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ABSTRACT

This study examined the relations of parental beliefs, the parental child rearing experience, and task situation variables. Parent behavior in two types of task situation was observed, and beliefs of 24 pairs of parents were assessed by interview and questionnaire measures. Subsequently, mothers and fathers separately played with their child in free play and structured task situations, and parents' behavior was coded for affect and control. Fathers and mothers showed few group differences on beliefs or behavioral measures. Task situation type affected both mothers' and fathers' behaviors. Parental beliefs and demographic variables were identified as predictors for some measures of parental control, but not for parental affect. A list of 29 references and 10 tables are included. (DC)

Parents' beliefs and parental behavior: A multi-method study

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Abstract

34 spouse-pairs and their preschool-aged children participated in a study of the relations of parental beliefs, and experiential and situational variables, with observed parental behavior. Parents' beliefs were assessed through multiple interview and questionnaire measures. Subsequently, mothers and fathers separately played with their child in free-play and structured-task situations, with parents' behavior coded for affect and control/directiveness. Fathers and mothers showed few group differences on beliefs or behavioral measures, though husbands' and wives' scores were largely independent of each other. Moreover, there were gender differences in how beliefs and beliefs-behavior relations were organized. In addition, there were significant situation-type effects on both mothers' and fathers' behavior. Significant predictors, including both parental beliefs and demographic variables, were identified for some measures of parental control, but not for parental affect. The results are discussed in terms of a model of multiple influences on parental behavior.

Parents' beliefs and parental behavior: A multi-method study

Parents' beliefs about children and their development have been the focus of renewed interest in recent years (e.g., Goodnow & Collins, 1990; Sigel, Goodnow, & McGillicuddy-DeLisi, in press), though, to be sure, interest in parents' ideas concerning children and childrearing (including their values, expectations, attitudes, and preferred practices) has a considerable history in the child development literature. What, then, distinguishes the current round of attention to parental cognition?

Earlier efforts at assessment of parents' beliefs were typically motivated by a desire to link certain parental values, or conceptions of the child, with certain patterns of parental behavior--for example, authoritarian or permissive styles. Implicit was an assumption that one could identify optimal (and less-optimal) parent behavior by assessing their responses to what were essentially attitude-surveys. The results of these efforts were generally disappointing, however--the measures used were often not very good predictors of parents' actual behavior--(Holden & Edwards, 1989) and this is one reason why the topic lay somewhat dormant, until it was picked up again in the '80's, this time under some new guises--guises (we like to think) that treat the issues in some more-sophisticated ways.

One change is that parents' ideas have been conceptually recast as "schemas"--mental structures that affect how parents attend to, encode, respond to, and recall their experiences with children. Accordingly, measures of parental beliefs have become conceptually more diverse, encompassing, for example, their understanding of the process of development, and their attributions for particular child behaviors.

Another feature of this latest treatment is an approach that is more contextual and multidirectional (Murphey, in press). In this view, parental beliefs

are one important part of the context of parental behavior, and children's development, which are also influenced by the socio-cultural setting, by the particular context of the parent-child interaction, and by the child him- or herself. In such a model, beliefs influence, and are influenced by, parents' behavior and children's characteristics, in both direct and indirect ways.

The present study addressed a number of questions regarding the structure of parental beliefs, comparisons between mothers' and fathers' beliefs, and parental behavior. One purpose was to test the proposition that there are global, integrative dimensions of parents' beliefs--dimensions here termed "child-agency" and "parent-agency." These refer, on the one hand, to parents' views of the child as an active, autonomous constructor (or co-constructor) of his or her own development; and, on the other, to beliefs that parents themselves are effective in influencing developmental outcomes. Separately, each of these two belief-dimensions has been shown in the literature to be associated with desirable parental behavior and, in some cases, with positive child outcomes (Bugental & Shennum, 1984; Conger, McCarty, Yang, Lahey, & Kropp, 1984; Jennings & Connors, 1989; McGillicuddy-DeLisi, 1985; Pratt, Kerig, Cowan, & Cowan, 1988; Stevens, 1988; Tulkin & Cohler, 1973); however, they have seldom been studied together. In the present study multiple beliefs-measures were used, in order to test for convergence that would support the two hypothesized dimensions.

