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Leiden  
The Netherlands

## **Emerging parenthood: Parental sensitivity from infancy to toddlerhood**

Branger, M.C.E.

### **Citation**

Branger, M. C. E. (2022, November 2). *Emerging parenthood: Parental sensitivity from infancy to toddlerhood*. Retrieved from <https://hdl.handle.net/1887/3485135>

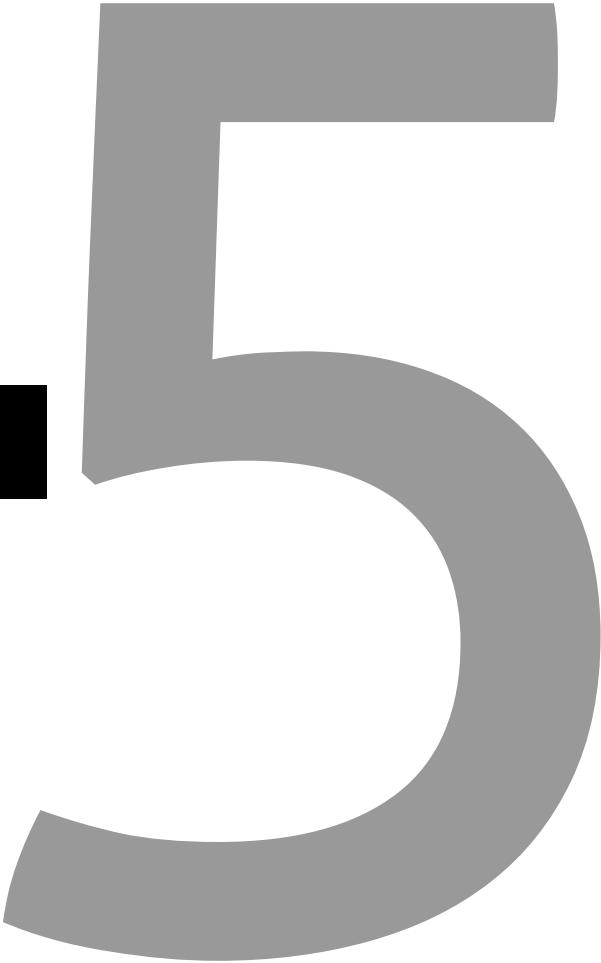
Version: Publisher's Version

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**Note:** To cite this publication please use the final published version (if applicable).

**CHAPTER 5**



# General discussion



*“I’m actually just excited to finally hold him, finally see what he looks like, how he is, what he does. How it’s going to feel to be together. I think it feels very connected. I believe I’ll probably be on like cloud nine, of course also days of frustration, I know that, but that’s ok. [...] We’ll discover together how it’s going to work, to be a family, actually.”*

– A Dutch mother in her prenatal interview.

*“It’s a bit hard to grasp as a man, that it’s yours. You can rationally reason about it, but the penny hasn’t dropped yet. And I think the moment a child is born, it will be clear, also emotionally, what that will entail, that you’ll have a child and it’s yours and you’ll build up a bond with them, and they become a part of your life.”*

– A Dutch father in his prenatal interview.

The birth of a child represents an important transition in a person’s life. As these Dutch expecting parents demonstrate in the quotes above, several questions, expectations, and responsibilities arise during this major adjustment phase. They become a parent and are confronted with an exciting and challenging new task: parenting. Even though parents can positively impact child development through sensitive parenting, especially in the first few foundational years of children’s lives, limited research had been done on the early development of sensitive parenting. Therefore, the overarching aim of this dissertation was to provide more insight in the development of sensitive parenting from infancy to toddlerhood in primiparous mothers and fathers. In Chapter 2, we examined whether the context in which parental sensitivity is observed could be a source of variability in sensitivity, by comparing mothers’ and fathers’ sensitive parenting to their four-month-old infant in four different contexts. In Chapter 3, we examined the development of mothers’ as well as fathers’ narrative coherence of their mental representations of their child across the transition to parenthood, and the relation between pre- and postnatal narrative coherence and parental sensitivity. In Chapter 4, we examined the trajectories of maternal and paternal sensitivity across three time points from infancy to toddlerhood, using a multilevel modeling design and following the implications of the study presented in Chapter 2. In this final chapter, the findings of these studies will be summarized and discussed, resulting in an overview of conclusions and limitations of this dissertation as well as implications for future research and practice.

## **Context as a source of variability in parental sensitivity**

Before examining trajectories and possible precursors of sensitive parenting, we studied the measurement of this construct – and in particular the context in which parental sensitivity is measured. Even though this construct was originally developed by Mary Ainsworth based on her long, naturalistic observations of mother-infant interactions (e.g., Ainsworth, 1967), in more recent research parental sensitivity has generally been measured via short observations in a wide range of contexts. An important research question of this dissertation was therefore whether the context in which parental sensitivity is measured,

plays a role in findings of variability in sensitivity. In other words: should we take context into account when measuring (trajectories of) parental sensitivity?

