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ABSTRACT

A supportive father as well as a supportive mother may foster offspring's healthy development. But what the behavior of a supportive parent looks like may in part depend upon whether the parent is a mother or a father. From the beginnings of empirical research on fathers, the father's role in traditional western families has been conceptualized as familiarizing the child with the demands of the world outside the family. Within the German Bielefeld Longitudinal Study, one aspect of paternal ability to fulfill this role has been assessed by examining fathers' sensitivity in challenging the child (age 24 months) during a play-situation. The fathers were asked to introduce a new play material to the child. Later, developmental sequelae on children's peer competencies and coping strategies, as assessed from interviews at age 16, were studied. Paternal sensitivity in challenging during toddlerhood, as assessed with macro- as well as microanalytic measures, turned out to be related to adolescents' peer integration, friendship quality, conflict resolution in close friendships, and hostility. Additionally, gender-specific relations emerged. Paternal sensitivity in challenging during toddlerhood showed associations with the use of active coping strategies for girls and the use of mental coping strategies for boys. Findings point to the possibility that challenging sensitively may be an important qualitative aspect of fathering during toddlerhood. (Contains 13 references.) (Author/SD)

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# LONGITUDINAL SEQUELAE OF FATHERS' SENSITIVITY WHILE CHALLENGING THE CHILD DURING JOINT PLAY

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## **Abstract**

From the beginnings of empirical father research father's role in traditional western families has been conceptualized as familiarizing the child with the demands of the world outside the family (Lamb, 1975).

Within the German Bielefeld Longitudinal Study (Grossmann, Grossmann, Spangler, Suess & Unzner, 1985) one aspect of paternal ability to fulfill this role has been assessed by examining fathers' sensitivity in challenging the child during a play-situation at 24 months. The fathers had to introduce a new play material to the child. Developmental sequelae on different aspects of children's peer competencies and coping strategies as assessed with interview respectively questionnaire at age 16 have been studied.

Paternal sensitivity in challenging during toddlerhood as assessed with macro- as well as microanalytic measures turned out to be related to adolescent's peer integration, friendship quality, conflict resolution in close friendships and hostility. Additionally gender-specific relations emerged. Paternal sensitivity in challenging during toddlerhood also showed associations with the usage of active coping strategies for girls and the usage of mental coping strategies for boys.

Findings point to the possibility that challenging sensitively may be an important qualitative aspect of fathering during toddlerhood. As suggested by Bowlby (1979) a supportive father as well as a supportive mother may foster offspring's healthy development. But how the behavior of a supportive parent looks like may in part depend upon whether it is a mother or a father.

## **Introduction**

Twenty years ago Lamb (1975, p.259) has argued that at least in western cultures "fathers may serve as a link between the child and outside world". They may do so by challenging children's knowledge and abilities, e.g. providing the child with exciting experiences and encouraging exploration. Father's ability to fulfill this role as well as longitudinal sequelae may in part depend on his sensitivity during such father-child encounters. Self-regulatory and social competencies may be fostered by fathers high on sensitivity in challenging, as has been reported by Parke (1990) for the context of physical child-father play. Also children with fathers high on sensitivity in challenging may learn better how to deal constructively with challenging situations and problems.

In the presented study paternal sensitivity in challenging was assessed using macro- as well as microanalytic measures in a play-situation during toddlerhood. Longitudinal outcomes were evaluated looking at children's social competence and coping strategies 14 years later in adolescence.

### **Questions:**

- 1) Do adolescents with fathers high on sensitivity in challenging show indices of positive peer relationships and constructive coping strategies?
- 2) Are there relations between more specific behavioral components of paternal challenging sensitivity and children's peer relationships and coping strategies in adolescence?

## **Subjects**

As part of the German Bielefeld Longitudinal Study (Grossmann, Grossmann, Spangler, Suess & Unzner, 1985) 47 father-child dyads were observed around the 2nd birthday. 44 of the children (23 boys, 21 girls) were seen again at age 16 (Zimmermann, 1994).

## **Methods**

### **Paternal sensitivity in challenging at 24 months**

Fathers participated in a dyadic play-situation with their toddlers. During a home visit they were given play material (play dough) that was new to the children and asked to play jointly for 10 minutes. The sessions were videotaped and analysed in two steps:

#### **1. Global analysis**

Paternal sensitivity in challenging was assessed using a global 7-point rating scale. A high score for the whole play session was given if the father seemed sensitive to the child's abilities, goals and emotions in the way he tried to teach the child and in the way he reacted to the child's signals and play initiatives. Also father's ability to set and follow through appropriate standards of general conduct was considered a criteria (Kassubek, 1996).