A second question was concerned with what differences there might be between fathers and mothers in their beliefs, in the organization of their beliefs, and in the relations between beliefs and behavior. The empirical evidence on this point is inconsistent: some studies report few mother-father differences, whereas others imply that in one or more of these areas, there are some sex-of-parent effects (Miller, 1988). The present study addresses this issue by analyzing data for mothers and fathers, both as groups, and within-couples.

Finally, we proposed to analyze the multivariate contributions to parental behavior of three kinds of factors: parental beliefs, parental experience, and situational context.

Some reasons for interest in parents' beliefs have already been given; a brief rationale for these other two factors is offered next. The role of parental experience has typically been examined by comparing mothers and fathers. Fathers generally have less direct childrearing experience, both before and after becoming parents, than do mothers, and this disparity may affect the kinds of beliefs about children they hold, as well as how those beliefs translate into behavior. Indeed, it has been suggested that when fathers spend greater amounts of time with their children, their parenting behavior becomes more similar to that of mothers (Lamb, 1981). Although mother-father differences in beliefs or behavior may exist for reasons other than their direct childrearing involvement, this is often proposed as one important mediator of such differences (McGillicuddy-DeLisi, 1985). On the other hand, a counter-argument goes, parental beliefs--and parental behavior, too--may be largely normatively determined by the "cultural code" we all assimilate, and thus not influenced very much by individual experience (Goodnow, 1985). Accordingly, in this study separate analyses of both gender and caretaking experience were made.

Other investigators have emphasized the importance of the particular context in which parental behavior occurs. This context includes: (1) the nature of the child's own behavior (Grusec & Kuczynski, 1980), (2) whether the setting is public or private (Holden, 1989), and (3) the kinds of task demands the situation presents to the parent (Skinner, 1985; Zussman, 1980). For instance, parents may adjust their behavior with their child if there is a focus on task completion, as opposed to an unstructured agenda. In the present study, we created two play

situations involving parents and their children, that were intended to evoke different kinds of task demands.

Method

In the present study, thirty-four spouse-pairs, each of whom had a first-born target child 3-5 years old, were interviewed and completed questionnaires in the their homes. This provided the beliefs-data, as well as background information, including parents' estimates of the amount of time they typically spent in meaningful interaction with the target child.

Measures of parental beliefs

Five beliefs measures were administered (see Table 1). Based on a review of the literature on parents' beliefs, two fundamental dimensions were hypothesized to characterize parents' thinking about child development. For each of the two constructs multiple measures were used, allowing both a test of their convergent validity, and their evaluation separately in predicting behavior.

As noted earlier, one dimension is here termed "child-agency." This has to do with the parent's belief that the child is an active, and (at least to some extent) autonomous contributor to his or her own development. Accordingly, the parent conceives the learning process as ideally more child-centered than adult-imposed. The other pole of this dimension could be described as "authoritarian," "controlling," or "restrictive."

The second dimension is termed "parent-agency." This concerns the parent's belief in his or her own influence or efficacy in affecting transient interactions with the child, as well as the more enduring outcomes of child development. Parents' beliefs at one end of this continuum would express a strong sense of internally-mediated control, and confidence in affecting outcomes; at the other would be beliefs expressing little internal control, and attributions to circumstances, "luck," or others, including the child.

Finally, a third aspect of parental beliefs--the timing of their expectations for development--was included in this study, as an indicator of parents' understanding of normative development. The empirical literature on parents' expectations is somewhat inconsistent: inappropriate expectations (typically those that are too "early") have frequently been linked with child maltreatment (Azar, Robinson, Hekimian, & Twentyman, 1984); however, in "normal" parent samples there is some evidence associating "early" parental expectations with children's subsequent competence, particularly in verbal and cognitive domains (Miller, 1988). Still, there are few studies relating such beliefs to parents' actual behavior; thus, a measure of parental expectations was incorporated in the present study.

