DOCUMENT RESUME

ED 262 859 PS 015 064

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TITLE Correlates of Fathers' Participation in Family Work: A Technical Report. Working Paper No. 106.
INSTITUTION Wellesley Coll., Mass. Center for Research on Women.
SPONS AGENCY National Inst. of Mental Health (DHEW), Bethesda, Md.
PUB DATE 83
GRANT NIMH-MH-34225
NOTE 126p.; For related working paper, see PS 015 065
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Childhood Attitudes; *Child Rearing; Comparative Analysis; Demography; Elementary School Students; *Employed Women; *Fathers; Interviews; Kindergarten Children; *Mothers; *Parent Attitudes; Questionnaires; Self Esteem; Sex Role; Sex Stereotypes
IDENTIFIERS *Housework; Satisfaction

ABSTRACT

This study addresses the nature, extent, antecedents, and consequences of fathers' participation in child care and home chores. Data was collected from 160 families with children in kindergarten and fourth-grade classes. The sample was equally divided between the two grade levels and within each grade level by sex. Within each of the four groups thus formed, half the mothers were employed. Dimensions of fathers' participation selected for analysis included total, proportional, and solo interaction time; solo performance of specific child care tasks; and performance of traditionally feminine household chores. Antecedents thought to influence fathers' participation included mother's and father's employment status and pattern, demographics, family structure, parental attitudes, and parental socialization. Consequences of fathers' participation were conceptualized as involving role strain and well-being. Children's sex role-related beliefs and values were measured by assessing attitudes concerning children's activities, adult occupational roles, and adult family roles, and by addressing several dimensions within each domain. Results provide descriptive data on each of the five father participation variables, correlational data describing the relationship between antecedents and the five father participation variables, consequences of fathers' participation for parents, descriptive data concerning children's sex role attitudes, and consequences for children of fathers' participation. A four-page reference list and 28 tables are appended. (RH)

CORRELATES OF FATHERS' PARTICIPATION IN FAMILY WORK: A TECHNICAL REPORT

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1983

The research reported here was funded by the National Institute of Mental Health (MH 34225). Additional funds for analyses were provided by a grant to the first author from the Henry A. Murray Research Center of Radcliffe College.

WORKING PAPER
NO. 106

Wellesley College
Center for Research on Women
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Correlates of Fathers' Participation in Family Work

OVERVIEW

This paper is a technical report of the findings of the research project "Correlates of Fathers' Participation in Family Work."

The study addressed three major topics concerning fathers' participation in family work (child care and home chores):

1. The nature and extent of participation. What are the dimensions and patterns of fathers' participation?

2. The antecedents of participation. What determines the extent, form, and patterning of fathers' participation?

3. The consequences of participation. What are the effects on fathers and on mothers of the different forms of fathers' participation? What are the consequences with respect to their children's sex-role related attitudes and behavior?

In 1980-81, data were collected from 160 families from the kindergarten and fourth-grade rosters of a suburban school system in the greater Boston area. The sample was equally divided between the two grade levels and within each grade level by sex. Within each of the four groups thus formed, half the mothers were employed (see Figure 1). Fathers and mothers were interviewed in their homes by a two person (male and female) interview team; children were seen individually in two sessions in the school setting.

Issues relating to the father's role in the family are of growing

concern and reflect current re-examination of the male role, catalyzed in large part by the women's movement and by the increased labor force participation of married women with children. Many fathers both need and want to participate more directly in family work, yet the factors influencing their participation, and the effects of participation, are not yet well understood. Indeed, even the extent of their current participation is unclear. Fathers' family work has too often been treated as a unitary variable, as "one thing", rather than as consisting of many components--for example, merely being present in the home when the mother is out, interacting intensively with children, doing traditionally masculine household chores, doing traditionally feminine household chores.

The project described here examined many different components of fathers' participation and explored the antecedents and consequences of each.

BACKGROUND AND RATIONALE

It is useful to identify three phases in mainstream social science research and thinking about the father's role in family work. For many decades, until the 1960's, children and the care of children were seen as the domain of the mother (Nash, 1965; Parsons, 1955). In this first phase, the father's role in childcare was viewed as primarily indirect, through his function of providing financial support for the family and emotional support for the mother. There was little concern with changing this pattern, nor was change viewed as desirable.

Two major theoretical perspectives guided much of this early

research: (a) Freudian theory, which had always pointed to the father's importance in children's psychosexual development, particularly in the onset and resolution of the Oedipal conflict, with subsequent development of identification and conscience; and (b) Parsonian theory, which stressed the role of the father as the instrumental leader of the family and the bridge to the occupational world outside. According to Parsons, the father was therefore concerned more than the mother with sex-typing and sex-role differentiation of sons and daughters.

A substantial body of literature was generated by these views (Aberle & Naegele, 1952; Johnston, 1963; Sears, Rau, & Alpert, 1965); researchers focused on such issues as the relationship of children's sex-typing to such paternal variables as the father's own "masculinity" (either as directly measured or as perceived by the child) and his warmth and concern (e.g., Mussen & Rutherford, 1963).

A second phase of concern with the father's role in the family emerged in the 1960's and dominated the 1970's. Influenced by women's increased labor force participation, and by issues of equity associated with the growth of the women's movement, questions challenging the prior paradigm were raised and investigated (Hoffman, 1963; Kotelchuck, 1976; Lamb, 1976; Levine, 1976). How does the attachment between father and child compare to that between mother and child? Precisely what do fathers do with respect to child care? What determines the extent of their participation? What are the consequences? How can fathers become more involved?

Underlying the second phase was a somewhat romanticized view of the dawning of a "new era" of fathering in which fathers and children would

find their lives enhanced and mothers would be relieved of the overload associated with being both paid workers and primary caretakers of children. Recent careful reviews of the data emerging from this second phase reflect recognition that reality is more complicated. This recognition ushered in the third phase. New findings about fathers' participation (Hoffman, 1983; Levine, Lamb, & Pleck, 1983; Pleck, 1983; Radin & Russell, 1983), suggest that there are costs as well as benefits in new patterns of fathers' participation in family work, and these differ according to individual circumstances and attitudes; moreover they are not identical for fathers and for mothers. This study was designed to address these complexities and is an expansion of earlier work by the investigators.

In the context of a larger study of competence-related behaviors of preschool-age girls, the authors examined correlates of fathers' participation in specific child-care tasks (Baruch & Barnett, 1981). Fathers indicated the proportion of time each task was done by the father alone, by the father and mother jointly, and by the mother alone. The extent of independent, or "solo", performance of child-care tasks by the father was positively related to maternal employment and to non-traditional sex-role ideology of both fathers and mothers. Fathers' solo performance was also significantly and negatively related to daughters' stereotyping of peers and of parents. An unexpected finding was that fathers' solo participation was negatively related to mothers' overall satisfaction with their role pattern.

The present study builds on and expands this earlier work by collecting data from both fathers and mothers on: (a) a variety of forms of

participation; (b) potential antecedents; and (c) potential consequences. Moreover, families with children in two age groups (kindergarten and fourth grade) were selected in order to examine effects of fathers' participation on children's sex-role related attitudes and behavior both during and after attainment of gender constancy. According to cognitive developmental theory (Kohlberg, 1966), young children's cognitive processes control much of their sex-role related beliefs and attitudes. For example, when children first attain gender constancy (by age six or seven), that is, when they understand that they will always belong to their own sex, they consistently develop the belief that "my own sex is better," regardless of such variations in socialization experience as parental attitudes. Parental influences on beliefs and attitudes were thus expected to be more powerful among the fourth-grade children than among kindergarteners.

OVERVIEW OF CATEGORIES OF VARIABLES

The study reported here was a correlational one and thus does not permit the disentangling of cause and effect, i.e., conclusions about the direction of relationships found. However, since certain variables were conceptualized as antecedents of (influences on) fathers' participation patterns and others were treated as consequences, causal language is sometimes utilized.

Nature and Extent of Fathers' Participation

Major categories of fathers' participation distinguished in prior research (Goldberg, 1981; Pleck, 1983) include:

1. Household chores versus child care.

2. "Levels" of child care, e.g., merely being in the child's presence versus such interaction as playing a game, doing a joint project.

3. The absolute amount of time fathers spend in child care versus the amount of time proportional to that of the mother. Particularly with respect to the effects on the child, it may be the relative interaction time of parents that matters.