#### **2. Microanalysis**

In a second step of analyses paternal sensitivity in challenging was broken down into behavioral components. Therefore all attempts of the father and child to influence each other's behavior were selected by independent observers and coded for content (e.g. reprimand child, seek attention, initiate play) and partner's response (e.g. father ignoring the child). Father's attempts to influence the child were also coded for low or high intrusiveness. Quality of paternal scaffolding was rated on a 5-point scale looking at play episodes. Four variables, reflecting relative numbers of all influence attempts by father or child or all play episodes, were selected for the present analysis:

##### **\* Father reprimand child**

Relative number of reprimands by the father, e.g. don't throw the play dough away. Stop it!

##### **\* High responsiveness**

Relative number of responsive reactions of the father to child influence attempts.

**\* High intrusiveness**

Relative number of highly intrusive influence attempts by the father.

**\* Sensitive scaffolding**

Relative number of episodes where paternal scaffolding was coded as sensitive.

All four variables showed a highly significant relation to the global rating of sensitivity in challenging.

**Peer relationships at age 16**

As part of a larger assessment during a home visit the children were interviewed about their peer relationships when they were 16 years old (Zimmermann, 1994). Several 7-point-rating scales were constructed to tap different aspects of the juvenils' peer relations. Peer integration was coded from "not integrated" to "highly integrated" based on adolescents' statements about the extension of their peer network and quality of joint activities. The integration of trust and mutual emotional commitment into the description of close same-sex friendships was used as criterion for coding friendship quality. A rating scale for cross-sexual-relationships evaluated the amount and quality of reported cross-sex contact. A high score was given if a personal relationship with regular contacts was described. How adolescents described conflict resolution in close friendships was assessed using a fourth rating scale. Criteria included clarity of communicating the own point of view, balance between assertiveness and cooperation, ability to stay problem-focused during conflict and perceived relationship stability despite of conflict. Two additional rating scales appraised juvenils' hostility and social anxiety in contact with peers (Merkl, 1995).

**Coping with everyday problems at age 16**

A coping questionnaire for adolescents from Seiffge-Krenke (1989) was used to assess the usage of four different strategies of coping with everyday problems: Active coping including the utilisation of social resources; mental coping (e.g. thinking about possible solutions for a problem); problem avoidance and emotional self-appeasment. All scores represent relative numbers of coping strategies (Zimmermann, 1994; Zimmermann & Grossmann, 1997).

## Results

1. Adolescents, whose fathers showed high scores of sensitivity in challenging during toddlerhood, reported multiple signs of high peer competence.

Observed paternal sensitivity in challenging as indicated by makro- as well as microanalytic measures was systematically related to several aspects of adolescent's peer competence as reported during an interview (see tables 1 and 2).

Table 1: Father's sensitivity in challenging (global rating) his toddler at 24 months as related to several aspects of children's peer competence at age 16.

Adolescent's peer competence (Interview, rating)	Father's sensitivity in challenging at 24 months (Observation, global rating)	
	Peer integration	$r = .20$
Friendship quality	$r = .30$	*
Cross-sexual relationships		ns
Conflict resolution	$r = .30$	*
Hostility	$r = .32$	*
Social Anxiety		ns

(Spearman-Brown, \*  $p \leq .05$ , +  $p \leq .10$ , onetailed)

Table 2: Behavioral components of paternal challenging sensitivity as related to several aspects of children's peer competence at age 16.

Adolescent's peer competence (Interview, ratings)	Paternal play behavior at 24 months			
	Reprimand child	High responsiveness	High intrusiveness	Sensitive scaffolding
Peer integration		$r = .35$ **	$r = .39$ **	
Friendship quality	$r = -.41$ **	$r = .31$ *	$r = .47$ **	$r = .26$ *
Cross-sexual relationships				
Conflict resolution	$r = .24$ +	$r = .29$ *	$r = .35$ *	$r = .24$ +
Hostility		$r = .31$ *	$r = .47$ **	$r = .21$ +
Social anxiety				

(Spearman-Brown, \*\*  $p \leq .01$ , \*  $p \leq .05$ , +  $p \leq .10$ , onetailed)

There was no gender difference regarding responsiveness, intrusiveness and sensitive scaffolding. Reprimanding the child took a greater proportion of all influence attempts for father's of boys than father's of girls ( $t(28)=2.99$ ,  $p=.004$ ). In table 3 longitudinal sequelae of father's play behavior are listed separately for girls and boys ( $n=21/23$ ).

