

Predicting Antecedents of Mother-Infant and Father-Infant Attachment: A Comparison between Categorical and Continuous Variables

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Introduction

Examination of the various factors that may influence infant-mother attachment relationships has been a focus of considerable research. Less research has focused on the antecedents of infant-father attachment (see Belsky, 1996; Owen & Cox, 1997; van IJzendoorn & de Wolff, 1997). In addition, different methodologies have been used to examine the antecedents of attachment. For example, infants can be grouped as either **secure or insecure** and variables can be identified to discriminate between the two groups. In contrast, attachment security can be treated on a continuum using two factors: **Proximity-Seeking Vs. Avoidant Strategies** and **Angry and Resistant Strategies** (Fraley & Spieker, 2003). The purpose of this poster is to identify antecedents for mother-infant and father-infant attachment and compare the results of the two methods used to predict mother- and father-infant attachment security.

Questions

1. What are the predictors of mother-infant and father-infant attachment security?
2. Are the patterns of results similar or different when attachment security is treated as a categorical variable rather than continuous variables?

Method

Participants

70 mothers, 63 fathers, and their infants. Mean age 29.16 ($SD = 4.63$) for mothers, and 31.72 ($SD = 6.80$) for fathers before birth of target child.

81% European-American, predominantly middle-class and well-educated.

Measures

Data collected at three time points:

- A) Pre-birth (3rd trimester)
- B) 3.5 months post-birth
- C) 12 and 13 months post-birth

Infant Attachment Security:

Strange Situation Procedure (Ainsworth et al., 1978); measured at 12 and 13 months.

- 1) Categorical (*secure vs. insecure*)
- 2) Continuous (2 dimensions)
Proximity-Seeking vs. Avoidant Strategies = proximity seeking (5 & 8) + contact maintenance (5 & 8) – avoidance (5 & 8)
Angry and Resistant Strategies = resistance (5 & 8) + disorganization total

Infant Difficult Temperament:

Perceived by mothers and fathers (ICQ; Bates et al., 1979); measured at 3.5 months.

Negative Marital Quality:

- a) Pre-birth negative marital quality
 - b) 3.5-month post-birth negative marital quality
- Composites based on *Dyadic Adjustment Scale* (DAS; Spanier, 1976) and *Observed Marital Interaction* (Frosch et al., 1998); both measured pre-birth and at 3.5 months.

Beliefs about Paternal Roles:

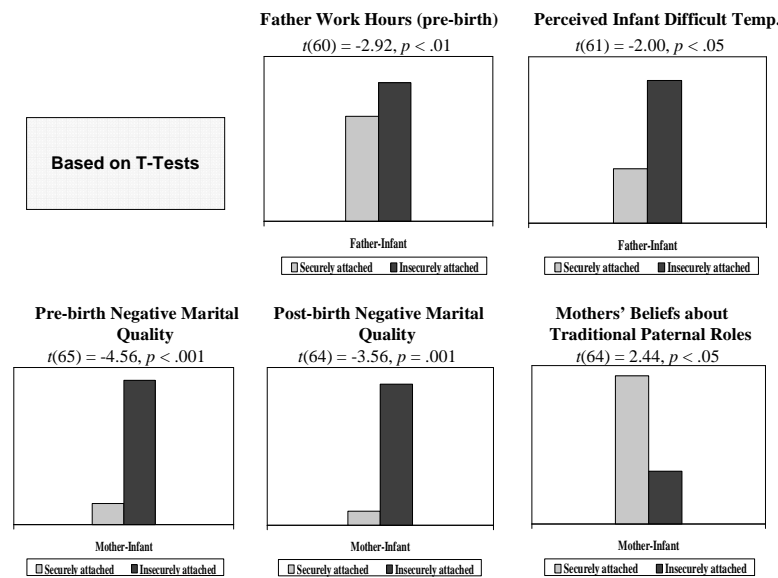
Mothers: beliefs about 1) *traditional* paternal roles, and 2) *nontraditional* paternal roles

Fathers: beliefs about 1) *traditional* paternal roles, and 2) *nontraditional* paternal roles (Modified ROFQ; Palkovitz, 1984); measured pre-birth.

Demographic Variables:

Age, education, family income, and work hours; measured pre-birth.

Result 1 : Attachment Security as a Categorical Variable



Result 2: Attachment Security as Continuous Variables

Correlational Analyses	Proximity-Seeking Vs. Avoidant Strategies to Mothers	Angry and Resistant Strategies to Mothers	Proximity-Seeking Vs. Avoidant Strategies to Fathers	Angry and Resistant Strategies to Fathers
	Mother work hours (pre-birth)	-.03	.09	.30*
Father work hours (pre-birth)	.20†	.21†	-.01	.32*
Perceived infant difficult temperament at 3.5 months	-.09	.15	-.24†	.12
Pre-birth negative marital quality	-.08	.11	-.25*	-.03
Post-birth negative marital quality	-.22†	.03	-.19	-.06
Mothers' beliefs about traditional paternal roles	-.07	-.23†	-.03	.03
Fathers' beliefs about traditional paternal roles	-.19	-.10	-.13	.09
Mothers' beliefs about nontraditional paternal roles	-.20†	-.22†	.02	-.00
Fathers' beliefs about nontraditional paternal roles	-.12	-.30*	.04	-.27*

N ranged from 59 to 70 due to missing data. † $p < .10$, * $p < .05$, ** $p < .01$.

Summary

1. Different antecedents are associated with attachment to mother and father.
2. Examining attachment security as a categorical variable vs. continuous variables yields slightly different patterns of results. Moreover, examining attachment security as continuous variables allows us to identify predictors associated with specific aspects of attachment security.
 - Mothers' work hours (pre-birth) were related to more **Proximity-Seeking Vs. Avoidant and Angry and Resistant Strategies to fathers**.
 - Mothers who worked more pre-birth had infants who used more *Proximity-Seeking vs. Avoidant* and *Angry and Resistant Strategies* to fathers.
 - Fathers' work hours (pre-birth) were related to **categorical father-infant attachment** and infants' **Angry and Resistant Strategies to fathers**.
 - Infants who were insecurely attached to fathers had fathers who worked more pre-birth. Fathers who worked more pre-birth had infants who used more *Angry and Resistant Strategies* to them.
 - Infants who were securely attached to fathers were perceived by their parents as having less difficult temperament at 3.5 months.
- Pre- and post-birth negative marital quality were related to **categorical mother-infant attachment**, but only pre-birth negative marital quality was negatively related to **Proximity-Seeking Vs. Avoidant Strategies to fathers**.
 - Infants who were securely attached to mothers had parents who had lower negative marital quality pre- and post-birth. Infants were less likely to use *Proximity-Seeking Vs. Avoidant Strategies* to fathers when parents had higher negative marital quality pre-birth.
- Fathers' beliefs about nontraditional paternal roles were negatively related to **Angry and Resistant Strategies to both mothers and fathers**.
 - Infants were less likely to use *Angry and Resistant Strategies* to both mothers and fathers if fathers held more nontraditional beliefs about paternal roles.
- Mothers' beliefs about traditional paternal roles were related to **categorical mother-infant attachment**.
 - Infants who were securely attached to mothers had mothers who held more traditional beliefs about paternal roles.