To answer this question, we examined maternal and paternal sensitivity towards four-month-old infants in four different contexts: a routine caregiving session, free play episode, and the baseline and reunion of the Still Face Paradigm (SFP; Tronick et al., 1978). The results, which are described in detail in Chapter 2, demonstrated that mean levels of parental sensitivity indeed varied across contexts: parental sensitivity was higher during routine caregiving than during free play, the SFP baseline, and the SFP reunion, and higher during free play than during the SFP baseline and reunion. Our findings suggest that parents find it easier to notice their child's signals and respond appropriately to them in situations that are more ecologically valid, and that they are more challenged in less naturalistic contexts, which is in line with a previous study that examined mothers only (Joosen et al., 2012). This highlights the importance of taking context into account when measuring parental sensitivity. To avoid confounding effects, we advise researchers to use similar observational settings over time and across subgroups when studying (trajectories of) sensitive parenting. We therefore applied this implication in Chapters 3 and 4. In Chapter 3, we used all four previously mentioned contexts for observations of sensitivity in both mothers and fathers. In Chapter 4, to represent daily life as much as possible, we selected a naturalistic observational context that could be used similarly over time for both mothers and fathers to measure parental sensitivity (i.e., a free play setting).

### **Narrative coherence and parental sensitivity across the transition to parenthood**

Parental sensitivity is an important predictor of infant attachment quality (De Wolff & Van IJzendoorn, 1997). Together with parents' representations of their child, it is theorized to play an important role in the intergenerational transmission of attachment (e.g., Oppenheim, 2006). This theoretical framework is visualized in Figure 1. Research suggests that in particular the narrative coherence of parents' mental representations of the child, i.e. parents' ability to provide a believable, clear, relevant, and internally consistent story about (the relationship with) their child, seems to play a role in this framework (Oppenheim, 2006; Sher-Censor, 2015). Therefore, the second goal of this dissertation was to examine the development of narrative coherence across the transition to parenthood specifically, and its theorized relation with sensitive parenting, of which the results are presented in Chapter 3. To our knowledge, this was the very first study to focus on prenatal as well as postnatal narrative coherence in both mothers and fathers, including the theorized link with parental sensitivity.



**Figure 1.** Theoretical framework of the intergenerational transmission of attachment.

Regarding the development of narrative coherence across the transition to parenthood, our results demonstrated that mean levels of both paternal and maternal narrative coherence improved over time, which was in line with previous research on related parental representation concepts (e.g., Cairo et al., 2012; Vreeswijk et al., 2015). These findings indicate that – even though parents already create thoughts and feelings about the (future) relationship with their child during pregnancy (Foley et al., 2019; Glover & Capron, 2017) – speaking coherently about the relationship with their child becomes easier when parents have had actual experiences with their child and can add vivid examples of who their child is. Interestingly, pre- and postnatal narrative coherence were related in fathers, but not in mothers. Mothers who created a more coherent narrative during pregnancy, were not necessarily more coherent after the birth of their child. This may be explained by the hormonal changes that mothers experience during and after pregnancy, by the amount of time spent with the infant, and/or by possible negative birth experiences. Both mothers and fathers experience hormonal changes across the transition to parenthood, such as changes in estradiol and testosterone, but mothers' changes and fluctuations are driven by pregnancy, childbirth, and lactation, and are more drastic (Leuner et al., 2010). Furthermore, mothers are more often the primary caregiver than fathers, which allows them to spend more time with their infant. The instability of mothers' narrative coherence across the transition to parenthood may also indicate that prenatal fantasies more quickly turned into realistic and complex narratives in mothers than in fathers. Lastly, negative birth experiences could have temporarily hampered some mothers' ability to create a coherent narrative, as we noticed during our data collection that mothers with negative experiences often elaborated on the birth experience instead of the interview question. Previous research indeed demonstrated that a negative violation of expectations (i.e., when postnatal representations of the parent-child relationship are more negative than prenatal representations) more often occurs in mothers with more negative birth experiences, whereas this is not the case for fathers (Flykt et al., 2014). As this is the first study to examine narrative coherence across the transition to parenthood, we are careful in drawing conclusions. Much more research is needed to further examine how and why narrative coherence develops and changes over time across the transition to parenthood.

