sort, Teti, Nakagawa, Das, and Wirth (1991) did not find an effect of partner dissatisfaction on attachment security. Using Strange Situation classifications, Das Eiden and Leonard (1996) did not find an effect of marital satisfaction on organized infant-mother attachment classifications. Also, Levitt, Weber, and Clark (1986) and Zeanah and colleagues (1993) did not find an effect of marital satisfaction or support measured with a social support interview on secure, avoidant, or resistant infant attachment.

To sum up, one set of studies indicated unconditional effects of dysfunctional marital interactions on the quality of infant-parent attachment relationships, whereas another set of studies indicated that no effects may exist or that effects may be conditional on as of yet unknown factors or may exist within subgroups. A limitation of the extant research is, that samples had relatively little statistical power for testing differences between insecure attachment categories (i.e., avoidant and resistance) and for testing more complex hypotheses of multiple intra- and interpersonal factors. The studies with null findings did not consider disorganized attachment, while studies that did find effects for greater partner dissatisfaction pointed specifically to disorganized infant-mother attachment.

Partner Dissatisfaction and Infant-Mother Attachment: Multivariate Effects

Parenting self-efficacy, the conviction that one is able to parent successfully, has direct as well as indirect links with partner factors and parenting and child outcomes (Coleman & Karakker, 1998; Jones & Prinz, 2005). According to Bandura (1997), self-efficacy beliefs are part of a larger environmental transactional structure, in which social interactions play a major role.

Partner factors on infant-mother attachment via parenting self-efficacy (or related constructs) have, to our knowledge, only been considered in terms of indirect or mediator effects. The focus on mediation models follows the conclusion drawn by Teti, O'Connell, and Reiner (1996) that parenting self-efficacy should be regarded as a gateway for contextual factors to influence maternal behavior and infant-mother interactions. Huth-Bocks, Levendosky, Bogat, and von Eye (2004) hypothesized a mediation effect of multiple forms of social support on infant-mother attachment via parenting self-efficacy, but did not continue with the analyses as parenting self-efficacy had "inadequate variance and was completely unrelated to infant-mother attachment" (p. 488). Isabella (1994) did a path analysis and showed that marital quality was related to infant-mother attachment via role satisfaction, which is conceptually related to parenting self-efficacy. However, Isabella (1994) excluded maternal role satisfaction from his final model and used a composite of satisfaction from the role of self, employee, wife, and homemaker.

Importantly, partner relationship dissatisfaction may be related to infant-mother relationship quality through other pathways than the undermining of parenting self-efficacy (Coleman & Karraker, 1998), for example through exposure of children to negative affect between partners or through the effects of co-parenting (Kitzmann, Gaylord, Holt, & Kenny, 2003; Teubert & Pinquart, 2010). However, the possibility that parenting self-efficacy may also buffer or exacerbate direct factors of parenting has not received much attention. There are some studies that examined the buffering role of parenting self-efficacy in the association between risk factors and parenting behavior. Leerkes and Crockenberg (2002) found that mothers who rated their infant's behavior as more difficult were less sensitive when their parenting self-efficacy was low or extremely high (which was argued to be maladaptive) and more sensitive when their parenting self-efficacy was moderately high. Hastings and Brown (2002) found that fathers of autistic children with low parenting self-efficacy experienced a negative effect of child behavior problems on their anxiety symptoms whereas high parenting self-efficacy seemed to buffer this negative effect. To our knowledge, no studies have tested the interaction effects between partner relationship factors and parenting self-efficacy in the prediction of infant-mother attachment. However, there are some studies that considered a moderation effect of other social factors on attachment. Crockenberg (1981) showed that mothers who rated their child as more irritable were more likely to have an insecure infant-mother attachment when social support was low. This is consistent with findings by Wong and colleagues (2009) showing that mothers who perceived paternal involvement (which was argued to actually be reduced) as more important and had a fussy child also had a more insecure infant-mother attachment. These interaction effects (Crockenberg, 1981; Hastings & Brown, 2002; Leerkes

& Crockenberg, 2002; Wong et al., 2009) suggest the possibility of partner relationship dissatisfaction as a risk for attachment security especially when combined with low parenting self-efficacy.