Measures of parental behavior

Four to eight weeks following the home visits, parents (husbands and wives on separate occasions) came with the target child to our lab playroom. There they spent 10 minutes in unstructured play, followed by 10 minutes in which the parent was asked to help the child to complete a task--either putting together a series of jigsaw puzzles of graded difficulty, or constructing a house from Lego-type blocks. The type of task was randomly assigned to the first-appearing parent of each spouse-pair, with the other parent receiving the contrasting task. Thus, data were collected on parents' behavior in two situations, designed to test the effects of differing contextual demands: an unstructured, free-play setting; and a jointly assigned task.

These parent-child interactions were videotaped through 1-way mirror. Independent coders blind to parents' beliefs coded the tapes for three behavioral dimensions. The directness or indirectness of parents' control strategies, and their positive affect or "warmth," are dimensions previously identified as central in typologies of parenting styles (Maccoby & Martin, 1983). Here, control was assessed by coding parents' verbal directiveness, and also--in the task situation--

the level of their control over the child's completion of the task. Thus, for each mother and father, we obtained 5 behavioral scores, across two situations: in the no-task situation, speech directiveness and positive affect; and in the task situation, task assistance, speech directiveness, and positive affect.

Based on our conceptual model (Murphey, in press) we predicted that these parental behaviors would be associated with variables operating at multiple levels of influence: at the most distal level, the parent's sociocultural status; more proximally, the parent's direct childrearing experience (not gender per se); cognitive variables (parental beliefs); immediate situational demands; and characteristics of the child. Ideally, then, we would have liked to have included a socioeconomically more diverse sample, and to have made assessments of children as well as parents. However, due to constraints of time, our analyses focused primarily on the roles of parental experience, situational context, and parental beliefs.

Results and Discussion

Table 2 describes the sample's characteristics in terms of age, SES, and reported amount of time typically spent with the target child (TIME), for both fathers and mothers. There were significant group differences on both SES and TIME. Fathers held higher SES rankings, and reported spending fewer hours per week in direct interaction with their children, than did mothers. However, within couples, husbands' and wives' scores on these measures were not significantly correlated, indicating no single pattern of comparison.

Relations among beliefs-measures

The reader will recall that one aim of this research was to test for integrative parental belief-dimensions of "child-" and "parent-agency." Tables 3 and 4 show the correlations among beliefs, behaviors, and demographic measures for mothers and fathers, respectively. The data do not show the convergence

between conceptually-related measures of the two dimensions that would support the hypothesis. Specifically, there were no significant relations, for either mothers or fathers, between restrictive childrearing beliefs (TRAD) and a view of the child as an "active constructivist" (ACC), nor between "perceived control in caregiving" (PCC) and "parental locus of control" (PLC). Thus, it is more likely that each of these instruments measures conceptually distinct ideas about the roles of child and parent, rather than global dimensions of "child-" or "parent-agency." Alternatively, the results may simply reflect a certain amount of measurement error. Because of their statistical independence, all five belief measures for both fathers and mothers entered into subsequent analyses.

Comparisons between mothers and fathers

The second research question--concerning differences between mothers and fathers--was addressed through several types of analyses.

To test whether mothers and fathers, as groups, held different parental beliefs, their scores on each of the five beliefs measures were compared, using the t-test for paired observations. The data are shown in Table 5. On none of the measures was the difference between mothers and fathers significant.

Thus, fathers and mothers share fundamentally the same set of ideas about childrearing and development. This similarity is not likely a result of equivalent childrearing experience, because fathers, on average, report spending significantly fewer hours with their children than do mothers. Instead, the results suggest that such ideas are products of normative cultural socialization that is common to the experience of both.

