

A comparison of father-infant interaction between primary and non-primary care giving fathers.

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Abstract

Background

This study examined the sociodemographic characteristics and attitudes of primary care giving fathers and non-primary care giving fathers and the quality of their interaction with their infants.

Method

Two groups of fathers of 11.9 month old infants were compared - 25 primary care giving fathers (20 hours per week or more of sole infant care) and 75 non-primary care giving fathers - with regard to sociodemographic characteristics, attitudinal differences and father-infant interaction during play and mealtimes. The quality of father-child interaction in relation to the total number of hours of primary care provided by fathers was also examined.

Results

Primary care giving fathers had lower occupational status and earned a smaller proportion of the family income but did not differ in educational level or attitudes compared with non primary care giving fathers. There were no differences between the partners of the two groups of fathers on any variables, and their infants did not differ in temperament. Primary care giving fathers and their infants exhibited more positive emotional tone during play than non-primary care giving fathers, although fathers did not differ in responsivity. There were no differences between the groups during mealtimes. There was a positive association between total number of child care hours provided by all fathers and infant positive emotional tone.

Conclusions

Primary and non primary care giving fathers were similar in many respects, but primary care giving fathers and their infants were happier during play. This suggests a possible link between the involvement of fathers in the care of their children and their children's emotional state. The finding of a trend towards increased paternal happiness with increased hours of child care suggests that there may also be a gain for fathers who are more involved in the care of their infants. Further research is needed to determine whether these differences ultimately have an effect on children's development.

Keywords

Fathers, infants, father-infant interaction, responsivity, care-giving, parenting.

Introduction

Until relatively recently, interest and research into the roles fathers play in infant and child development has been a comparatively neglected area. This is in contrast to the extensive research into the importance of mothering - and the roles of mothers in the development of their infants and children - throughout the majority of the 20th century (Bowlby 1982; Lamb and Tamis-LeMonda 2004). As recently as the mid-1970s there was doubt as to whether fathers had any specific role in child development other than to 'pass on' maleness to their sons and act as protectors and providers for their families (Lamb 1981; Knibiehler 1995). The historical presence of mothers as primary carers may have contributed to a lack of consideration of the part fathers might play in the evolving lives of their infants and children (LaRossa 1997; Lewis and Lamb 2003). As fathers were not their children's carers, the presumption may have been that they had little or no part to play developmentally. However, in the last 20 years or so, there has been an increasing understanding and recognition that fathers - as well as mothers - have significant, complex and multidimensional functions in their children's development (Cabrera *et al.*, 2000; Ramchandani and McConachie 2005).

It has been established that infants form a distinct and important attachment to their fathers that differs from that with their mothers (Grossmann *et al.*, 1999; Grossmann *et al.*, 2002). The relevance to child development of father-attachment and sensitivity is demonstrated by evidence of a wide range of positive effects on emotional, intellectual, social and behavioural development

where fathers are present in their children's lives. There is an association between the quantity and quality of involvement, response, facilitation and empathy fathers have with their children and improved cognitive outcomes for those children (Amato and Rivera 1999). Additionally, father involvement in childhood has been shown to protect against adult psychological distress (Flouri and Buchanan 2003). The absence of a paternal figure has associations with reduced academic achievement and increased conduct disorder in children (Piffner *et al.*, 2001). The demonstration of a detrimental effect of paternal depression on children's early behaviour and emotional developmental is further evidence of the importance of the paternal role (Ramchandani *et al.*, 2005).

In spite of the increasing interest and study of fathers, a number of areas of paternal involvement have not been explored. Fathers who provide a significant proportion of primary care to their infants and children have not been extensively described or studied (Lamb and Tamis-LeMonda 2004). Some of the reasons for this relate to Primary Care Giving (PCG) fathers being relatively uncommon, difficulties in recruiting fathers into research studies and an increasing proportion of fathers who are absent from the lives of their children (Cabrera *et al.*, 2000). A study of PCG fathers could facilitate a better understanding of the contribution of the father-infant relationship.

This paper focuses on whether there are differences between fathers who primarily care for their infants (PCGs) and Non-Primary Care Giving (NPCG) fathers who do not. Three research questions are considered:

1. Are there sociodemographic and attitudinal differences and/or similarities between PCG and NPCG fathers?
2. Do PCG and NPCG fathers differ in their interaction with their infants?
3. Does the quality of the father-child interaction relate to the number of hours of primary care provided by fathers?