With greater partner dissatisfaction, parenting self-efficacy may be of particular importance to the infant-mother attachment relationship. Parental resources become drained by stressful social circumstances (e.g., Prinzie, Stams, Dekovic, Reijntjes, & Belsky, 2009), unless these resources might be replenished, for example based on strong and stable convictions about one's ability to be a good parent (Coleman & Karraker, 1998). Hence, the current study hypothesized that high parenting self-efficacy would ameliorate the negative effect of partner dissatisfaction on infant-mother attachment whereas low parenting self-efficacy would exacerbate the effect of partner dissatisfaction on infant-mother attachment. More precisely, for mothers experiencing greater partner dissatisfaction, high parenting self-efficacy would predict secure attachment, or at least organized patterns of attachment. High partner dissatisfaction and low parenting self-efficacy would predict an insecure organized or disorganized infant-mother attachment classifications. Explorative analyses were done to examine combined effects of partner dissatisfaction and parenting self-efficacy on specific categories of insecure attachment.

METHOD

Sample

Mothers ($N = 270$) ranged in age from 15 to 41 years ($M = 28.6$, $SD = 5.5$) at birth of their first child. Most mothers were married (36%) or living together with their partner (49%). Few mothers were single (10%) or lived separated from their partner (6%). More than half of the mothers were highly educated with a higher professional education diploma or a university degree (60%). A lower number of women had a middle-level applied diploma (30%). Seven percent finished lower general secondary education and 3% had primary education. Gross income (14% was missing) was measured with four categories: less than €23.900 (17%), €23.900-€42.700 (19%), €42.900-€69.700 (30%), and more than €69.700 (20%). Mothers predominantly had two Dutch parents (76%), 11% had at least one parent that was non-Dutch Western and the remaining 13% had at least one parent who was non-Western. Slightly less boys (45%) than girls participated in the study. Compared to the general Dutch population (Statistics Netherlands, 2013a), mothers in the current study were younger when having their first child (28 versus 29 years old), less often had a boy (45% versus 51%), and less often were married (36% versus 56%). Also, mothers had a comparable gross income (€47.000 spendable

income for a two person household with a child; Statistics Netherlands, 2013b), but more often were highly educated (60% versus 28%; Statistics Netherlands, 2012). Mothers also more often were non-Dutch (24% versus 11%; Statistics Netherlands, 2014). This study was conducted within the larger cohort study Generations².

Procedure

The current study combined data from a normative and an at-risk subsample (i.e., women expected to have an increased chance of intergenerational problems). Women were recruited in several ways. First-time pregnant women were contacted through midwifery practices, websites, and information meetings in community centers in the area of Amsterdam. After we received written informed consent, women filled in their first prenatal questionnaire including demographics. The demographics included the question whether pregnant women received professional support from child protection services, a psychologist, or psychiatrist before the age of eighteen. Additionally, we recruited women for the at-risk sample with elevated depressive and/or anxiety symptoms on their prenatal assessment. Women who answered yes or had elevated depressive and/or anxiety symptoms were considered for the at-risk sample and contacted for a face-to-face information meeting about additional assessments besides cohort questionnaires. We also contacted pregnant women with current psychosocial difficulties in collaboration with professional support services in the Netherlands, ranging from outpatient short-term care to residential long-term care. This was done because these mothers are usually underrepresented in cohort studies. Pregnant women were personally informed and written consent was obtained from all parties involved such as parents, partners, and legal guardians. All other women in the larger cohort study were contacted for the normative sample up to the point that 180 participants were included. Mothers in the normative sample were informed over the phone and were sent additional informed consent forms for the extensive assessments. Informed consent for videotaping the infant at the 12-month laboratory assessment was obtained from all parties involved. Normative mothers and at-risk mothers from the larger cohort received questionnaires via postal mail. If questionnaires were not completed within 2 weeks, women were sent a reminder by e-mail and 2 weeks later they were contacted by phone. This process was repeated up to 1.5 years. At-risk mothers recruited via professional support filled in the questionnaires after the Strange Situation Procedure.