In order to examine the similarity of beliefs within couples, correlations were calculated between husbands' and wives' scores on each of the measures (Table 6). On only two measures (traditionality/restrictiveness, and parental locus of control) were correlations significant, indicating moderate agreement. Thus,

despite their similarity at the group-level, the pattern of husbands' and wives' beliefs within couples showed considerable variability across the sample.

Interestingly, examination of the correlations among demographic, beliefs, and behavioral measures for mothers and fathers (Tables 3 and 4, respectively) shows some additional group differences in organization.

For mothers (Table 3), "perceived control over caregiving" (PCC) was significantly negatively correlated with the earliness of developmental expectations (EXPEC); mothers who were less confident of their abilities to affect interactions with children, held earlier expectations regarding child development. There was also a trend for mothers with a more "internal" parental locus of control (PLC) to attribute a less-active role to the child in the construction of development (ACC).

On the other hand, fathers (Table 4) who were more "internal" with respect to parenting (PLC) were significantly more likely than more-"external" fathers to see the child's role as "active" (ACC). There was a parallel relationship, approaching signficance, between ACC beliefs and father's perceived control (PCC).

For mothers (Table 3), levels of both speech directiveness and positive affect were significantly positively correlated across the no-task and task situations. For fathers (Table 4), positive affect, but not speech directiveness, was significantly correlated across situations. For fathers only, affect in the no-task situation was significantly negatively related to their speech directiveness in the subsequent task situation; that is, fathers who showed more positive affect in the free-play situation also were less directive in their speech during the task. For both mothers and fathers, speech directiveness and task assistance were not significantly correlated, implying that these were independent measures of parental control.

Did mothers and fathers differ in the quality of their behavior with the child? Table 7 reports comparisons (paired t-tests) on the five behavioral measures. The only area of significant difference was in parents' speech directiveness in the no-task situation; here fathers (M=.56) were more directive than mothers (M=.42). Thus, as there were few gender differences in parental beliefs, so were there few with respect to parental behavior. As in the case of beliefs, parents' behavior may be responsive to broad-based social norms, particularly in a semi-public setting. Within the constraints of the laboratory situation fathers and mothers, on average, likely were responding similarly to perceived normative prescriptions for their behavior, particularly in the task situation, where they were given more explicit instructions.

Interestingly, however, there were no significant correlations between fathers and mothers on any of the behavioral measures, indicating a good deal of within-couple variability in their patterns of response.

Relations between beliefs and behaviors

There were few significant relationships between parental beliefs and behavior. Mothers (Table 3) who were more traditional in their childrearing attitudes (TRAD) were significantly more directive in the no-task situation, but their directiveness during the task was unrelated to this measure. Mothers' scores on the other measure of "child-agency" beliefs (ACC) were unrelated to their behaviors. One measure of "parent-agency" beliefs (PLC, but not PCC) was associated with observed behavior: mothers who were more "internal" offered significantly more indirect kinds of help on the task (TASKASS). The timing of mothers' expectations for development (EXPEC) was unrelated to the coded behaviors, except that mothers holding earlier expectations were more likely to show greater positive affect in the task situation.

Fathers (Table 4) holding more traditional childrearing views (TRAD) were somewhat more likely to be directive in the no-task situation, and to be less directive in the task situation. Fathers' directiveness in both situations was significantly positively related to their parental locus of control (PLC): men who were more "internal" used more directive speech, whether in the free-play or task situations.

Effects of situation-type

In order to assess the influence of situation-type, the two measures (positive affect, and speech directiveness) that were common to both settings were analyzed. As shown in Table 8, the nature of the situation (task vs. no-task) significantly affected mothers' scores on both measures, and fathers' scores on one of the two. Both mothers and fathers used more directive speech in the task situation, and mothers also showed less positive affect. In contrast to the few significant sex-of-parent effects, then, situational context appears to have substantial influence on parents' behavior. It seems likely that the perceived demands associated with the task-assignment led parents to become more directive, and (for mothers) less positive.