Method

1. Sample

The sample for this study was drawn from the Families, Children and Child Care study (Sylva *et al.*, 2007). Sampling centred on ante-natal clinics held in two large hospitals in England, one in North London and one in Oxfordshire, each catering for a demographically diverse population. In addition a number of community post-natal clinics were visited to reach more of the disadvantaged mothers in these areas, and thus ensure that the social class distribution of the sample reflected the areas as closely as possible (Malmberg *et al.*, 2005).

Eligibility criteria for mothers were: aged 16 or over at the time of the child's birth, adequately fluent for interview in English, no specific plan to move in the next two years and no plans to have their child adopted or placed in the care of social services. Eligibility criteria for children were: singleton, birth weight 2500 grams or more, gestation of 37 weeks or more, no significant congenital abnormalities and no more than 48 hours in a Special Care Baby Unit.

Researchers approached 1862 mothers at recruitment (40.8% in hospitals and 59.2% in community clinics) of whom 217 (11.6%) were ineligible for the study. Out of the remaining 1645, 444 (27.0%) chose not to participate. The final FCCC sample consisted of 1201 children and the mothers and infants were initially seen at three months and then followed up at 10 months.

Information from the FCCC 10-month mother interview (N=1077) was used to select fathers. At this interview, mothers reported the types and quantity of child care used for their infant. This included fathers, grandparents, relatives, friends, childminders, nannies and nursery care. Mothers were asked specifically about paternal involvement with child care, such as how many times a week the father bathed, fed, changed nappies and took sole responsibility for the infant. There was a high correlation ($r_{xy} = .89$) between maternal reports of paternal child care hours and subsequent father-reported hours, as has been found previously (Manlove and Vernon-Feagans 2002). On the basis of the mothers and fathers reports, fathers who provided a substantial amount of care for their children were selected. A cut-off of 20 waking hours a week of sole child-care was used as the definition of PCG fathers.

Fathers were recruited to this study between May 1999 and July 2000.

Consecutive PCG fathers and one in every six NPCG fathers, recruited over this period were approached. Twenty-five out of 30 PCG, and 75 out of 86 NPCG fathers consented to take part and were included in the sample. The average age of fathers was 35.0 years (SD = 6.44). Assessment of father-child

interaction was undertaken when the child was between 11 and 13 months of age (mean 11.9 months, SD = .73). Of the 100 children, 52 were boys, 46 were firstborn, 41 second born and 12 third born, or later. Child gender and birth order did not vary according to PCG-status (child gender by PCG status $\chi^2 [1] = .16$; $p = .69$; child birth order by PCG status $\chi^2 [1] = 1.47$; $p = .22$).

2. Instruments and Measures

The PCG and NPCG fathers were compared on a number of demographic and individual factors. The FCCC three-month mother interview report of her partner was the source of maternal and paternal educational level, occupational status as indicated on the three-step socioeconomic class (SEC) scale where higher scores indicate higher socioeconomic class (Rose and O'Reilly 1998), fathers' income as a proportion of the family income at three and 10 months and an index of adverse living conditions. Stability of adverse living conditions (Sylva *et al.*, 2007) between three and 10 months was calculated as the average adversity score at three and 10 months.

Mothers' 10 month reports of father involvement in daily child care activities, measured as times/week the father bathed, fed, changed nappies and took sole responsibility for their infant, was used to describe paternal involvement in their child's care. The hours/week fathers took sole responsibility was also determined (see Table 1). Fathers also reported directly on decision-making in the couple regarding the child. This was based on five items rated on five point

scales (1 = father decides, 5 = mother decides), e.g. 'Who decides what clothes [infant] wears?' The internal consistency was $\alpha = .75$ (Cronbach's alpha).

Fathers completed the Dyadic Adjustment Scale (DAS) as a measure of marital adjustment (Spanier and Graham 1976; Carey *et al.*, 1993). This includes: marital consensus; marital satisfaction; cohesion and expression of affection. Fathers also completed the Parental Modernity Scale on attitudes toward child-rearing (Schaefer and Edgerton, 1985) which yields two sub-scales 'Traditionalism' ($\alpha = .88$) e.g. 'children should always obey their teacher' and 'Progressivism' ($\alpha = .85$) e.g. 'children learn best by doing things themselves rather than listening to others'.