Measures

Infant-mother attachment. Infant-mother attachment was assessed with the Strange Situation Procedure (SSP; Ainsworth, Blehar, Waters, & Wall, 1978) when the infant was 12 months old. At the time of the SSP, infants ranged in age from 11.07 to 19.75 with a mean age

of 13 months ($SD = 1.09$). The SSP consists of eight consecutive episodes of three minutes each, including play, an encounter with a stranger, two separations from, and two reunions with the mother. Both reunion episodes were coded for proximity- and contact seeking, contact maintaining, resistant, and avoidant behavior. Infants classified as secure (B) were able to maintain proximity and contact with the mother at the reunion after which they were able to return to play. Avoidant (A) infants showed little or no proximity seeking during the reunion and avoided their mother often by focusing on play. Resistant (C) infants were characterized by angry behaviors during reunion and a difficulty to return to play. Insecure-disorganized attachment was coded with the Main and Solomon system (1990) on the basis of contradictory behaviors of the infant in the presence of their mother. SSPs were coded by five reliable coders and agreement on the classifications varied from a kappa of .62 to .91.

Partner dissatisfaction. Partner dissatisfaction was measured with the Spouse/Parenting Partner Relationship subscale of the Dutch Parenting Stress Index (PSI; De Brock, Vermulst, Gerris, & Abidin, 1992), which consisted of 7 items (e.g., “Raising this child has caused more problems in the relationship with my partner than I thought”) scored on a 6-point Likert scale ranging from 1 = *totally disagree* to 6 = *totally agree*. Sum scores were divided by 7 to create mean scores. Higher scores indicated more dissatisfaction from the relationship. Internal consistency of the subscale was acceptable ($\alpha = .67$).

Parenting self-efficacy. Parenting self-efficacy was measured with a Dutch translation of the Maternal Self-Efficacy in the Nurturing Role Questionnaire (Pedersen, Bryan, Huffman, & Del Carmen, 1989). The questionnaire consisted of 16 items (e.g., “I feel confident in my role as a parent.”) that were scored on a 7-point Likert scale ranging from 1 = *not at all representative of me* to 7 = *strongly representative of me*. Total scores were divided by 16 to create mean scores. Higher scores reflected higher parenting self-efficacy. Internal consistency of this measure was good ($\alpha = .86$).

Data Analytic Strategy

Little’s MCAR test (Little & Rubin, 1987) was used to examine the pattern among the missing values and imputation was done accordingly. Effects on infant-mother attachment were examined in four ways: two-way forced (secure versus non-secure based on primary classifications), two-way unforced (secure versus non-secure including disorganized), three-way (secure, avoidant, and resistant), and four-way (secure, avoidant, resistant, and disorganized). Moderation of the effect of partner dissatisfaction and parenting self-efficacy on infant-mother attachment was examined using a multinomial logistic regression analysis. A product factor of partner dissatisfaction and parenting self-efficacy (centered) was entered in the hierarchical regression

after the centered independent and moderator variable (Aiken & West, 1991), after which simple slope analyses were conducted to examine the effect of the independent variable on the outcome for different levels of the moderator.

RESULTS

Missing Data Analyses and Descriptives

Missing values were considered missing at random (MAR) using Little's MCAR test ($\chi^2 = 2558.59$, $df = 2374$, $p = .004$) and replaced using multiple imputations ($n = 10$). Higher parenting self-efficacy was associated with lower partner dissatisfaction ($r(270) = -.27$, $p < .001$). Partner dissatisfaction scores ranged from 1 to 5.71 ($M = 2.38$, $SD = .82$) and parenting self-efficacy scores ranged from 2.63 to 7 ($M = 5.97$, $SD = .64$). Table 1 shows the distribution of infant-mother attachment classifications. From the 270 mothers, 156 came from the normative subsample and 114 from the at-risk subsample that both were part of a larger cohort. Mothers from the normative subsample more often had two Dutch parents ($\chi^2(2) = 18.65$, $p < .001$), had a higher income ($\chi^2(3) = 53.27$, $p < .001$), were more educated ($\chi^2(4) = 53.52$, $p < .001$), and were older ($t(268) = 6.46$, $p < .001$) than mothers from the at-risk sample. Overall, preliminary analyses did not reveal significant associations between the model variables and maternal age, education, nationality, or income. Models were not influenced by outliers.