4. Independent or "solo" participation versus participation jointly

with the mother. From the child's perspective, when the father does child care or chores along with the mother, he may seem to be a helper; rather than the major responsible parent. From the parent's perspective, being in sole charge may be experienced differently, whether in terms of rewards or stress, from merely joining in an activity or chore (Russell, 1978).

The dimensions of fathers' participation that were selected for extensive analyses in this study are described in Table 1 and included

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Insert Table 1 About Here

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total interaction time, proportional interaction time, solo interaction time (mother not present), solo performance of specific child-care tasks, and performance of traditionally feminine household chores.

Antecedents of Fathers' Participation

Antecedents thought to influence fathers' participation in family work include the following categories:

1. Mother's and father's employment status and pattern. Although there is currently a debate about whether husbands of employed wives do significantly more family work, and about whether a particular husband takes on more family work when his wife becomes employed (Pleck, 1983; Hoffman, 1983), the paid work pattern of each parent has consistently been found to influence fathers' participation patterns. As Pleck (1983) points out, however, such variables as fathers' paid work hours and the flexibility of their hours do not fully "explain" their participation patterns, since mothers with similar work schedules do more family work.

2. Demographics. Other variables, such as parents' age, educational attainment, income, both total family income and that amount earned separately by each parent, and occupational prestige, may shape participation patterns. For example, fathers' income has been found to be negatively related to their participation (Blood & Wolfe, 1960; Ericksen, Yancey & Ericksen, 1979). Income is related to the relative power and resources of fathers and mothers, which in turn are thought to influence the allocation of family work (Mortimer, Hall & Hall, 1976). Findings about parents' age and participation are inconsistent (Pleck, 1983). Educational attainment may make parents more liberal toward sharing family work and may be associated with a mother's willingness to give up her special role and power in the family because of easier access to other opportunities and identities. If so, education should be more strongly associated with fathers' participation when the wife is employed.

3. Family structure. The target child's sex and grade were expected to affect father's participation. Additionally, the number and ages of children in a family constitute a set of demands on parents for child care and home chores. Child-care "load" has been found to predict fathers' participation, especially when mothers are employed (Pleck, 1983).

4. Parental attitudes. The sex-role ideology of both fathers and mothers has been found to influence fathers' participation patterns (Baruch & Barnett, 1981; Pleck, 1983). In the current study, The Attitude Toward Masculinity Scale (Brannon & Juni, 198-), was used to measure parents' attitude toward the male role. Each parent's beliefs about who should provide the economic support for the family was also assessed. In

addition, Bem's Sex Role Inventory (1974) was used to assess self-rated masculinity, femininity and androgyny, although it is unclear whether these aspects of sex typing are best seen as antecedents or as consequences of fathers' participation patterns (Keshet & Rosenthal, 1978).

5. Parental socialization. The patterns exemplified by the father's and mother's parents with respect to family work and paid work have been shown to influence fathers' participation patterns (Radin, 1981a). Two views have been advanced: (a) that fathers tend to imitate their own father's patterns, and (b) that they tend to compensate for them, that is, to do more the lower the level of their own father's involvement.

The employment statuses of the mother's and father's mother have also been found to be associated with increased participation by fathers (Radin, 1981b). Unfortunately, this aspect of parental socialization was not assessed.

Consequences of Fathers' Participation

Consequences for Parents. The consequences of fathers' participation were conceptualized as falling into two categories: the first consists of measures of current role strain; the second consists of measures of well-being. For each form of fathers' participation, these two sets of consequences were examined separately for fathers and mothers in families with employed and non-employed wives.

Role strain. One argument for increased participation by fathers in family work is that it will balance the total load on each parent so as to reduce the role strain of employed wives. It is acknowledged that men may thus experience increased role strain. Moreover, since wives are apparently conflicted about the desirability of their husbands doing more,

increased participation may increase wives' level of strain (Russell & Radin, 1983).

A variety of measures were used to assess role strain. Each parent was asked about: (a) attitude toward his or her own pattern; (b) attitude toward the spouse's pattern; and (c) perception of the spouse's attitude toward the partner's pattern. These role strain variables focused on perceptions about time and energy demands and conflicts and on the degree to which each parent desired changes in his/her pattern and that of the spouse. For example, we examined the relationship between fathers' total interaction time and such role strain consequences as the degree to which a father reported having too little time for his career, the degree to which his wife reported that her work interfered with family demands, and how satisfied each was with the partner's allocation of time between work and family.[1]

Well-being. Fathers' participation patterns were examined in relation to parents' evaluations of their roles as parents and as spouses as well as their assessments of overall life-satisfaction and self-esteem. Prior research suggests, in fact, that overall, it is the father's relationship to the child that benefits most from his increased participation, while the costs are most likely to be borne by the marital relationship (Lamb, 1984). The more time a father spends with children relative to the mother, the more positive his wife may be toward the marital relationship but the less positive he may be about her performance of the parent role. Three aspects of the marital relationship were distinguished: satisfaction, equity, and evaluation of the spouse as a parent.

Effects of participation on fathers' and mothers' self-esteem and overall life satisfaction, which have only rarely been studied, were also examined. Finally, although overall job satisfaction was unfortunately not assessed in this study, we did measure satisfaction with work schedules.

Consequences for children. Two contrasting views have been put forth concerning the potential effects of increased fathers' participation on children's sex-role related attitudes and behaviors. First, if fathers have typically differentiated between the sexes and promoted sex typing more than have mothers, increased exposure to fathers may increase traditional sex-role attitudes and behaviors in children. Second, since by their participation in family work, particularly in the context of maternal employment, highly involved fathers exemplify less sex-differentiated adult role behavior, their children should hold less traditional attitudes and behavior. According to Michael Lamb, "It is plausible to assume that if (the father) were to favor more egalitarian sex roles, these would be fostered, particularly if, by his own behavior, he showed that these were not incompatible with his own gender identification (1976, p. 25)." Lamb's argument suggests that a father's participation must be viewed in the context of his attitudes (and those of the mother) in order to understand the consequences for his children's sex-role related attitudes and behaviors.

In prior research, the relationship between parental sex-role attitudes and those of children has been found to be weak; parental sex-role-related behavior is typically more strongly related to children's attitudes (Baruch & Barnett, 1981). In contrast to the authors' preliminary study described above, Marantz and Mansfield (1977) found no

effects of fathers' participation on 5 year old children's sex typing; however, their data were gathered through interviews with mothers and did not focus on child care done independently by the fathers. Such findings suggest the need to specify particular forms of fathers' participation, and indicate that the consequences, like those of maternal employment, depend in part on the child's sex and age. Sex-role theory suggests stronger effects for boys, i.e., the same-sex child, and for children who are beyond the age of attainment of gender constancy (Kohlberg, 1966).

In the present study, children's sex-role related beliefs and values were measured by assessing attitudes in three domains (children's activities; adult occupational roles; adult family roles) and by addressing several dimensions within each domain (see below). This approach builds upon measures used to evaluate Freestyle, the public television program designed to reduce children's sex-role stereotyping (Johnston, Ettame, & Davidson, 1980). In addition, a behavioral measure of sex-role flexibility was developed for the study so as to assess the child's willingness to cross sex-role boundaries when appropriate to do so. The focus of this measure was not on performance--how the child routinely performed with respect to sex roles--but on the child's competence, the capacity to ignore conventional restrictions when this is the adaptive choice (Bem & Lenney, 1976; Vedovato, 1978).

METHODOLOGY

Subjects and Procedures

Subjects were 160 fathers of kindergarten and fourth-grade children, their wives and their children. Subjects were drawn from the roster of families whose children were enrolled in a suburban school system in the greater Boston area. At each grade level, half of the children were boys and half girls; within each of the four groups thus formed, half had employed mothers (see Figure 1). Employment was defined as working at least 17-1/2 hours per week for at least three months prior to being interviewed for this study. Non-employed mothers were defined as employed less than 8 hours per week. All families were Caucasian, two-parent families; the child was the natural child of both parents. The sample was middle-class: eligibility was defined by the father's occupation (Hollingshead Class III and above).

The school system required that recruiting be done by mail through their office; parents could not be contacted directly by telephone until they responded. The procedure for developing the sample therefore included several steps. The school liason office mailed to every family with a kindergarten or fourth-grade child a packet containing the following: a letter from the Director of Pupil Services endorsing the project and urging participation; a letter from the principal investigators describing the project and outlining the procedures and time investment involved; and a stamped response card that asked for the family's telephone number and the mother's employment status. The study was described to parents as concerning how fathers and mothers spend their time with respect to paid

work, family work, and other activities, and how their patterns are related to children's attitudes about the roles of men and women.