Multivariate analyses of parental behavior

Because of the significant effect contributed by the situation, parents' behavior in each setting (no-task and task) was analyzed separately, using a multivariate model. Motivated by the theoretical perspective that parental behavior is influenced by multiple contextual variables, each of the five behavioral measures, for both fathers and mothers, were regressed on the following set of factors: a distal, summary-marker of sociocultural background (SES); a measure of proximal parental influence (TIME); a "mid-level," psychological set of variables (the 5 beliefs measures); and, where univariate analyses revealed significant effects, task type. Although there were no significant main effects of the child's

sex on any of the parent behavioral measures, possible interactions were assessed by including child sex (CHSEX) as an additional predictor variable.

A backward stepwise procedure was used, where least-significant variables were sequentially removed from the predictor set until the model reached a significance level of .05. Following this procedure, significant models including either beliefs or demographic indicators were obtained for 3 behavioral measures.

One was fathers' speech directiveness in the no-task situation, where the variables in the model accounted for nearly a third of the variance (Table 9A). The contribution of individual predictors was assessed in two ways: by entering each first into the equation, we can see the extent of variance it uniquely explains; by entering the variable last (i.e., after the others have been entered), the change in R^2 represents the additional variance it accounts for, after controlling for the effects of the others.

Here, both the TIME measure and 3 of the beliefs measures explained significant portions of the variance. However, the amount of time fathers reported spending with the target child was significant not on its own, but only after accounting for the effects of the other variables. Interestingly, it was fathers who reported spending more time with their children who were more directive; it may be that more experienced fathers are likely to be more assertive with their children, though the direction of effects here is ambiguous.

One "child-agency" belief (TRAD) and one "parent-agency" belief (PLC) contributed significantly to the variance: parents who held a more authoritarian view of development were more directive, as were those who had a more "internal" locus of control with respect to the parenting role. Interestingly, it was the beliefs measures only (taken together), that accounted for significant change in the variance, both uniquely and after controlling for the effects of the other variables.

A significant regression model was also obtained for mothers' speech directiveness, again in the no-task situation (Table 9B). Variables in the model accounted for over one quarter of the variance, but the significant contributors were the beliefs measures only. Specifically, this was one measure (TRAD) of the "child-agency" dimension: mothers holding a less child-centered view of development were more directive.

Finally, the third significant regression model obtained was for mothers' task assistance (Table 9C). In this case, virtually all the explained variance (10%) was accounted for by mothers' parental locus of control: mothers who reported greater self-efficacy (i.e., were more "internal") in parenting offered the child more indirect help on the task--attending and giving general-level suggestions rather than specific advice or physical assistance.

What of the behavior measures for which no significant regression models resulted? In three cases (fathers' task assistance, and mothers' directiveness and positive affect in the task situation) there were unintended significant effects due to the nature of the assigned task (puzzles vs. blocks), leaving little additional variance to be explained. However, even apart from these, none of the affect measures were significantly accounted for.

One explanation is that parents may more closely self-monitor their emotional tone, particularly when they are aware of being observed by other adults. Other research (Kochanska, Kuczinski, & Radke-Yarrow, 1989) has suggested that parents' affect is influenced more by the child's responses to their interventions, rather than by their beliefs. In any event, affect may be a dimension of parents' behavior that is complexly influenced; if so, it is likely to show a weaker relationship to cognitive mediators like parental beliefs, in contrast to a more specified dimension, like directiveness.

To conclude, the results of the present study make it fairly clear that parental behavior is multiply influenced: by setting, by parents' ideas about children, and (to some extent) by parental experience. The nature of the parenting task, in particular, was shown here to be a critical factor, but within settings, parents' beliefs accounted for significant variance, at least on measures of directiveness or control. There was some support for the idea that beliefs concerning both "child-agency" and "parent-agency" were importantly linked with behavior.