Mothers completed subscales from the Bates Infant Characteristics Questionnaire (Bates *et al.*, 1979) to describe their child's temperament. The original scale was developed for six month olds; however, two of the subscales, fussy temperament and non-adaptable temperament, were included to assess the child at three months. Some wording was changed to fit an English context (e.g., using 'nappies' instead of 'diapers'). The internal consistencies were $\alpha = .80$ for fussiness and $\alpha = .62$ for non-adaptable temperament.

3. Direct observations of father-infant interactions

Videotaped observations were made of the fathers with their infants in two distinct situations. The first was a play session consisting of five 2.5 minute consecutive segments with standardised sequential introduction of toys provided

by the researcher: (1) free-play without toys (fathers were invited to play a clapping game or to chat or sing with their infant); (2) exploration of a textured, age-appropriate book; (3) a stacking-ring toy; (4) a wooden shape-sorting toy, and (5) a battery-operated musical toy (Stein, *et al.*, 1994; Stein, *et al.*, 1999). The toys were selected to be age-appropriate for exploratory play. The fathers were asked to play with their children as they normally would and considerable effort was made to help fathers feel relaxed in the video-situation. Fathers were reassured that this was not a test of ability on the part of their children. One NPCG father declined to be filmed.

The second situation videotaped was a mealtime. Fathers were requested to provide both finger-food and food of a sloppy consistency. Taping continued throughout the meal ending in the majority of cases after any clean up of the child by the father. Fifty two (54.2%) of the feeds were at least 14 minutes, nine were at least 12 minutes, nine were 10 minutes, six were eight minutes, 12 were six minutes, seven were four minutes and one was two minutes long.

4. Coding of videotapes

Videotapes were rated blind with respect to all father information, including PCG/NPCG status. A time-sampling method was used in which particular behaviours were rated on predefined scales for each two-and-a-half minute segment in the case of play; and every two minutes in the case of the mealtime. Two independent raters coded the videotaped father-infant interactions during each of the five 2.5 minute play segments. The mealtimes were of different

length. Previous research (Stein *et al.*, 1994) and piloting showed that most father-infant interaction occurred at the beginning and at the end of the meal. Consequently, the first five, and last two, segments were coded when the meal lasted longer than 14 minutes.

The areas assessed for coding were chosen on the basis of pilot work and on the extant literature. The observational tools were based on instruments developed by Skuse and colleagues (Hinde and Tamplin 1983; Lindberg *et al.*, 1990; Wolke *et al.*, 1990; Skuse *et al.*, 1992; Stein *et al.*, 1994). Four features of the father-infant play and mealtime interaction were coded from the videotapes: paternal sensitivity, facilitation, paternal mood and infant mood.

Paternal Sensitivity was measured using two observation scales. The first was based on the original global sensitivity scale of Ainsworth (1973) and the second on a scale of facilitation (Stein *et al.*, 1994, 1999). Sensitivity was rated on a five-point scale (1 = highly insensitive, 2 = moderately insensitive, 3 = inconsistently sensitive, 4 = sensitive, 5 = highly sensitive). The average inter-rater agreement between the coder of the father tapes and an external coder for ten randomly selected father tapes, was $\kappa = .84$ (weighted Kappa; Gwet, 2001). Facilitation was defined as an action by the father which assisted the child in an activity in which he/she was already engaged in or had signaled he/she wished to do (Stein *et al.*, 1994, 1999), (1 = no facilitations at all, 2 = a few attempts at facilitation, 3 = moderate/some inappropriate facilitation, 4 = much facilitation, 5 = skilled and appropriate facilitation most of the time), identifying the second

half of Ainsworth's (1973) original conceptualisation of maternal sensitivity, as a mother's ability to respond to the child's signals promptly and appropriately. The average inter-rater agreement for fathers was $\kappa = .78$. The global sensitivity and facilitation subscales were strongly intercorrelated ($r = .72$), and merged together to form one sensitivity construct in line with Ainsworth's original definition (Ainsworth, 1973; Lohaus *et al.*, 2001; Kochanska *et al.*, 2004). For structural validity of the measures see Malmberg *et al.* (2007).