Families who responded positively were categorized into four groups by sex and grade of their child. Within each group the respondents were further classified by the mother's employment status. Within each of the eight groups thus formed potential families were assigned random numbers. Families were contacted by telephone in order of random number by a member of the research team. This procedure was used to fill all but two cells, for which insufficient response cards were received. The school system then granted permission to contact potential families in these cells by telephone; this procedure yielded enough families to fill the remaining two cells.

Because of the procedures used, only an estimate of the response rate is possible; it was approximately 40% of those on the roster. For the same reason, differences between those participating and those refusing could not be studied but are unlikely to be demographic, given the homogeneous nature of the town and parental population. It may be that families in which fathers participated the least were the most likely to refuse, given the current social desirability of fathers' involvement.

Date were collected from the fall of 1980 to the spring of 1981. Prior to the data collection phase, the principal investigators had carried out pilot interviews out with 20 families, as described below. In the actual study, fathers and mothers were interviewed in their homes for approximately two hours by a team consisting of a male and a female staff member. First, parents were interviewed jointly about the extent of each

parent's participation in child care and home chores, in paid employment, and in other activities. Demographic data about the family were also obtained jointly. Each parent was then interviewed in a separate room to obtain data about satisfactions and conflicts in various roles. Finally, a questionnaire packet was left with each parent to be filled out and returned by mail; the packet included the measures of attitude toward the male role, self-esteem, and sex-typing. Upon returning these, each parent received $5 for participating.

Description of Sample

The mean age of mothers was 39.38 years, and of fathers, 41.11. Of the 80 employed mothers, 44 worked from 17 to 29 hours per week; 33 worked 30 or more hours per week; three had lowered their work hours slightly below 17 hours between the telephone screening and our visit. The mean occupational prestige level (Siegel, 1971) of employed mothers was 47.6, which is the level assigned to a bookkeeper and to the owner of a real estate agency. The mean occupational prestige level of fathers was 55.78, the level assigned to an accountant and to a social worker. The mean educational level of both mothers and fathers corresponded to a college degree. Mean family income was in the mid $30,000 range for the total sample. Fathers' mean income was approximately $28,000; that of employed wives was $7,500, reflecting the high proportion of part-time workers among women.

Of the 160 families, 6 had one child, 87 had two children, 47 had three children, and 20 had four or more children. With respect to the variable that combines number and ages of children, 18

percent of the families ha' at least one child under 3 years of age; 62 percent ha at least one child between 3 and 8 years of age; and the remaining 21 percent have no child younger than 9 years of age. Thus, 82 percent of the samples are beyond the years of intense child-rearing, i.e., their children are 3 years of age or older.

Development of Instruments

Pilot interviews with 20 families were carried out in the first year of the study to: (a) develop techniques for conducting and recording interviews that were in part joint and in part individual; (b) modify the list of child-care tasks we originally developed for parents of preschoolers for use with parents of older children; and (c) pretest formats for collecting a variety of data on fathers' and mothers' child care and home chores, including identification of major dimensions. For example, "responsibility" for tasks was defined as "remembering, planning and scheduling" tasks, because it became apparent that responsibility had different meanings for parents; some fathers described themselves as "responsible" for tasks such as buying groceries because they had to earn the money to buy the food.

A second pilot effort focused on children. Five boys and five girls in each grade level who attended after-school programs in neighboring towns served as pilot subjects in order to develop the behavioral measure of sex-role flexibility described below and to modify previously used questionnaire scales (Johnston, et al., 1980).

Measures of fathers' participation in child care. Several dimensions of child care and of home chores were distinguished including level of

interaction with children and masculine versus feminine home chores.

1. Interaction time. Time spent with only the target child was not distinguished from time spent with more than one child; pilot work indicated that for the most part the presence of other children beside the target child was a function of family constellation, housing design, and chance.

Parents used a chart devised for this study (see Appendix) to indicate, separately for five typical work days and two typical non-work days (i.e., one typical week), hours during which the child and each parent were home and awake; they then indicated the nature of the child-parent interaction that typically occured during each of those hours. Hours during which the child was at home and awake and one or both parents were at home were coded jointly by parents and interviewer for level of interaction. (Coding also indicated when the child was home with no parent present). Three levels of interaction were described to parents:

1. Parent and child are not involved together. Each is enjoying an independent activity with no interaction: "no interaction."

2. Parent and child each are doing their own thing, aware of each other's activities, and interacting periodically: "intermittent interaction."

3. Parent and child are actively involved together, as in doing homework, playing a game, being involved in a project: "intensive interaction."

A variety of scores were calculated from these data which differentiated, for example, the number of workday and non-work day hours

per week a father spent interacting with the child jointly with his wife versus time father spent alone with the child, i.e., "solo" time.

2. Child-care tasks. A second instrument used to measure father participation was a checklist of 11 child-care tasks. For each task, parents were asked what percent of the time it was done by the father alone, by the parents together, and by the mother alone (0 - 20%; 20-40%, etc.). Parents then indicated which parent—father, mother, or both--had responsibility for the task. The 11 tasks were: take to birthday party; take to doctor/dentist, go to teacher conference; supervise morning routine; clean up room; spend special time at bedtime; take to or from lessons; buy clothes; take on outings (museum, park); supervise personal hygiene; stay home, or make arrangements for care, when child is sick.

In the scoring, a "1" was assigned to 0-20% time, a "2" for 20-40%, etc. In order to examine whether changes in fathers' participation over time related to outcome variables in the study, such as satisfaction with the parental role, parents of fourth graders also filled out this checklist for when the target child was in kindergarten. Inspection of the data indicated that although the child was older now, fathers were doing more than when the child was in kindergarten. Therefore change scores were calculated by subtracting scores at kindergarten from scores at fourth grade. Change scores were found to be uncorrelated with any consequence variables; thus no further analyses were done with this measure.

3. Fathers' performance of home chores. Parents jointly reported the hours each spent on work days and on non-work days on nine household tasks. Five are commonly seen as "feminine" chores (meal preparation,

cleaning house, laundry, grocery shopping, meal clean-up). Four "masculine" tasks were included: general repairs, yard work, car repairs, paying bills. Parents then jointly indicated who was responsible: the father, the mother, or both.

The absolute amount of time per week each parent spent in each chore was calculated. Scores were combined for the five feminine tasks, for the four masculine tasks, and for total tasks. A proportional score was calculated for each of these two sets of tasks, that is, the proportion of the total time both parents spent that was spent by the father.

On the basis of exploratory data analysis and conceptual considerations, a sub-set of five father participation variables was selected for use in the major analyses of antecedents and consequences (see Table 1). These variables reflect our conceptualization of the major dimensions of fathers' participation. Three interaction time variables were created using the data from the hourly charts. Level 2 interaction (intermittent) and level 3 interaction (intensive) were combined for two reasons. First, empirical examination of correlation patterns showed that the combined variable was more powerful. Second, the distinction between the levels, although conceptually clear to both parents and to researchers, was not a perfect match to real life interaction. For example, conversations held while a parent was chauffering a child were experienced as intensive interaction yet technically were intermittent.

Analogous data were used to construct the same five scores for mothers' participation; some comparative data are reported below.[3]

Measures of Determinants of Fathers' Participation

Employment status and pattern. All fathers and all employed mothers reported their occupation and the number of hours they worked (including paid overtime and travel time). They also rated on a 1-7 scale the flexibility of their work schedules and their satisfaction with that flexibility.

Demographics. Each parent reported his/her age, educational attainment and income.[4] Total family income and the ratio of the wife's income to the husband's were calculated. Occupational prestige was determined using the Siegel scale (Siegel, 1971).

Family structure. Information on the number, sex, and ages of all children was obtained. Child-care "load" was calculated by categorizing families as follows: (a) 3 = at least one child under 3; (b) 2 = one child 3 to 8 years old; (c) 1 = at least one child 9 years or older.

Parental attitudes. Parents' attitudes toward the male role were assessed using a short form of Brannon's Attitude Toward Masculinity Scale (Brannon & Juni, 1982). On a 1-7 scale, parents indicated the extent to which they agreed with such statements as "It bothers me when a man does something that I consider feminine", and "Success in his work has to be a man's central goal in his life." Parents' attitudes toward the economic provider role were measured by asking: (a) who should support the family (father, mother, both)[5]; and (b) the importance to each parent of his/her income (if any) and of the spouse's income to maintaining their standard of living. The Bem Sex Role Inventory was also administered; however, neither fathers' nor mothers' masculinity or femininity scores were significantly related to any of the fathers' participation variables.