Table 1. Distribution of Infant-Mother Attachment Classifications (N = 270)

	Secure		Insecure					
	n	%	Avoidant		Resistant			
Two-way forced ^a	167	62	n		%			
			103		38			
Two-way unforced ^b	141	52	n		%			
			129		48			
	n	%	Avoidant		Resistant			
			n	%	n	%		
Three-way ^c	167	62	43	16	60	22		
	n	%	Avoidant		Resistant		Disorganized	
			n	%	n	%	n	%
Four-way ^d	141	52	33	12	36	13	60	22

Note. ^aTwo-way forced = secure versus non-secure based on primary classifications; ^bTwo-way unforced = secure versus non-secure including disorganization; ^cThree-way = secure, avoidant, and resistant; ^dFour-way = secure, avoidant, resistant, and disorganized.

Partner Dissatisfaction and Infant-Mother Attachment: Bivariate Effects

T-tests and ANOVAs were used to examine the association between partner dissatisfaction and parenting self-efficacy and infant-mother attachment. (Pooled ANOVA results are not available in SPSS, but individual imputations and original data did not yield different results.) For two-way secure/insecure attachment classifications, there were no differences in partner dissatisfaction (forced: $t(268) = .90, p = .35$; unforced: $t(268) = .51, p = .61$) or parenting self-efficacy (forced: $t(268) = -.54, p = .59$; unforced: $t(268) = .17, p = .86$). For three-way forced secure, avoidant, and resistant attachment, there were no differences in partner dissatisfaction ($F(2, 245) = .81, p = .45$) or parenting self-efficacy ($F(2, 247) = .23, p = .79$). Also for four-way secure, avoidant, resistant, and disorganized attachment, no differences in partner dissatisfaction ($F(3, 245) = .84, p = .47$) or parenting self-efficacy ($F(3, 247) = .91, p = .44$) were found.

Partner Dissatisfaction and Infant-Mother Attachment: Multivariate Effects

There were no significant interaction-effects of partner dissatisfaction by parenting self-efficacy on infant-mother attachment with two-way (forced: $\chi^2(1) = -.55, p = .06$; unforced: $\chi^2(1) = -.15, p = .52$) or three-way (mother A-C: $\chi^2(2) = .98, p = .06$; mother B-C: $\chi^2(2) = -.21, p = .48$) classifications. Using four-way classifications, the omnibus test ($\chi^2(9) = 13.71, p = .13$) was not significant as the model variables were not associated comparing all four infant-mother attachment classifications (original data are reported as SPSS does not provide pooled data). Nevertheless, significant interaction-effects comparing specific classifications could be interpreted (Hancock & Klockars, 1996). Moderation effects of partner dissatisfaction by parenting self-efficacy were significant with regard to secure ($\chi^2(3) = -1.52, p = .009$), resistant ($\chi^2(3) = -1.37, p = .028$), and disorganized ($\chi^2(3) = -1.61, p = .007$) versus avoidant infant-mother attachment. Thus, avoidant infant-mother attachment could be distinguished from other attachment classifications based on an interaction-effect between partner dissatisfaction and parenting self-efficacy.

Simple slope analyses revealed that higher partner dissatisfaction was associated with infant-mother attachment at different levels of parenting self-efficacy (see Table 2). At very high (+2 *SD*) levels of parenting self-efficacy, one point higher partner dissatisfaction increased the odds of an avoidant infant-mother attachment (compared to disorganized) by more than 7.5 times. At high (+1 *SD*) levels of parenting self-efficacy, the odds of an avoidant attachment was 2 for one point higher partner dissatisfaction, however, this effect was not significant. At low (-1 *SD*) and very low (-2 *SD*) levels of parenting self-efficacy, one point higher partner dissatisfaction increased the odds of a secure attachment by 4 to 12 times, of a