Paternal Mood was rated on a five-point scale (1 = unhappy, angry, 2 = not unhappy/angry for whole time period, 3 = moderately positive/a mix of positive and negative or neutral, 4 = mostly happy and positive, 5 = very happy, animated). The inter-rater agreement was $\kappa = .86$.

Infant Mood was similarly rated on a five-point scale (1 = very unhappy, 2 = not very happy, 3 = moderately happy, a mix of happy/unhappy or neutral, 4 = happy but not overjoyed, 5 = very happy, animated). The inter-rater agreement was $\kappa = .88$.

5. Statistical analyses

PCG and NPCG fathers were compared using t-tests and Mann-Whitney tests.

For the analyses of the observations, the average score for each variable across the sessions was used as the dependent variable for play and mealtime respectively.

Results

1. Comparison of socio-demographic characteristics, involvement and attitudes to parenting of PCG and NPCG fathers.

PCG fathers earned a smaller proportion of the family income than NPCG fathers at three and 10 months ($p < .001$ and $p < .01$). NPCG family income was significantly greater than PCG family income at three months ($p < .001$). PCG fathers had a lower occupational status than NPCG fathers ($p < .001$) (see Table 1).

There were no differences between the occupational status of female partners of PCG and NPCG fathers and no significant differences between the PCG and NPCG group with regard to maternal and paternal age, educational level or adverse living conditions. In addition there were no differences between PCG and NPCG fathers in relation to paternal attitudes to child rearing (traditional/progressive). There were no significant differences between PCG and NPCG infants from mothers' reports of fussiness or unadaptable temperament of their infants at either three or 10 months.

PCG fathers were reported by their female partners to feed their children and change their children's nappies significantly more often than NPCG fathers ($p < .001$). Mothers also reported that PCG fathers took significantly more sole responsibility for their children than NPCG fathers ($p < .001$) confirming PCG status. When all fathers were asked to report on the decision-making process for their infants within the parental couple, PCG fathers reported that their

partners made fewer decisions about their child compared to NPCG fathers ($p < .001$) (see Table 1).

2. Comparison of the interaction of PCG and NPCG fathers with their infants and differences between the infants of PCG and NPCG fathers.

Group comparisons between PCG and NPCG fathers were conducted for the father-infant play and mealtime variables. During play, PCG fathers scored on average higher on emotional tone than NPCG fathers ($t = -2.18$, $df = 97$, $p < .05$) and infants of PCG fathers had an average higher score for mood than infants of NPCG fathers ($t = -2.58$, $df = 97$, $p < .01$) (see Table 2). The effect sizes (Cohen 1988) were moderately strong for fathers' emotional tone ($d = .51$) and infant mood ($d = .60$) during play. In contrast, during mealtimes, there were no significant differences between the groups on the mood of either father or infant. There were no significant differences between the groups in terms of fathers' sensitivity during either play or mealtimes. Father sensitivity did not vary by child's gender or birth order.

3. Total hours of care and infant emotional tone.

There was a significant positive relationship between the total number of hours of paternal sole child care and infant emotional tone during play ($r = .27$; $p < .01$) and a non-significant trend in the same direction between hours of paternal sole care and paternal emotional tone during play ($r = .17$; $p < .10$). There was no significant association between total number of paternal hours of care and any other interaction variables.

Discussion

The current study examined differences between PCG fathers who provided more than 20 waking hours per week of sole infant care, and NPCG fathers. The concordance between mothers' and fathers' reports of father involvement in the care of their infants, and the statistically significant differences between both mother and father reports of paternal care-giving of PCG and NPCG fathers, lends validity to the classification of fathers as PCG or NPCG. These results are consistent with previous reports of a high level of correspondence between maternal and paternal reports of input into child care (Manlove and Vernon-Feagans 2002). Three domains were examined: (1) sociodemographic and attitudinal characteristics, (2) father-infant interaction and (3) hours of sole paternal care.

1. Sociodemographic characteristics and attitudes to parenting

PCG fathers earned less and had a lower occupational status than NPCG fathers. The lower income of PCG fathers, compared to NPCG fathers, is likely to have occurred, at least in part, because of the increased time PCG fathers spent looking after their infants. PCG fathers had fewer hours available than NPCG fathers to be employed, spending at least 20 waking hours a week caring for their infants. Similarly it is likely that as a consequence of their reduced availability to work, PCG fathers may have been unable to obtain, or maintain, the same occupational status as NPCG fathers. There seems to be an evident need of studies in which the directionality of fathers' decision-making for becoming a primary care giver is investigated.