In contrast to our hypothesis, we only found weak evidence for the theorized link between narrative coherence and parental sensitivity. As previously mentioned, we observed parental sensitivity during routine caregiving, free play, and the SFP baseline and reunion. In fathers, only postnatal narrative coherence was related to parental sensitivity in the free play context. In all other contexts pre- and postnatal narrative coherence did not predict parental sensitivity in both mothers and fathers. This does not necessarily

mean that the theoretical framework of narrative coherence and parental sensitivity as important factors in the intergenerational transmission of attachment is incorrect. Previous meta-analyses on related parental representation concepts did find evidence for the relation between parents' representations of the child and their sensitivity, although the studies that were included generally focused on older infants than our sample (Foley & Hughes, 2018; Zeegers et al., 2017). The current study is the first that focused on the concept of narrative coherence in relation to parental sensitivity during the transition to parenthood in particular, and we looked at a specific and relatively short time frame from 36-weeks pregnancy to 4 months after birth during which a major life event takes place and a whole new family system is being formed. The infants' young age may have played a role, as well as the relative instability of narrative coherence in this special time period. Perhaps more time is needed for parents to be able to form realistic and complex narratives, and thus for narrative coherence to become more crystallized, in order to be able to represent the flexibility in parents' information processing that is relevant for their actual parenting. Importantly, previous research indicated that sensitivity in mothers could also be somewhat unstable in the first year of the child's life (Lohaus et al., 2004). All in all, these results highlight the importance of longitudinal research to create more insight on the development of narrative coherence as well as parental sensitivity and its interconnectedness across the transition to parenthood and in the first years of the child's life. In Chapter 4, we therefore zoomed in on sensitive parenting, and examined maternal and paternal sensitivity over time from early infancy to toddlerhood.

### **Maternal and paternal sensitivity from infancy to toddlerhood**

The last two goals of this dissertation were to examine differences in parental sensitivity between mothers and fathers, and to study the development of maternal and paternal sensitivity over time, of which the results are presented in Chapter 2 and 4. In Chapter 2, we examined differences between mothers' and fathers' sensitive parenting to their four-month-old infant in four different observational contexts, and found that mothers and fathers were equally sensitive across all contexts. In Chapter 3, we examined differences between maternal and paternal sensitivity in relation to narrative coherence, and found that only paternal sensitivity was related to paternal narrative coherence in a free play context only. In Chapter 4, instead of focusing on one time point, we examined trajectories of parental sensitivity in mothers and fathers across three time points from infancy to toddlerhood. Parental sensitivity was observed in the same context over time (i.e., free play, as this was a naturalistic observational context that could quite easily be used similarly over time), using Ainsworth's conceptualization of sensitivity. Furthermore, the data set consisted of not only Dutch parents, but also parents from the UK and the USA. Again, we found no overall difference between mothers' and fathers' sensitivity. Interestingly, we did find differences in their trajectories over time: parental sensitivity increased from infancy to toddlerhood in both parents, indicating that both parents become better in responding in a sensitive matter to the child's signals over time, but this increase was slightly steeper for mothers than for fathers.



The results of this dissertation on (overall) differences between mothers and fathers sensitive parenting are interesting, as they are in contrast to the popular belief of not just the general public but also some biologists that mothers are naturally 'better' parents than fathers (Gustafsson et al., 2013). At least with regard to sensitive parenting in the first two years of children's lives, this is not true: just four months after birth, mothers' and fathers' sensitivity is equal, and the same is true for the overall two-year-period. Their trajectories during this time frame do differ though, with a slightly steeper increase in mothers compared to fathers, which could perhaps be explained by the difference in the amount of time that mothers and fathers generally spend with their child. Whereas fathers usually go back to work quite quickly after the birth of their child, mothers regularly have a longer period of pregnancy leave and often work less hours after they have become parents than before their pregnancy so they can take care of their child (e.g., CBS, 2019). Even though spending more time with children does not guarantee higher levels of sensitivity, it can help in getting to understand children's unique wishes, needs, and signals, which is necessary to respond in a sensitive manner to their signals. As previous research on differences in mothers' and fathers' sensitive parenting using different time points in infancy as well as toddlerhood was mixed, partly due to the use of different contexts and conceptualizations of sensitivity, this dissertation adds to the existing literature by showing the bigger picture of mothers' and fathers' trajectories of sensitive parenting in those first two foundational years of their child's life.

### **Strengths, limitations, and implications for future directions**

This dissertation has a number of strengths, such as its longitudinal multi-method design, the inclusion of fathers, and the multilevel modeling approach to account for the dyadic nature of data. However, a few limitations of this dissertation should be taken into account. First, all samples of the studies presented in this dissertation consisted of parents from so-called WEIRD countries: Western, Educated, Industrialized, Rich, and Democratic (Henrich et al., 2010). Participating parents were relatively highly educated, and their age at the birth of their child as well as their family SES was relatively high, which fits with findings that higher education is related to delayed childbearing as well as a higher income (Eriksson et al., 2013). The specific background characteristics thus limit the generalizability of our results, which also means that this dissertation is unable to contribute to the deeper understanding of the possible universality of parental sensitivity which has been highly debated (e.g., Mesman et al., 2018; Keller et al., 2018). Future research should investigate whether the results presented in this dissertation also apply for more diverse groups of parents, in order to understand to what extent Ainsworth's concept of sensitivity is a universally valid construct.