Table 2. Effect of Partner Dissatisfaction on Attachment at Different Levels of Parenting Self-Efficacy

	Higher partner dissatisfaction			
	B (SE)	Exp(B)	p	SSP
PSE ^a -2 SD	2.54 (.96)	12.67	.009	B>A
	2.18 (1.01)	8.86	.032	C>A
	2.66 (.97)	14.33	.007	D>A
PSE ^a -1 SD	1.57 (.62)	4.81	.013	B>A
	1.30 (.66)	3.69	.048	C>A
	1.63 (.63)	5.12	.010	D>A
PSE ^a +1 SD	.72 (.48)	2.06	.13	A>D
PSE ^a +2 SD	2.05 (.89)	7.76	.022	A>D

Note. ^aPSE = parenting self-efficacy; SSP = Strange Situation Procedure.

resistant attachment by 3 to 8 times, and of a disorganized attachment by 5 to 14 times (compared to avoidant). Conversely, for greater partner dissatisfaction, low parenting self-efficacy decreased the odds of an avoidant infant-mother attachment (compared to secure, resistant, and disorganized) whereas high parenting self-efficacy increased the odds of an avoidant infant-mother attachment (compared to disorganized).

DISCUSSION

The predictive association between dissatisfaction with the partner relationship and infant-mother attachment quality varied by level of parenting self-efficacy, which may explain why no bivariate association was found between partner relationship satisfaction and quality of attachment. Mothers with high parenting self-efficacy were more likely to develop avoidant attachment than disorganized attachment when dealing with partner dissatisfaction. Mothers with low parenting self-efficacy were more likely to develop disorganized, resistant, but, surprisingly, also secure attachment relationships with their infant than avoidant attachment when faced with high partner relationship dissatisfaction. Conversely, the combination of dissatisfaction from the partner relationship and low parenting self-efficacy decreased the chance of an avoidant infant-mother attachment.

Avoidance in infant-mother dyads is assumed to reflect a deactivation of infants' attachment system in order to manage and regulate distress from interactions with rejecting and consis-

tently insensitive mothers (Ainsworth et al., 1978). Rejection has been thought of as a defensive strategy that mothers use in response to unpleasant experiences associated with infants' attachment needs (Ainsworth, 1985; Marvin, Cooper, Hoffman, & Powell, 2002). Infants are thought to avoid the negative effect of the rejection by diminishing overt display of attachment needs, which is facilitated by directing attention away from their attachment figures. Although looking away and avoiding are cues the mother could interpret as signals that the child is in need of attention, mothers join the infant in this defensive behavior illustrating the development of an intertwined pattern of avoidance and defensive behaviors between mother and infant (Marvin et al., 2002). It may be speculated that this defensive strategy of mothers is only feasible during minor stress and not when stressors become more severe (Mikulincer & Shaver, 2008). For example, Berant, Mikulincer, and Florian (2001) found that mothers who normally used defensive strategies continued to do so when they gave birth to a healthy baby, but became more emotion-focused when their baby had a life-threatening heart problem. Also, experimental studies showed that attachment-related fears could be suppressed, but that the moment a second stressor (cognitive task) was added the defensive mode was not maintained and participants had access to suppressed thoughts (e.g., Mikulincer, Dolev, & Shaver, 2004). Following this line of thought, mothers who use a defensive strategy and are confronted with an additional stressor may "lack the resources necessary to maintain their usual defensive exclusion of attachment-related concerns" (Mikulincer & Shaver, 2008, p. 509). Possibly, the co-occurrence of partner dissatisfaction and low parenting self-efficacy represents such an accumulation of stressors. This combination of adverse factors may drain resources important for parenting to the point that mothers' defensive strategies and rejecting behaviors towards their infant are difficult to maintain decreasing the chance of developing an avoidant attachment between mother and infant. Our findings point towards considerable complexity of maternal intra- and interpersonal antecedents of individual differences in the quality of attachment.