Interestingly the same measures ("traditionality/ restrictiveness of attitudes," and "parental locus of control") that were the strongest among the beliefs predictors of parents' behavior, were also those on which there was the significant (if modest) inter-spouse agreement. However, the relations between beliefs and behavior were somewhat different for mothers and fathers. Although in both groups of parents traditional/ restrictive childrearing attitudes were associated with directive behavior, perceived parental efficacy was--for fathers--linked with greater directiveness, whereas for mothers it was related to less directiveness. The discrepancy is intriguing, though its fuller interpretation depends on further research, if indeed the finding is robust.

Of course, there are limitations to the conclusions to be drawn here. I should stress that the findings presented here are correlational; implicit has been an assumption that beliefs influence behavior, but an equally-valid inference is that, for instance, parents who are more directive come to hold more parent-centered beliefs about development and attribute more control to themselves. Second, the sample was, by and large, well-educated and affluent; one would want to see this kind of research replicated with socio-economically diverse samples. Third, identifying more sensitive and reliable measures is another important

concern. The task of productively and reliably coding qualitative behavioral data also presents a continual challenge.

There are a number of important features of the larger picture of socialization that remain for further research to investigate. One is to begin to tie the literature on parental beliefs to some of the work on "internal working models," or social-cognitive schemas, concerning one's relationships with others. This calls for some different kinds of assessments of parents' beliefs, including something about their own families of origin. Other researchers in this field have recently developed measures that are designed to assess the quality of parents' thinking about the relationships between self and others (Main, Kaplan, & Cassidy, 1985; Newberger, 1980; Sameroff & Feil, 1985).

Another part of the picture to be developed concerns the child's role in these processes. Although I think that much of parental cognition and parental behavior is normatively influenced, there is clear evidence from other research that child characteristics such as gender, age, physical attractiveness, health-status, and temperament influence how parents respond. Some of the interesting questions here are how parents' beliefs may function either to maintain or strengthen parents' positive or negative perceptions of the child, and thus contribute to poorer- or better-functioning parent-child relationships.

While we have much still to learn about the processes and outcomes associated with parents' efforts, this kind of knowledge is likely to enhance our understanding, both of parents and of children.

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Table 1

Measures of parents' beliefs

Construct: "Child-Agency". Child is active, autonomous contributor to own development; learning process is ideally more child-centered than adult-directed.

Two measures: here termed ACC ("active construction of the child") (higher scores indicate a more "active" view of the child) (adapted from McGillicuddy-DeLisi, Polymeropoulos, Stinson, & Kraft, 1980), and TRAD ("traditionality of parental beliefs") (higher scores represent more traditional/restrictive beliefs) (from Schaefer & Edgerton, 1985)

Construct: "Parent-Agency". Parent has important influence in affecting short- and long-term child outcomes.

Two measures: here termed PCC ("perceived control over caregiving") (higher scores indicate greater perceived control) (adapted from Bugental & Shennum, 1984), and PLC ("parental locus of control") (higher scores indicate greater "internality") (adapted from Valecha & Ostrom, 1974)

Construct: Expectations concerning timing of child's acquisition of developmental competencies.

Measure: here termed EXPEC ("earliness of expectations") (higher scores indicate earlier expectations) (adapted from Hess, Kashiwagi, Azuma, Price, & Dickson, 1980)

Table 2

Background measures for mothers and fathers

Measure	Mothers	Fathers
Age(years)	33.8 (3.77)	34.9 (5.19)
SES[a]	39.1 (19.00)	54.5*** (13.63)
Time with child[b]	22.1 (9.59)	13.2*** (7.81)