Fathers' androgyny scores, calculated as recommended by Taylor and Hall (1982) were related weakly to solo performance of child-care tasks (r = .14, $p<.05$), but not to any other participation variable. Mothers' androgyny scores were unrelated to any participation variable. No further analyses were carried out, as parents' sex typing was of little importance either as an antecedent or a consequence of participation.

Parental socialization. Parents' background with respect to their own father's role was assessed by open-ended questions about the father's availability, the quality of their relationship with him, and his participation in child-care tasks. In addition, each parent rated on a 7-point scale, the quality of fathering he or she received between the ages of 5 and 10, the age range of the children in this study.

For scoring the open-ended questions, a coder was trained to an adequate (85%) level of reliability, assessed by agreement with a principal investigator in a random subsample of 20% of the cases. Perceived availability of the father was coded: 1 = low; 2 = medium; 3 = high. The emotional quality of the relationship was scored: 1 = poor; 2 = indifferent; 3 = fair to good; 4 = excellent. The father's participation in child care was scored: 1 = father did almost nothing; 2 = helped when asked or did a few tasks regularly; 3 = parents did equal amounts or father did more.

Measures of Consequences: Role-Strain

Several groups of role-strain variables were assessed that were hypothesized to be influenced by fathers' participation. The first concerned time or energy problems. Parents rated on a 1 - 4 scale (from

not at all to very much) the degree to which they were bothered by lack of time/energy for each of the following: (a) family; (b) work/career; (c) self; (d) spouse; and (e) friends. Second, a set of open-ended questions inquired about work/family conflicts for self and spouse. Coding (1 - 4 scale) yielded four scores; two for self (my work conflicts with family; my family responsibilities conflict with work); and two analogous scores for perceptions of the spouse's conflicts.

A third group of role-strain variables concerned parents' desires about specific time spent with children and on chores. Parents were asked whether they wanted, and whether they wanted their spouse, to spend less time than now, the same, or more time with children and on chores. In addition, subjects used these categories to rate their perceptions of the spouse's desires about their own time with children and on chores. Scores were coded to indicate satisfaction vs. dissatisfaction with time allocation. Fourth, each parent's overall attitude toward the spouse's time allocation and work pattern was also assessed, including: (a) satisfaction with the spouse's allocation of time between family and work; (b) satisfaction with the spouse's work schedule; and (c) for fathers, preferences about the wife's employment status. Wives also reported their perceptions of husbands' preference about their employment status. Each spouse also rated his or her perception of the spouse's attitude toward his or her time allocation.

Measures of Consequences: Well-Being

Consequences for each parent were assessed for several domains:

1. With respect to the parent role, fathers and mothers rated: (a)

sense of involvement with child (7-point scale); (b) sense of competence as a parent (4-point scale); and (c) positive versus negative attitude toward being a parent (parent satisfaction, 7-point scale).

2. Three aspects of the marital relationship were assessed: (a) overall marital satisfaction (7-point scale); (b) sense of equity (7-point scale);[6] and (c) evaluation of how good a parent the spouse is (7-point scale).

3. Overall life satisfaction and satisfaction with one's work schedule were assessed using a 7-point scale; self-esteem was measured by the Rosenberg Scale (1965).

Measures of Consequences: Children's Sex-Role Attitudes and Behavior

Flexibility of sex role-related behavior: Structured situation. This measure was developed to assess the child's capacity to cross sex-role boundaries when there was an incentive to do so. Each child was taken to a private room in his or her school by a male and a female interviewer, equipped with cameras. The child was told: "We're here with cameras today because we need some pictures of children doing different things for a book we're writing. You'll be helping with some of the pictures—you get to choose which ones—and you'll also get a picture of yourself to keep. Because we appreciate your help, we'll be giving you some tokens of appreciation—some nickels—for the pictures you pose for. But we need some pictures more than others, so we'll be paying one nickel for some pictures and two nickels for others. We'll tell you which ones get how many nickels before you choose. One other thing you should know—to show the children here about our book, we'll be taking some of the pictures and

making a display like this one (pictures of children posing with the objects to be used) to put up in your classroom. So maybe your friends will see your picture!" (The last statement was included to increase the real life consequences of a sex-inappropriate choice.)

Instructions for each series of photographs followed the same format: "First, we need pictures of children playing football and pictures of children jumping rope. We can pay one nickel for (sex appropriate) and two nickels for (sex inappropriate)."

There were a series of nine photographs, three in each of three domains, as follows:

a. Current interests and activities:

1.	football	or	jump rope
2.	electric train	or	doll house (with vanity table)
3.	model car kit	or	embroidery sampler

b. Adult occupational roles:

1.	pilot (hat)	or	nurse (hat)
2.	police officer (badge)	or	secretary (typewriter)
3.	physician (stethescope)	or	librarian (books, cards, date stamp and stamp pad)

c. Adult family roles:

1.	shoveling snow (shovel)	or	serving a meal (casserole, spoon, pot holder)
2.	fixing object in house (wrench and pipe)	or	cleaning house (broom and dustpan)
3.	fixing car (windshield wiper and screwdriver)	or	baby care (baby doll and bottle)

Finally, each child was asked to pose with any one of the 18 objects and was given a Polaroid print of this pose.

The order in which the one-nickel versus two-nickel objects were presented was reversed for half the children, as was the left-right position of the objects. The camera was a 35 millimeter unit with a flash attachment that flashed convincingly, although, because of costs, film was not used.

In pilot work on this measure, some attention was given to equating the attractiveness of the objects used in the choice situations. However, it was not possible to carry out a systematic study of attractiveness by testing choice patterns under conditions of no incentives. Results presented below, as will be seen, raise the question of the extent to which patterns of choice were, in fact, influenced by differential attractiveness. That is, did some children choose librarian over physician not because of sex-role issues or monetary incentives, but because the stethescope was less appealing than the set of books, card, and stamp? To sort out these influences it will be necessary to collect data for an analogous sample without differential incentives.

Sex-role attitudes. Children were interviewed individually by a female staff member in a second session approximately two weeks after the photography session. The questionnaire represented an extension and modification of that used in evaluating the Freestyle public television program, a program designed to reduce sex-role stereotyping (Johnston, et al., 1980). In each of the three domains described above--children's

activities, adult occupational roles, adult sex-roles--a series of scales assessed a variety of attitudes about male and female sex roles; items included those used in the photography situation. High scores indicated stereotypic attitudes. For fourth graders, 4- and 5- point scales were used; for kindergarteners 3-point scales with visual aids were used.

1. Current interests and activities: There were 18 items for fourth graders and 16 for kindergarteners, half male and half female.

a. interests: How much would you like to _____ if you had a chance (from don't like it at all to like it a lot). (Examples: do sewing, play football).

b. beliefs about the relative competence of each sex: How good are boys and girls your age at _____ (from [appropriate sex] are much better to [inappropriate sex] are much better).

c. stereotypes/beliefs about who should do each: How do you feel about children doing these things: Is it (from a very good to a very bad idea) for boys/girls your age to _____.

2. Adult occupational roles: Children were asked about 16 occupational roles; 8 traditionally male and 8 traditionally female.

a. interests: When you grow up, would you (definitely not want that job, probably not want it, probably want it, definitely want it)? (Examples: truckdriver, secretary).

b. stereotypes: How do you feel about men (women) doing these jobs?

c. perceived difficulty: How hard do you think being a_____is? (from very easy to very hard). Scoring reflected the mean difficulty level attributed to male jobs minus the mean difficulty attributed to female jobs.

d. relative competence of each sex: How good do you think men and women are at doing these jobs? Do you think men are much better; men are a little better; men and women are about the same; women are a little better; women are much better?

e. perceived sex composition of the occupations: For each occupation, children indicated their perception of the sex composition, from almost all are inappropriate sex to almost all are the appropriate sex. This scale was included to help in interpretations of other scales. For example, if children now believe most physicians are women, girls' desires to be physician would no longer be non-traditional choices.

3. Adult family roles: Children were asked about 12 family tasks; 6 traditionally male and 6 traditionally female.

a. stereotypes: For each family task, who should do the following, (from sex-inappropriate parent only to sex-appropriate parent only. (Examples: earn money to support the family, clean up after meals)

b. perceived difficulty: How hard do you think it is to do each of the following (from very easy to very hard)? (Examples: take care of the car, clean the house.)

c. perceived "actual" family role: Who in your family does each?