As hypothesized, high parenting self-efficacy appeared to buffer against the odds of disorganized attachment when partner dissatisfaction was high. Mothers who experienced greater partner dissatisfaction but also high parenting self-efficacy may still have enough resources available to provide "good enough" parenting resulting in an organized-insecure attachment (George & Solomon, 2008). This could also be related to mothers' defensive strategy. For instance, teens who showed deactivation of their attachment system (i.e., associated with avoidance) have been found to show more dysfunctional anger towards their mother, which was argued to possibly be a means of distancing oneself (Kobak, Cole, Ferenzgillies, Fleming, & Gamble, 1993). In analogy, mothers of avoidant attached infants may devalue their partner (e.g., report

more partner dissatisfaction), but simultaneously have the defensive strategy of self-inflation (Hesse, 2008). Given their defensive skills, mothers of avoidant attached infants may report more partner problems in combination with positive evaluations of the self. The fact that this effect was found for mothers of avoidant attached infants only compared to mothers of disorganized attached infants may not be surprising. Mothers of disorganized attached infants have been described as characterized by “abdicated caregiving, failures of protection, and helplessness” (George & Solomon, 2008, p. 846), which incompatible with high parenting self-efficacy. Also, mothers of disorganized attached infants are thought to lack organized defenses (George & Solomon, 2008), in contrast to mothers in avoidant attachment relationships. The lack of specific effects for mothers of secure and resistant attached infants may be due to the fact that the combination of partner dissatisfaction and parenting self-efficacy as examined in this study may not tap into the processes associated with secure or resistant infant-mother attachment relationships.

Limitations and Directions for Future Research

Given that findings were mainly unexpected, it is important to replicate these in other studies. The lack of a significant direct effect was not unsurprising. Although there is meta-analytical evidence that marital support is related to attachment security (Atkinson et al., 2000), they suggested that not self-report but social support interviews and intervention would be better at predicting attachment security. Importantly, both Atkinson and colleagues’ (2000) suggestion and previous null findings of the effect of marital factors on attachment (e.g., Zeanah et al., 1993) refer to bivariate, unconditional effects. Findings from the current study suggested that self-report measures may be successfully used in moderation models. Also, the current study was limited to moderation of parenting self-efficacy on associations between attachment and the marital relationship. Similar mechanisms may, however, also play a role with social support from family, family-in-law, friends, neighbors, employees, and on a community level. In addition, results were specifically related to avoidant infant-mother attachment. More studies are necessary to investigate the effects of parenting self-efficacy and partner dissatisfaction on the defensive strategies that characterize mothers of avoidant dyads. Importantly, the current study did not include maternal attachment state of mind with regard to attachment measured with the Adult Attachment Interview. Meta-analytic evidence (Van IJzendoorn, 1995) suggests that avoidant attached infants often have a mother with a dismissing attachment state of mind, which is characterized by using defensive strategies when handling attachment-related questions about attachment figures (Hesse, 2008). Including the Adult Attachment Interview would give more insight into the origins of the defensive strategies that may come into play for mothers of avoidant infants who experience the combination of high partner relationship

dissatisfaction and high or low parenting self-efficacy. A strength of the study was the sample size of 270 mothers and their infant, which provided the opportunity to distinguish between organized insecure classifications. A further exploration of large enough normative and at-risk samples separately would be even more informative given the possible differential role of environmental factors for attachment security in low-risk versus high-risk samples (e.g., Cyr, Euser, Bakermans-Kranenburg, & van IJzendoorn, 2010).

Conclusion

The current study found no overall effect of partner dissatisfaction on infant-mother attachment, but did find an effect of greater partner relationship dissatisfaction on infant-mother attachment as a function of parenting self-efficacy. In doing so, the findings contribute to further expanding of a contextualized model of individual differences in infant-parent attachment relationships. Importantly, as the partner relationship may be seen as a main source of support needed for parenting (Gable et al., 1992) and the importance of high parenting self-efficacy is greater when support is low and exerts pressure on the parenting situation (Coleman & Karraker, 1998), it seems fruitful to examine parenting self-efficacy and partner (or broader social) factors in a moderation model when studying parenting and mother-child relationship outcomes.