Entries are means, followed by standard deviations

***$p \leq .001$, by paired t-test

[a]Hollingshead 4-factor index

[b]reported average hours per week

Table 3

Intercorrelations of measures: Mothers

	1	2	3
Demographic measures			
1 SES		-.04	-.08
2 CHSEX			-.08
3 TIME			
Beliefs measures			
4 ACC	.04	.28^{+}	-.05
5 TRAD	-.33*	.16	.00
6 PCC	-.09	-.19	-.03
7 PLC	.12	.21	.17
8 EXPEC	.10	-.07	.20
Behavior measures			
9 SPDIR-NT	-.22	-.16	.12
10 AFFECT-NT	.18	-.11	.04
11 SPDIR-T	-.24^{+}	-.02	.06
12 AFFECT-T	.25^{+}	-.13	.04
13 TASKASS	-.05	.11	-.10

(table continues)

	4	5	6	7	8
Beliefs measures					
4 ACC		.09	-.22^{+}	.27^{+}	.19
5 TRAD			-.04	.15	-.12
6 PCC				.02	-.40**
7 PLC					-.14
8 EXPEC					
Behavior measures					
9 SPDIR-NT	.13	.41**	-.03	-.20	-.07
10 AFFECT-NT	-.13	.00	-.01	-.05	.09
11 SPDIR-T	.18	.12	-.14	-.16	.12
12 AFFECT-T	.12	-.23	-.01	.09	.34*
13 TASKASS	.22	-.05	-.09	-.37*	-.13

(table continues)

	9	10	11	12	13
Behavior measures					
9 SPDIR-NT		-.01	.39*	-.21	.07
10 AFFECT-NT			-.04	.45**	-.12
11 SPDIR-T				.12	.13
12 AFFECT-T					-.20
13 TASKASS					

Note. SES = socio-economic status; CHSEX = child sex (boys = 1, girls = 2); TIME = reported time spent with child; ACC = active construction of the child; TRAD = traditionality of childrearing beliefs; PCC = perceived control in caregiving; PLC = parental locus of control; EXPEC = earliness of expectations; SPDIR-NT = speech directiveness in the no-task situation; AFFECT-NT = positive affect in the no-task situation; SPDIR-T = speech directiveness in the task situation; AFFECT-T = positive affect in the task situation; TASKASS = task assistance.

$^{+}p \leq .10$ $^{*}p \leq .05$ $^{**}p \leq .01$

Table 4

Intercorrelations of measures:Fathers

	1	2	3
Demographic measures			
1 SES		-.01	.10
2 CHSEX			-.16
3 TIME			
Beliefs Measures			
4 ACC	-.10	.33*	-.11
5 TRAD	-.26+	.08	-.26+
6 PCC	.12	-.08	.07
7 PLC	-.05	-.13	-.10
8 EXPEC	.10	.20	.14
Behavior measures			
9 SPDIR-NT	-.27+	-.17	.21
10 AFFECT-NT	.17	.11	-.16
11 SPDIR-T	.04	-.08	.08
12 AFFECT-T	.26+	.06	-.11
13 TASKASS	-.19	-.26+	.16

(table continues)

	4	5	6	7	8
Beliefs measures					
4 ACC		-.02	.26^{+}	.33*	.13
5 TRAD			.18	-.16	-.13
6 PCC				.09	.08
7 PLC					.00
8 EXPEC					
Behavior measures					
9 SPDIR-NT	.02	.29^{+}	-.02	.37*	-.02
10 AFFECT-NT	.11	.11	-.05	-.05	.05
11 SPDIR-T	-.14	-.26^{+}	.01	.30*	.00
12 AFFECT-T	.00	.09	-.21	-.03	-.02
13 TASKASS	-.03	.00	.20	-.04	-.11

(table continues)

	9	10	11	12	13
Behavior measures					
9 SPDIR-NT		.00	-.14	.12	.22
10 AFFECT-NT			-.37*	.72**	-.01
11 SPDIR-T				-.10	.03
12 AFFECT-T					-.02
13 TASKASS					

Note. SES= socio-economic status; CHSEX= child sex (boys=1, girls=2); TIME= reported time spent with child; ACC= active construction of the child; TRAD= traditionality of childrearing beliefs; PCC= perceived control in caregiving; PLC= parental locus of control; EXPEC=earliness of expectations; SPDIR-NT= speech directiveness in the no-task situation; AFFECT-NT= positive affect in the no-task situation; SPDIR-T= speech directiveness in the task situation; AFFECT-T= positive affect in the task situation; TASKASS= task assistance.