The subscales were moderately intercorrelated; the mean intercorrelation was .51. Nine scale scores were combined to create a total stereotyping score. The actual family role scale was not included in the total stereotyping score since it asks about the child's perception of reality. In addition, the perceived sex composition of occupations scale was not included. Stereotyping scores were transformed into z scores to

adjust for the difference in length of scales used for kindergarteners and fourth graders.

Occupational choice. Prior to the beginning of the adult occupational role section of the questionnaire, each child was asked about his or her occupational aspiration: "When you grow up, you'll be choosing a job that grownups do. That's a long time from now, but can you tell me what you would most like to be, what job you want to have?" Two scores were assigned to the choices: traditionality and prestige. Traditionality of choice was determined by census data on sex distribution within the occupation (Zuckerman, 1983). Choices for which 2/3 or more workers were the same sex as the child were scored as 3 = stereotyped. Those with 2/3 or more of opposite-sex workers were scored as 1 = nonstereotyped, and a score of 2 was assigned to choices falling between these two categories. For prestige ratings, Siegel's scale (1971) was used.

Gender constancy. Gender constancy of kindergarten children was determined in the questionnaire session with the female member of the research staff. The materials consisted of a set of cartoon-like figures (DeVries, 1969). The first picture showed a girl who had long hair and was wearing a dress. The set was constructed so that the top could be flipped to show the same figure with short hair; and the bottom could be flipped to show the same figure wearing pants. The second set showed a boy figure who had short hair and was wearing pants. When the top portion was flipped, a version of the same figure with long hair appeared. When the bottom portion was flipped, a figure wearing a dress was shown. For the set with the female figure, the child was told, "This is a girl and her name is

Janie." The child was then asked a series of questions, e.g., "If Janie played with trucks and did boy things, what would she be? Would she be a girl or would she be a boy?" and "If Janie put on boy clothes like this (flip bottom portion only), what would she be? Would she be a girl or would she be a boy?" The female-figure series culminated in the following question: "If Janie has her hair cut short like this (flip top portion), and wears boy clothes like this (flip bottom portion), what would she be? Would she be a girl or would she be a boy?" The child then responsed to a parallel question in which the male figure was the stimulus. These two items were used as our index of gender constancy.

If on both questions the child recognized that the stimulus figure did not change sex regardless of the manipulations, he/she received a score of three; if gender constancy was recognized for only one figure, the child received a score of two; and if the child failed both items, he/she received a score of one.

RESULTS

The results section is organized as follows: First, descriptive data on each of the five father participation variables are presented, including intercorrelations. Second, correlational data are presented describing the relationship between antecedents and the five father participation variables. The results of multiple regression analyses estimating the effects of selected antecedents on father participation are then discussed. Third, consequences of fathers' participation for parents are presented, including the role-strain variables and the well-being outcomes. Both correlational findings and results from multiple regression analyses are

discussed. Finally, descriptive data concerning children's sex-role attitudes are presented and analyses of consequences for children of fathers' participation are discussed.

Fathers Participation Variables

As Table 2 indicates, the five major participation variables selected

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Insert Table 2 about here

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as foci of this study, although significantly intercorrelated, are relatively independent aspects of participation in family work, with the exception of fathers' proportional interaction time, which is moderately correlated with proportion of feminine chores ($r = .65$), and as expected, moderately correlated with total interaction time ($r = .54$, $p < .001$).

Total interaction time. The time each parent spent at each level of interaction for workdays and for non-workdays is reported in Table 3 by

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Insert Table 3 about here

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child's grade level and mother's employment status. Mothers spent considerably more time than fathers in both intermittent and intensive interaction, particularly during the work week, and in families with non-employed mothers, this difference was greater. Weekend hours were similar overall for fathers and mothers. Both parents reported only a small number of hours in which they and the child were home and they were not available to the child. However, mothers more often reported this

pattern, perhaps because fathers tended to perceive themselves as available almost by definition whenever they were home. As was discussed above, intermittent and intensive interaction times were combined in later analyses, based on conceptual considerations and on inspection of patterns of correlations.

Proportional interaction time. The proportion of interaction time for fathers was as follows: for kindergarten fathers with non-employed wives, 35%, for those with employed wives, 41%. Among fourth-grade fathers with non-employed wives, the proportion was 40%, for those with employed wives, it was 42%

Solo interaction time. Fathers did from 1/5 to 1/3 of what mothers did. Only 53 of 160 fathers spent seven or more hours—that is, the equivalent of a day—interacting in the absence of the mother; 53 spent 3 to 6 hours, and 54 spent 0 to 2 hours. A detailed examination of the interview protocols from those fathers who spent 7 or more hours revealed that many had wives who worked atypical hours (e.g., nurses on the 3-11 shift); others in this group stressed their determination not to be like their own fathers, typically described as "never there." In Table 4, data

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Insert Table 4 about here

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are summarized by grade level and employment status for fathers' and mothers' solo interaction time.

Performance of 11 child-care tasks. The proportion of time in child-care tasks that is spent by the father alone is as follows: among

kindergarten fathers those with non-employed wives reported that they performed the tasks alone just under 20 percent of the time. The corresponding percent for those with employed wives was just over 20 percent. The results were identical for fourth-grade fathers.

Home chores. The mean percent of time per week spent in each chore that fathers spent (for workdays and non-workdays combined) is presented in Table 5, separately by maternal employment status. The mean percent of

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Insert Table 5 about here

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time spent by the fathers (whole sample) was 16.3% for feminine chores (SD = 13.82) and 66.5% for masculine chores (SD = 22.0). For fathers with employed wives, the mean percent of time spent on feminine chores was 19% SD = .13); for those with non-employed wives, it was 13% (SD =.12). The mean number of hours spent in feminine chores was 5.79 for fathers with employed wives and 4.31 for fathers with non-employed wives. In comparison, employed wives spent 26.7 hours in feminine chores; non-employed wives spent 31.8 hours. For the set of masculine chores, fathers with employed wives spent 11.9 hours and fathers with non-employed wives spent 10.4 hours. The data suggest that although masculine chores are done only sporadically, in contrast to the "dailiness" of feminine chores, fathers spend similar amounts of time on each set, and they spend less than one-fourth of the total time mothers spend, even among families with employed wives. Fathers with employed wives do somewhat more than those with non-employed wives.

Responsibility for child-care tasks and home chores. Responsibility, defined as "remembering, planning, and scheduling," was assessed both for the 11 child-care tasks and the nine home chores. Overall fathers had little responsibility. Of 160 fathers, 113 reported they were responsible for no child-care tasks, 35 were responsible for 1, and 12 for 2-3. As for feminine home chores, 150 fathers were not responsible for any; 8 were responsible for 1, and 2 for 2 to 3. Because of the constricted range of these two variables, they were omitted from further analyses.

Antecedents of Fathers' Participation: Zero-Order Correlation Analyses

Tables 6 and 7 display the zero-order correlation coefficients of

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Insert Tables 6 and 7 about here

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potential antecedents with each participation variable, separately for fathers with employed (Table 6) and non-employed wives (Table 7). Correlations of .25 or greater are discussed briefly here.

Fathers with employed wives. The strongest correlations were with variables reflecting the wife's work pattern. For fathers' total interaction time, the strongest correlations were with the number of hours the wife worked ($r = .39$, $p < .001$); the flexibility of her hours ($r = -.28$, $p < .01$); and her income ($r = .27$, $p < .05$). In addition, the child's grade (kindergarten vs. fourth grade) was related at $r = -.28$, $p < .01$. (Grade was coded as follows: 1 = 4th grade; 0 = kindergarten.)

For proportional interaction time, the number of hours the wife worked was again most strongly correlated ($r = .44$, $p < .001$). The mother's

educational level was also related to the proportion of time the father spent relative to the mother ($r = .27$, $p < .01$). Education may be associated with attitudes and values that affect participation patterns, although neither parent's attitude toward masculinity was significantly related.

For fathers' solo interaction time, there were few significant correlations. The mother's attitude toward the male role was correlated at $r = -.31$, ($p < .01$); the less traditional her views, the more time the father spent in solo interaction. As is indicated below, this form of fathers' participation appears to be shaped by influences different from the other forms discussed.