It is possible that some fathers took on more of a parenting role because their earning power was relatively low and so became PCG fathers as a consequence. This explanation, however, is made less plausible given the finding that PCG and NPCG fathers did not differ in terms of their educational attainment suggesting that lower or higher academic achievement is not a causative factor in determining PCG status. Additionally, there were no occupational or educational differences between the female partners of PCG and NPCG fathers suggesting that maternal employment and academic attainment was not a primary factor in determining PCG status. Similarly, there was no significant difference between PCG and NPCG fathers in terms of their families' adversity, suggesting that disadvantage was not a factor in influencing greater sole paternal care giving.

It might have been expected that PCG fathers would have more progressive attitudes to parenting than NPCG fathers, that they would be more 'modern' fathers choosing to care for their infants. Notions such as paternity leave and parental leave for fathers might aid progressive attitudes and are included in employment legislation in a number of countries (Russell and Hwang 2004). However, there were no significant differences in terms of attitudes to parenting between PCG and NPCG fathers on measures of progressivism and traditionalism to parenting. This finding suggests that differences between PCG and NPCG fathers are not consequent upon progressive attitudes to child care. This is in apparent contradiction to the findings of a study of 209 Israeli families (Gaunt 2005), so should be considered with caution, although this discrepancy

could have occurred because of cultural differences. There is recent evidence of significant changes in the roles of mothers and fathers in the United Kingdom with men and women 'converging' in the way they spend their time (Gershuny 2005).

It is noteworthy that there were no differences in the measures of child temperament between the children of PCG and NPCG fathers. It might have been hypothesised that PCG fathers cared for 'easier' infants, or alternatively were co-opted to be more involved if the child was proving difficult to manage, but there is no evidence for this.

2. PCG and NPCG fathers' interaction with their infants

PCG fathers and their children showed more positive emotional tone together during play than NPCG fathers and their children. This may be because PCG fathers had a better understanding of how to play with their infants as a result of the greater time they spent together. Whatever the underlying reasons, this increased happiness suggests that there was greater warmth between PCG fathers and their infants. It is perhaps not surprising that infants of 'happier' fathers were also found to be 'happier' (or vice versa). It has been suggested previously that fathers who provide sole child care for their infants have a wider repertoire of interaction patterns - as well as higher rates of interaction - than fathers who have less sole care of their infants (Pedersen *et al.*, 1987).

Although PCG fathers were happier during play, this did not translate into increased sensitivity (facilitation and global sensitivity) which suggests that the PCG/NPCG fathers were equally able to respond to their infants' signals and communication during interaction. No significant differences were found in terms of paternal responsiveness during either infant mealtimes or play.

The absence of a relationship between infant gender or birth order and fathers' PCG/NPCG status is concordant with a previous study (Pleck and Masciadrelli 2004) where it was suggested that child gender exerted less influence on paternal involvement than in previous decades, and that a child's gender is not a prime motivation for paternal involvement in child care.

3. Total hours of paternal care

The positive association between total paternal care-giving hours and infant happiness - for all fathers in the study - suggests a linear relationship. The more hours fathers spent with their infants, the happier the child was. The finding of a trend towards increased paternal happiness with increased hours of child care suggests that there may also be a gain for fathers who are more involved in the care of their infants. This is confirmed by the subjective experience of a number of fathers (West, *et al.*, submitted manuscript) who became PCG fathers in a relatively passive way, but came to place great value on the time they spent caring for their infants. The presence and direction of a causal relationship between infant and paternal 'happiness' cannot be established from this study.

4. Strengths and limitations of this study

The relatively large number of fathers (100) recruited from two separate locations in South East England across a broad socioeconomic range, with a good acceptance rate and the use of standardised and reliable measures of parental responsiveness, including direct interviews, adds validity to the findings. The most significant limitation was the enrollment of fathers via their partners which may have biased the sample; with mothers potentially underreporting fathers' hours of child care. This may have lead to the exclusion of some fathers. The length of the father-infant observations were relatively short, 12.5 minutes for the play, and variable in the case of mealtimes. This variability in mealtimes may in itself have affected potential differences in responsiveness and emotional tone.