Second, this dissertation describes the first study on pre- to postnatal narrative coherence and its relation with maternal and paternal sensitivity, but the time period studied was relatively short which possibly affected the results. As narrative coherence across the transition to parenthood is a relatively new research topic, the field would benefit from longitudinal research on the development of narrative coherence across this transition into the first few years of the child's life, as well as on its theorized relation with parental

sensitivity to explore whether and when this possible relation starts to develop, in order to gain more insight in the specific mechanisms of the intergenerational transmission of attachment.

Third, this dissertation focused on parenting constructs only, whereas parenting is not a one-way street. This is also a central aspect of family systems theory: family dynamics do not consist of linear cause-and-effect interactions with a clear starting point (e.g., parenting behavior) and an end (e.g., child outcome; Kelliedy & Lyons, 2019). Parents and children mutually influence each other, also called circular causality, and this creates an interactional pattern with no clear start or end. This raises the question of whether parenting constructs should be researched in isolation, without taking into account child constructs. When we take a closer look at the development of the sensitivity construct and coding scheme by Ainsworth, however, a major aspect that is often unrecognized is the emphasis on the dyadic nature (Bretherton, 2013). As mentioned by Bretherton (2013), Ainsworth does not interpret maternal and infant behavior as unidirectional cause-and-effect relations, but clearly describes what in family systems theory is called circular causality:

Whatever role may be played by the baby's constitutional characteristics, it seems quite clear that the mother's contribution to the interaction and the baby's contributions are caught up in an interacting spiral. It is because of these spiral effects – some vicious and some virtuous – that the variables are so confounded that it is not possible to distinguish independent from dependent variables. (Ainsworth & Bell, 1969, p. 160)

Ainsworth therefore does not consider sensitivity in absolute terms, isolated from the child's behaviors, which is reflected in her definition of maternal sensitivity, and also described in the following quote (Bretherton, 2013):

[It] does not consider maternal behavior in any absolute terms. The most important aspect of it, I repeat, was the mother's ability to gear her interactions to infant behavioral cues, so that despite inevitable constitutional differences among infants who later became securely attached, all had had experiences of a good "mesh." (Ainsworth, 1977, p. 6)

Thus, even though it would of course be interesting to dive more into the interconnectedness of parental sensitivity and child behaviors in future research, Ainsworth's sensitivity used in this dissertation is a parenting construct already with a dyadic or relational character.

Besides suggestions for future research, this dissertation also has practical implications. First, psychologists, social workers, and other professionals working with families need to be aware that context plays a role when they evaluate parents' parenting skills: parents are able to demonstrate their full capacities best in more naturalistic contexts (e.g., in their own home during regular activities), whereas they are more challenged in less naturalistic contexts (e.g., in the office or lab). Thus, context matters, and both ends of parents' capability spectrum could be valuable to examine when an evaluation of parenting skills is necessary; whereas the more naturalistic contexts can reflect daily life and the best of parents' capabilities, the less naturalistic contexts are useful to examine parents' behaviors

when they feel challenged during situations they are less familiar or comfortable with. Second, whereas prenatal check-ups are vital for parents' and babies' health and wellbeing, and could play a role in the prevention of family problems after birth, it is important to also understand that ideas and feelings expecting parents have of the near future with their child may not necessarily be representative of their postnatal representations and their actual parenting, at least on the short term. Lastly, as there is still a widespread belief that mothers are 'better' parents than fathers, this dissertation shows that we should not underestimate fathers at least with regard to their sensitive parenting skills: in the first foundational years of their child's life, fathers' skills are overall equal to mothers' sensitive parenting skills.

## Conclusion

All in all, this dissertation provides a deeper understanding of the development of sensitive parenting from infancy to toddlerhood in primiparous mothers and fathers, through the use of international, longitudinal data and a multi-method and multi-context design. Taking all findings together, we highly encourage both research and practice to take context into account when studying and evaluating parenting skills. Additionally, we made a first step towards more clarity on narrative coherence across the transition to parenthood and its relation with parental sensitivity, and we recommend to examine this topic more longitudinally to gain more insight in this part of the framework of intergenerational transmission of attachment. Furthermore, we conclude that, whereas trajectories of sensitivity differ between mothers and fathers from infancy to toddlerhood, overall they are equally sensitive. Lastly, we conclude that parental sensitivity increases from infancy to toddlerhood in both mothers and fathers: in those first foundational years of children's lives, parents do become better in sensitive parenting.

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