In contrast to dimensions of participation that center around interacting with children, the specific child-care tasks a father does were related to aspects of his life as well as of his wife's. The proportion of time the father did the 11 child-care tasks alone was most strongly associated with occupational prestige ($r = .36$, $p < .001$ and $r = .28$, $p < .01$, for fathers and mothers, respectively); income, both the importance each spouse attributes to their own income ($r = -.36$, $p < .001$ and $r = .30$, $p < .001$, for fathers and mothers, respectively), and the amount of income each spouse earned ($r = -.30$, $p < .01$ and $r = .25$, $p < .05$, for fathers and mothers, respectively). In addition, the number of hours the mother worked was a predictor of fathers' performance of child-care tasks ($r = .37$, $p < .001$).

Two contrasting trends emerge from these findings: Fathers' performance of child-care tasks alone increases with his occupational prestige and decreases with the amount of money he makes and with the importance he attributes to his

income for maintaining the family's standard of living.

Finally, with respect to fathers' performance of traditionally feminine household chores, there are a greater number of moderately significant correlations than for the other dimensions of fathers' participation. Most important were the hours the mother worked (r = .41, $p<.001$); her income (r = .37, $p<.001$); each parent's attitude toward the male role (r = -.40, $p<$ .001 for fathers, and r = -.31, $p<.001$ for mothers); and each parent's belief about who should support the family (r = .41, $p<.001$, and r = .35, $p<$ .001 for fathers and mothers, respectively.) Fathers' proportion of feminine chores was associated with fathers' and mothers' beliefs that economic responsibility should be shared. In addition, total family income (r =.32, $p<.01$), and father's education (r = .29, $p<.01$) were associated with performance of feminine chores. The constraints of the wife's employment, parents' beliefs about adult roles and responsibilities, and variables reflecting social class (income and education) thus are related to the extent to which a father carries out traditionally feminine chores exclusive of child care.

The pattern of stronger correlations of antecedents with the home chores and child-care tasks dimensions of fathers' participation compared with interaction time suggests it may be specific chores that are negotiated about and transferred to fathers on the basis of the wife's work responsibilities and parental attitudes, rather than hours of time spent with children. Overall, the correlational patterns of fathers' participation variables in relation to antecedents suggest that the wife is a strong influence. This pattern is the mirror image of that found in the

"male" domain of paid work, where the husband's attitudes and needs are powerful influences on the wife's employment patterns. In addition, the higher the fathers' income, the less he did for all forms of participation.

Fathers with non-employed wives. For this group there were fewer and weaker relationships between antecedents and fathers' participation. Perhaps in these families more individual and idiosyncratic influences on participation come into play in the absence of structural constraints. For fathers' total interaction time, only the correlation with perceived emotional quality of the father's relationship to his own father reached the .25 level. The relationship was negative; that is, the lower a man perceived the quality to be, the higher his total interaction time. This pattern was also true for the remaining participation variables, except proportion of feminine chores. This finding is consistent with the view that fathers tend to compensate for perceived deprivation in their own background, and challenges the view that men imitate their own fathers. For fathers with non-employed wives the desire to be more involved with one's children than one's father was, however, does not appear to generalize to taking on traditionally feminine household chores.

For proportional interaction time, the child's grade ($r = -.33$, $p<.01$), number of children ($r = .25$, $p<.05$), and the number of hours the father worked ($r = -.32$, $p<.01$) were significantly related. In addition, the more important the father perceived his income to be, the lower the proportion of time he spent ($r = -.29$, $p<.01$). Thus the time fathers spent relative to mothers was related both to child-care demands and the characteristics of his job.

As was the case for families in which the wife was employed, the significant antecedents of fathers' solo interaction time were few; the strongest correlation was with the importance he attached to his own income ($r = .26$, $p < .05$).

With respect to fathers' solo performance of the 11 child-care tasks, among men with non-employed wives, no correlation reached the .25 level. Sex of the child was significantly correlated ($r = -.23$, $p < .05$), as was fathers' perceptions of the quality of fathering they received ($r = -.24$, $p < .05$). Fathers do more child-care tasks alone with a son than with a daughter. This is the only instance in which the sex of the child was related to a fathers' participation variable.

Finally, with respect to feminine chores, no correlation reached the .25 level. However, significant but modest correlations of fathers' and mothers' attitude toward the male role ($r = -.22$, $p < .05$; and $r = -.20$, $p < .05$, respectively), suggest that parents' ideology and beliefs about sex roles may influence the extent to which fathers perform feminine chores in families with non-employed wives.

Antecedents of Fathers' Participation: Multiple Regression Analyses

A series of multiple regression equations, with each father's participation variable as the outcome variable, were estimated for families with employed and non-employed mothers, respectively. Because sample size restricted the number of variables that could be entered as predictors, only those with zero-order correlations of .20 and above with at least one father participation variable were selected. In addition, multiple regressions were estimated for the sample as a whole in order to consider a

larger set of potential antecedents, including mothers' work status.

Total sample. A set of fifteen predictor variables, was entered into five simultaneous regression analyses; each of the five father participation measures in turn was the outcome variable. The set contained four family structure variables (sex of child, child's grade in school, number of children, child-care load); three demographic variables (father's education, mother's education, and total family income); one parental socialization variable (fathers' evaluation of the fathering received when he was between 5 and 10 years of age); two employment status and pattern variables (mothers' employment status, and number of hours fathers' worked per week); and five attitudinal variables (importance of father's income to father, each parent's attitude toward the male role, and each parent's perception of who should have economic responsibility for the family.) The regression models for all five father participation variables are displayed in Table 8.

Insert Table 8 about here

The fifteen variable model accounted for 19% of the variance in total interaction time ($F = 2.16$, df 15, 141, $p<.05$,). Four individual predictor variables were significantly related to the outcome measure: child's grade in school ($B = -.25$, $F = 6.71$, df 1, 141, $p<.05$); fathers' feelings about the quality of fathering they received as youngsters ($B = -.16$, $F = 3.92$, df 1, 141, $p<.05$); importance of father's income to father ($B = .22$, $F = 6.63$, df 1, 141, $p<.05$), and mother's attitude toward the male role ($B =$

-.22, $F = 6.04$, df 1,141, $p < .05$). Thus, controlling for the effects of the other predictors, the following relationships are significant; fathers spent less time interacting with older children, they spent more time interacting when they considered their own income to be important to maintaining their standard of living, when their wives held non-traditional attitudes about the male role, and when they perceive themselves to have had poor fathering experiences when they were between five and ten years of age.

The fifteen variable model accounted for 29% of the variance in fathers' proportional interaction time ($F = 3.86$, df 15, 142, $p < .01$). Four individual predictor variables were significantly related to this index of father participation father's evaluation of the fathering he received; ($B = -.18$, $F = 6.02$, df 1, 142, $p < .05$); number of children ($B = .16$, $F = 4.48$, df 1, 142, $p < .05$); mother's employment status ($B = -.28$, $F = 11.21$, df 1, 142, $p < .01$); and mother's attitude toward the male role ($B = -.21$, $F = 6.04$, df 1, 142, $p < .01$). The more children in the family, the greater was the fathers' proportion of interaction time; it was also greater when wives were employed, when wives held non-traditional attitudes about the male role, and when fathers were negative about the quality of the fathering they received.

The total regression model accounted for 22% of the variance in fathers' solo interaction time ($F = 2.74$, df 15, 142, $p < .01$). Five of the fifteen individual predictor variables were significantly related to solo interaction time: child's grade in school ($B = -.22$, $F = 5.59$, df 1, 142, $p < .05$); number of children in the family ($B = .19$, $F = 6.07$, df 1, 142, $p <$

.05); father's evaluation of the quality of fathering he received (B = -.16, F = 4.50, df 1, 142, $p<.05$); the importance of the fathers' income to the father (B =.24, F = 8.64, df 1, 142, $p<.01$); and mother's attitude toward the male role (B = -.27, F 9.68, df 1, 142, $p<.01$). Fathers spent less time in solo interaction with older than with younger children, and more time when they had larger families. Interestingly, mothers' employment status was not significantly related to this measure of father participation.

Results of these three analyses of variables reflecting the amount and quality of time fathers spent in interaction with their children consistently showed the importance of wives' endorsement of non-traditional family role for husbands, and an apparent tendency for fathers to compensate in their own behavior for a perceived lack in the quality of fathering they received when they were growing up.