$^{+}p \leq .10$ $^{*}p \leq .05$ $^{**}p \leq .01$

Table 5

Mothers' and fathers' scores on beliefs measures.

Measure	Mothers	Fathers
ACC	2.24 (.13)	2.30 (.14)
TRAD	10.50 (8.92)	13.31 (15.91)
PCC	5.66 (.48)	5.45 (.47)
PLC	7.06 (5.42)	7.90 (4.73)
EXPEC	2.01 (.28)	2.07 (.27)

Note. Entries are means, followed by standard deviations. ACC= active construction of the child; TRAD= traditionality of childrearing beliefs; PCC= perceived control in caregiving; PLC= parental locus of control; EXPEC=earliness of expectations.

Table 6

Mother-father correlations across beliefs measures

Measure	r
ACC ("active constr. of the child")	NS
TRAD ("traditional/restrictive attitudes")	.37*
PLC ("parental locus of control")	.47**
PCC ("perc'd. control in caregiving")	NS
EXPEC ("earliness of expectations")	NS

*p<.05 **p<.01

Table 7

Mothers' and fathers' scores on behavior measures

Measure	Mothers	Fathers
Speech directiveness/ no-task	0.42 (.20)	0.56* (.29)
Pos. affect/ no-task	2.08 (.30)	1.99 (.37)
Speech directiveness/ task	0.82 (.45)	0.89 (.53)
Pos. affect/task	1.94 (.34)	1.93 (.30)
Task assistance	2.50 (.61)	2.35 (.51)

Note. Entries are means, followed by standard deviations.

*$p \leq .05$, by paired t-test

Table 8

Behavior measures in no-task and task situations

Measure	No-task	Task
Mothers' speech directiveness	0.42 (.20)	0.82*** (.45)
Mothers' pos. affect	2.07 (.30)	1.94* (.34)
Fathers' speech directiveness	0.56 (.29)	0.87* (.53)
Fathers' pos. affect	1.99 (.37)	1.93 (.31)

Note. Entries are means, followed by standard deviations.

***$p \leq .001$ *$p \leq .05$

Table 9A

Fathers' speech directiveness--No-task: Predictors in the significant multiple regression model

Predictor	entered first	entered last
SES	.04	.03
TIME	.01	.12*
CHSEX	.00	.02
PCC	.04	.00
PLC	.10*	.22**
TRAD	.05	.18**
PCC, PLC, TRAD	.20*	.26*

Note. Entries are changes in adjusted R^2 associated with each step. Total adjusted R^2= .29. SES= socio-economic status; CHSEX= child sex (boys=1, girls=2); TIME= reported time spent with child; TRAD= traditionality of childrearing beliefs; PCC= perceived control in caregiving; PLC= parental locus of control.

*p<.05 **p<.01

Table 9B

Mothers' speech directiveness--No-task: Predictors in the significant multiple regression model

Predictor	entered first	entered last
SES	.04	.01
TIME	.03	.00
CHSEX	.01	.08
PLC	.01	.03
TRAD	.19*	.18*
EXPEC	.01	.05
PLC, TRAD, EXPEC	.21*	.25*

Note. Entries are changes in adjusted R^2 associated with each step. Total adjusted R^2 = .21. SES= socio-economic status; CHSEX= child sex (boys=1, girls=2); TIME= reported time spent with child; TRAD= traditionality of childrearing beliefs; PLC= parental locus of control; EXPEC=earliness of expectations.

*$p < .05$

Table 9C

Mothers' task assistance: Predictors in the significant multiple regression model

Predictor	entered first	entered last
PLC	.10*	.10*

Note. Entries are changes in adjusted R^2 associated with each step.

PLC = parental locus of control.

*$p < .05$