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insert table 3  
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2. Observed paternal sensitivity in challenging during toddlerhood was related to adolescents' coping strategies reported 14 years later. Again gender-specific connections emerged.

Adolescents with fathers high on challenging sensitivity during toddlerhood indicated more mental coping and less emotional appeasement ( $r=.32$  \*;  $r=-.27$  \*). The association of paternal sensitivity in challenging with adolescent mental coping was much stronger for boys than girls ( $r=.52$  vs.  $r=.21$ ). For girls only paternal challenging sensitivity was associated with a greater proportion of reported active coping and less report of problem avoidance ( $r=.40$  \*,  $r=-.36$  \*).

Table 4 reveals gender-specific relations between particular aspects of paternal play behavior and coping strategies as indicated by the children 14 years later.

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insert table 4  
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Table 3: Gender-specific associations between behavioral components of paternal challenging sensitivity during toddlerhood and several aspects of children's peer competencies at age 16.

	Paternal play behavior at 24 months								
	Reprimand child		High responsiveness		High intrusiveness		Sensitive scaffolding		
	boys	girls	boys	girls	boys	girls	boys	girls	
Adolescent's Peer Competence (Interview, ratings)									
Peer integration	-.39 *				-.28 +	-.48 *			.33 +
Friendship quality	-.44 *		.40 *	.30 +	-.52 **	-.33 +			.31 +
Cross-sexual relationships			.28 +	.41 *					
Conflict resolution	-.36 *		.31 +			-.42 *			.39 *
Hostility					.37 *	.61 **			-.61 **
Social anxiety		.30 +		-.48 *					-.35 +

(Spearman-Brown, \*\* p≤.01, \* p≤.05, + p≤.10, onetailed)

Table 4: Gender-specific associations between behavioral components of paternal challenging sensitivity during toddlerhood and children's coping strategies at age 16.

		Paternal play behavior at 24 months									
		Reprimand child		High responsiveness		High intrusiveness		Sensitive scaffolding			
		boys	girls	boys	girls	boys	girls	boys	girls		
<b>Adolescent's Coping Strategies</b>											
Active Coping		-.41 *	.35 +	-.31 +	.40 *	-.59 **					
Mental Coping											
Problem avoidance		.62 **	-.62 **			.41 *					
Emotional appeasement			.30 +								

(Pearson, \*\* p ≤ .01, \* p ≤ .05, + p ≤ .10, onetailed)



## Discussion

Even over the fairly long time-interval of 14 years paternal sensitivity in challenging proved to be related to multiple indices of children's peer competence and competent coping strategies. Therefore sensitivity in challenging may be an important qualitative aspect of fathering behavior. It also may be an integrative construct as indicated by high correlations between global ratings and the analyses of more specific paternal interaction variables (e.g. intrusiveness, quality of scaffolding during play episodes).

Paternal influences on children's social development have repeatedly been reported (see Parke, 1995; Franz, McClelland & Weinberger, 1991). These results are confirmed and expanded by the presented data. The outcomes of this study also point to the possibility that similar interactional experiences may contribute to the development of different competencies or incompetencies depending upon sex of the child. For example for girls but not boys indices of high paternal sensitivity in challenging were associated with more active coping strategies and less social anxiety. On the other hand children's ability to experience friendship as incorporating emotional closeness as well as the usage of mental coping strategies (e.g. thinking about different solutions for a problem) showed clearer relations to indices of paternal sensitivity in challenging for boys.

In attachment research sensitivity as defined by Ainsworth, Bell & Stayton (1974) has been used with mother-child dyads successfully for many years. This study outgrew of an attempt to adapt the concept of sensitivity to the more challenging play styles of fathers. The results as well as data presented by Grossmann (1997) underscore the necessity for ecological valid measures in studying child-father relationships. Bowlby (1979) suggested that supportive relationships with both parents enable a child to become a trusting and effectively coping individual. But how the relationship with a supportive parent looks like may be very different partly depending on whether it is with a mother or a father. Being able to challenge children's abilities in playful situations sensitively may be an important feature of a supportive father, who is thereby effectively serving as a link between child and outside world.

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