With respect to fathers' performance of child-care tasks, the fifteen variable model accounted for 20% of the variance (F = 2.32, df 15, 142, $p<.01$). Three predictors were significantly related to the outcome variable: sex of child (B = -.18, F = 4.95, df 1, 142, $p<.05$); mothers' employment status (B = -.26, F = 8.30, df 1, 142, $p<.01$), and the importance of the father's income to the father (B = -.20, F = 5.61, df 1, 142, $p<.05$). Fathers did more child-care tasks alone when their wives were employed and when the child in question was male. Moreover, fathers' participation in this form of child-care was conversely related to the importance they assigned to their own income for maintaining the family's standard of living.

The total regression model accounted for 28% of the variance in the proportion of feminine chores fathers did ($F = 3.68$, df 15, 142, $p<.01$). Two predictors--both attitudinal variables--were significantly related to this measure of father participation; fathers' attitude toward the male role ($B = -.18$, $F = 4.53$, df 1, 142, $p<.05$) and mothers' beliefs about who should have financial responsibility for the family ($B = .22$, $F = 5.64$, df 1, 142, $p<.05$). Fathers with less traditional attitudes engaged in more feminine home chores, as did men whose wives believed that the financial responsibility for their family should be shared rather than be solely that of the father.

Fathers with employed wives. A set of ten predictor variables was entered into separate simultaneous multiple regression analyses with each of the five father participation variables as outcomes. Four predictors were demographic: father's income, mother's income, father's education, and mother's education. Two were employment status and pattern variables--the number of hours per week the mother worked, and flexibility of mother's work schedule--three were attitudinal--father's attitude toward the male role, mother's attitude toward the male role, and father's beliefs about responsibility for providing for the family. One family structure variable was included, that of child's grade. In four of the five regression analyses, the regression equations were significant; the exception was the analysis with solo interaction time as the outcome variable. The data are reported in Table 9.

Insert Table 9 about here

The set of ten predictors accounted for 32% of the variance in fathers' total interaction time ($F = 3.19$, df 10, 68, $p<.01$). Two individual predictors were significantly related to the outcome variable: number of hours the wife worked ($B = .39$, $F = 6.30$, df 1, 68, $p<.05$); and child's grade in school ($B = -.24$, $F = 4.64$, df 1, 68, $p<.05$). The more a wife worked, the more time the father spent in interaction with his children. In addition, fathers of kindergarten children spent more time in interaction than did fathers of fourth graders.

With proportional interaction time as the outcome variable, the set of ten predictors accounted for 31% of the variance ($F = 3.03$, df 10, 68, $p<.01$). The significant individual predictor variables were: the number of hours the wife worked ($B = .58$, $F = 13.62$, df 1, 68, $p<.01$); and the wife's attitude toward the male role ($B = -.24$, $F = 4.02$, df 1, 68, $p<.05$). The more hours the wife worked, and the more non-traditional her attitude toward the male role, the greater the father's proportion of interaction time relative to hers. The combination of the demands of a wife's employment and a non-traditional attitude both creates more demand for fathers' participation and may create an atmosphere that encourages fathers to be more participatory and may also create more demands for father participation.

For child-care tasks, the ten variable model was not significant.

With proportion of feminine home chores as the outcome, the ten variable model accounted for 46% of the variance ($F = 5.76$, df 10, 68, $p<.02$). As for proportional interaction time, the number of hours the wife

worked was a significant individual predictor (B = .32, F = 5.14, df 1, 68, $p<.05$), as was her attitude toward the male role (B = -.34, F = 10.00, df 1, 68, $p<.01$).

Fathers with non-employed wives. A set of ten predictor variables was entered into separate simultaneous multiple regression analyses with each of the five father participation variables as outcomes. The ten were: sex of child; child's grade in school; number of children; father's income last year; father's education; father's evaluation of the fathering received; number of hours per week father worked; the importance of the father's income to the father; mother's attitude toward the male role; and father's attitude toward the male role. The data are presented in Table 10.

Insert Table 10 about here

Three of the five regression equations were significant; with child-care tasks and feminine home chores as outcome variables, the regression models were not signficant. It is noteworthy that these two outcome variables reflected carrying out traditionally feminine work—child care and home chores—rather than joining in family interaction. One possible explanation is that fathers only participated in these more onerous chores when they had to, i.e., when their wives were employed and could not meet all the demands of these tasks.

With fathers' total interaction time as the outcome, the ten variable model accounted for 24% of the variance (F = 2.15, df 10, 68, $p<.05$). Two individual predictor variables were significant: father's perception of the

quality of fathering he received (B = -.27, F = 6.48, df 1, 68, $p<.01$); and mother's attitude toward the male role (B = -.25, F = 4.09, df 1, 68, $p<.05$). The more negatively a father felt about his earlier experiences with his own father, and the more his wife endorsed a non-traditional role for men, the more time he spent with his own child.

The set of ten predictor variables accounted for 40% of the variance in father's proportional interaction time (F = 4.58, df 10, 69, $p<.01$). Four individual predictor variables were significantly related to the outcome variable: number of children (B = .22, F = 5.14, df 1, 69, $p<.05$); number of hours per week that the father worked (B = -.25, F = 6.57, df 1, 69, $p<.05$); the importance of father's income to the father (B = .20, F = 4.01, df 1, 69, $p<.05$); and father's perception of the quality of fathering he received (B = -.24, F = 6.17, df 1, 69, $p<.01$). A father's proportional interaction time thus was responsive to family and job-related demands; it increased with the number of children in the family and decreased with the number of hours he had to work each week. Further, fathers who evaluated their own father's negatively appeared to compensate by spending proportionally more time with their children. More puzzling is the finding that fathers' proportional interaction time increased as did their perception that the income they earned was important to maintaining their standard of living. Given that all wives in this subgroup were not employed and thus did not earn an income, this correlation may reflect a social class effect in which upper-middle class men spend more time with their families.

The ten predictors accounted for 24% of the variance in solo

interaction time (F = 2.18, df 10, 69, $p<.05$). Four variables were significantly related to this participation measure: child's grade in school (B = -.24, F = 4.91, df 1, 69, $p<.01$); number of children (B = .28, F = 6.50, df 1, 69, $p<.05$); importance of the father's income to the father (B = .30, F = 7.06, df 1, 69, $p<.01$); and father's evaluation of the fathering he received (B = -.24, F = 4.86, df 1, 69, $p<.05$). Again, family demands thus affected a father's solo interaction; the more children he had, the more he did; the older his children, the less he did.

In sum, for fathers with non-employed wives the ten variable model did not predict significantly either of the two participation variables that reflect the performance of tasks—child care or home chores. With the other three father participation variables as outcomes, the most consistent finding was a negative relationship with fathers' perceptions of the quality of fathering they received as youngsters.

Role-Strain Consequences of Fathers' Participation

Tables 11, 12, 13 and 14 present, for families with employed and non-employed

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Insert Tables 11, 12, 13 and 14 about here

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wives respectively, the zero-order correlations between the five fathers' participation variables and for each parent, the set of consequence variables concerning role strain. Because of the large number of variables, only correlations of .25 or greater are discussed here.

Fathers with employed wives. The strongest relationships concerned fathers' satisfaction with wives' work schedules and time allocation (see

Table 11). All five forms of participation were significantly and negatively related to a father's satisfaction with his wife's work schedule; correlations ranged from $r = -.31$, $p < .01$ for child-care tasks to $r = -.44$, $p < .001$ for proportional interaction time. All five forms of participation were also significantly and negatively related to satisfaction with the wife's allocation of time, although less strongly so. In addition, the extent to which a father did solo child-care tasks and the extent to which he performed feminine chores were positively related to the extent that he reported his wife's work was interfering with her family responsibilities ($r = .43$, $p < .001$ for both). The more a father performed child-care tasks, the more dissatisfied he was with the amount of time his wife spent in child care ($r = -.31$, $p < .01$). A father's performance of feminine chores, in contrast, was positively related to approval of his wife's working for pay ($r = .34$, $p < .001$). Finally, the greater the interaction time fathers spent proportional to that of the mother, the more they believed their wives were satisfied with the time they (the fathers) were spending in child care ($r = .28$, $p < .01$).

With respect to time and energy problems reported by fathers with employed wives, solo performance of child-care tasks was related to reporting too little time for career ($r = .31$, $p < .01$), and performance of feminine chores was related to not having enough time with one's wife ($r = .27$, $p < .01$). In sum, fathers' participation was consistently associated with dissatisfaction with their wives' time allocation, although performing feminine chores was related to approving of wives being employed. Further, fathers' problems with time and energy were associated with performing

specific child-care tasks and home chores rather than family interaction time.