This study did not attempt to determine the reasons for fathers becoming primary care givers for their infants. A qualitative examination of fathers' motivations is presented by West et al in a subsequent paper (West *et al.*, submitted manuscript). Further follow-up of such samples are required to know whether the various factors examined in this study influence longer-term child development.

Conclusions

This study set out to compare fathers who take a primary care giving role with their infants with fathers that do not. The findings demonstrate both similarities and differences between PCG and NPCG fathers. The men in the two groups

were similar demographically except that NPCG fathers had a lower income and occupational status compared to PCG fathers. During interaction there were no differences between the groups in terms of paternal sensitivity. However both PCG fathers and their infants were happier during play than NPCG fathers and their infants. This suggests one plausible mediating link between the involvement of fathers in the care of their children and subsequent developmental outcome, but replication and further research is needed to determine whether these differences ultimately have an effect on children's development.

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Table 1. Primary and non-primary care giving fathers: sociodemographic background, individual features, maternal and paternal reports of involvement with child.

<i>Demographic/feature</i>	PCG Fathers			NPCG Fathers			t-test	Significance (two tailed)	Cohen's d
	n	Mean	SD	n	Mean	SD			
Maternal age (years)	25	31.3	5.9	75	32.2	4.6	0.76	ns	0.18
Paternal age (years)	24	34.8	7.6	74	35.0	6.1	0.15	ns	0.04
Maternal Educational Level	25	4.0	1.7	75	4.7	1.2	1.91	ns	0.52
Paternal Educational Level	24	4.0	1.5	74	4.5	1.4	1.58	ns	0.37
Paternal Income proportion (3 months)	19	0.61	0.18	68	0.76	0.12	4.06	***	1.07
Paternal Income proportion (10 months)	23	0.59	0.22	72	0.75	0.11	3.50	**	1.15
Family income at 3 months (£)	25	23818	11727	74	40165	21279	4.80	***	0.85
Maternal occupational status	25	2.2	0.9	75	2.3	0.9	-0.72	ns	0.17
Paternal occupational status	24	1.8	0.9	74	2.6	0.8	-3.96	***	1.05
Family occupational status	25	2.3	0.9	75	2.7	0.6	-1.99	ns	0.55
Adverse living conditions (3-10 months)	25	0.15	0.18	74	0.12	0.18	-0.61	ns	0.14
Father Progressivism	17	3.4	1.3	60	4.0	0.8	1.78	ns	0.65
Father Traditionalism	17	2.9	0.7	59	2.7	0.7	-1.42	ns	0.40
<i>Mother report (10 Months)</i>							Mann Whitney		
Father bathes child (times/week)	23	1.6	1.8	73	2.3	2.4	-0.89	ns	
Father feeds child (times/week)	23	9.3	4.7	73	3.4	3.0	-5.20	***	
Father changes child's nappy (times/week)	23	17.6	8.0	73	7.7	6.0	-5.15	***	
Father takes sole responsibility (times/week)	23	4.4	1.7	73	2.3	3.0	-4.61	***	
Father takes sole responsibility (hours/week)	23	30.6	10.3	73	5.0	6.6	-6.89	***	
<i>Father report (10 months)</i>									
Decision making (1=fathers decide, 5=mothers decide)	25	3.4	0.7	75	4.3	0.4	-5.45	***	

Note: ns = not significant, * = p<.05, ** = p<.01, * = p<.001; the effect size was calculated as Cohen's d (Cohen 1988)**

Table 2. Primary and non-primary care giving fathers and their infants during play and mealtime: descriptive measures.

	PCG-Fathers (n = 24 to 25)		NPCG-Fathers (n = 74)		t-test	p	Cohen's d
	M	SD	M	SD			
<i>Play</i>							
Responsiveness	3.64	0.48	3.63	0.54	0.11	ns	0.02
Parent emotional tone	3.68	0.34	3.51	0.33	2.18	*	0.51
Infant emotional tone	3.59	0.33	3.37	0.37	2.58	*	0.60
<i>Mealtime</i>							
Responsiveness	3.61	0.47	3.60	0.58	0.11	ns	0.03
Parent emotional tone	3.52	0.41	3.42	0.35	1.22	ns	0.29
Infant emotional tone	3.26	0.51	3.20	0.37	0.67	ns	0.16

Note: ns = not significant, * = p<.05, ** = p<.01, * = p<.001; the effect size was calculated as Cohen's d (Cohen 1988)**