Fathers with non-employed wives. For these fathers, participation was less strongly related to the role-strain consequences (see Table 1). Most salient was solo performance of child-care tasks; the more a father did these, the more likely he was to report that he had too little time for himself ($r = .31$, $p < .01$), that family responsibilities were interfering with his work ($r = .33$, $p < .01$), and that he was dissatisfied with the amount of child care his wife did ($r = -.31$, $p < .01$). In addition, total interaction time was negatively related to reporting too little energy for family ($r = -.36$, $p < .01$), that is, the more time fathers spent with their child, the less they reported having too little time for their families.

Employed wives. As is shown in Table 1, of the five participation variables, the proportion of traditionally feminine chores done by the husband seemed to have the strongest association with a mother's reports of role strain. The more he did, the more likely his wife was to report that her work was interfering with her family responsibilities ($r = .48$, $p < .001$), and that she had too little energy for her family ($r = .40$, $p < .001$). In addition, the more time a father spent in solo interaction, the more likely his wife was to report that she did not have enough time with her husband ($r = .33$, $p < .01$); this may be because a father's solo interaction time often reflects parents taking "shifts" with respect to paid work and child care (Lein, 1979). Solo interaction time was also associated with the wife's perceiving her husband as dissatisfied with her time allocation ($r = -.29$, $p < .01$). Overall, the more her husband does, the more an employed wife is likely to feel her work is interfering with her role in the family.

In addition, the extent to which her husband did child-care tasks was related to her perception that he approved of her employment status (r = .31, $p<.01$).

Non-employed wives. Among non-employed wives, the only correlations to reach .25 or greater were that of fathers' performance of feminine chores with the wife's satisfaction with the amount of time her husband spent in child care (r = .27, $p<.01$) and with the wife's satisfaction with her husband's work schedule (r = .26, $p<.01$). (See Table 1 .) Unexpectedly, the association with satisfaction with time spent in chores was not significant. Thus, non-employed women's reactions to their husbands' participation did not appear to revolve around the time and energy problems or role conflicts measured in this study.

It is interesting that in the sample as a whole, only 6 (of 160) fathers reported being considerably or extremely bothered by having too little time for their careers, while 24 mothers did so. In contrast, while only 12 mothers reported they were considerably or extremely bothered by having too little time for their families, 40 fathers did so. It appears that parents experience less sense of deprivation with respect to their traditionally "primary" role--for fathers, that of family, for mothers, that of employment.

Well-Being Consequences of Fathers' Participation: Zero-Order Correlational Analyses for Fathers and Mothers

Zero-order correlation coefficients for participation variables and consequence variables are presented in Table 1 for fathers with employed wives and for the employed wives themselves; for fathers with

non-employed wives and the non-employed wives, they are presented in Table [illegible].

Insert Tables [illegible] and [illegible] about here

Fathers with employed wives. The most striking finding was that consequences concerned with the parent role had the strongest association with fathers' participation, and the association tended to be positive. Among men with employed wives, sense of involvement with the child was associated with proportional interaction time (r = .29, $p<.01$) and solo performance of child-care tasks (r = .29, $p<.01$). These two forms of fathers' participation were also related to the fathers' sense of competence as a parent (r = .25, $p<.05$, and r = .28, $p<.01$, respectively), as was total interaction time (r = .30, $p<.01$). Interestingly, the father's attitude toward being a parent, which reflects satisfaction with the parent role, was negatively although not significantly correlated with all forms of participation. Apparently, although fathers gain a sense of involvement and competence from what they do, the more they participate the less positive they are about being a parent. (This pattern does not hold for mothers; their attitudes are more positive, the more they participate.) Although correlations cannot specify the direction of an effect, it is likely that negative attitudes reflect rather than cause greater participation in fathers; for mothers, it is likely that greater participation reflects a positive attitude.

With respect to the marital role, in contrast, participation has

somewhat negative consequences. Fathers' sense of equity was negatively correlated with both total interaction time (r =-.28, $p<.01$) and proportional interaction time (r =-.38, $p<.001$). Equity was also negatively correlated with solo interaction time, although not significantly so. Marital satisfaction was not significantly related to any form of fathers' participation. However, fathers' solo interaction time was negatively related to how good a parent the father perceived the wife to be (r =-.29, $p<.01$). Being in sole charge of children seems to make the father more critical of his wife. This may reflect resentment, but may also mean he feels more competent to evaluate her parenting skills. This pattern is in contrast to the pattern for mothers: the more a father did with respect to child-care tasks and home chores, the more highly his wife rated him as a father (r = .31, $p<.01$ and r = .33, $p<.01$, respectively).

Although overall life satisfaction was negatively related to solo interaction time (r = -.36, $p<.01$), fathers' life satisfaction and their satisfaction with their work schedules were otherwise unrelated to participation patterns. Finally, fathers' self-esteem was positively related to all forms of participation. Correlations of self-esteem with total interaction time and proportional interaction time were particularly strong (r = .31, $p<.01$ and r = .33, $p<.01$, respectively).

Overall, then, for fathers with employed wives, self-esteem and a better self-image of oneself as a parent were the positive consequences of participation. A somewhat negative attitude toward the parent role, a sense of inequity within the marriage and a more critical view of the wife

as a parent were the negative consequences. Although the direction of the effect cannot be specified, it seems unlikely that these dissatisfactions would cause fatners to increase their participation, rather they may be a cost of increased participation.

Fathers with non-employed wives. For fathers with non-employed wives, the major consequences of participation also concerned the parental role. Sense of involvement was related to total interaction time (r = .45, $p<$ .001); proportional interaction time (r = .34, $p<.001$) and solo performance of child-care tasks (r = .31, $p<.01$). The only significant relationship with respect to the marital role was a negative association between sense of eqnity and proportional interaction time (r = -.21, $p<.05$). Self-esteem was positively related to solo performance of child-care tasks (r = .19, $p<$ .05); life satisfaction was negatively related to feminine chores (r = -.21, $p<.05$). These findings suggest that participation patterns are less salient in the lives of fathers with non-employed wives, perhaps in part because they participate somewhat less than do those with employed wives.

Employed wives. The strongest relationships between fathers' participation and consequences for employed mothers were with how good a parent she perceived the father to be; in contrast to the pattern for fathers, the associations were positive. Correlations were r =.31, $p<.01$ for solo performance of child-care tasks; r = .33, $p<.01$ for feminine chores; and r = .18, $p<.05$ for total interaction time. In addition, the more fatners participated, except for solo interaction time, the higher the mother's self-esteem. Correlations with self-esteem were significant for total interaction time (r = .22, $p<.05$), proportional interaction time (r =

.21, $p<.05$), and child-care tasks ($r = .21$, $p<.05$). Perhaps a husband's participation validates the importance of family work and thus enhances her self-image.

With respect to her role as a parent, the more a father participated, the lower the mother's sense of involvement with the child; correlations were significant and negative for total interaction time ($r = -.24$, $p<.05$) and proportional interaction time ($r = -.27$, $p<.05$). Although not as strong, correlations were also negative between mothers' attitude toward being a parent and both total interaction time ($r = -.18$, $p<.05$) and solo interaction time ($r = -.22$, $p<.05$). Like fathers, mothers viewed the parent role more negatively the more their husbands participated. This pattern suggests that high levels of fathers' participation may make clear the costs of parenthood to both parents.

Employed mothers' satisfaction with their work schedules was less the more their husbands participated, significantly so for solo interaction time ($r = -.25$, $p<.05$), proportional interaction time ($r = -.23$, $p<.05$) and total interaction time, ($r = -.21$, $p<.05$). Moreover, fathers' solo interaction time was negatively related to mothers' life satisfaction ($r = -.36$, $p<.01$). Thus employed women's reactions to their husbands' participation suggest concern that their paid work responsibilities create problems for their families.

Non-employed wives. For non-employed wives, fathers' participation variables were correlated significantly with very few consequences (see Table 16). The strongest relationships were with how favorably the mother perceived her husband as a parent, which is positively and significantly

related to total interaction time (r = .26, $p<.05$); proportional interaction time (r = .22, $p<.05$); and child-care tasks (r = .19, $p<.05$).

Interestingly, although fathers' participation and marital role variables were essentially unrelated among employed mothers, among non-employed mothers, fathers' proportional time and solo performance of child-care tasks were associated with a greater sense of equity (r = .19, $p<$ .05 for both). The more a father does, the more the wife feels benefitted within the marriage.

Well-Being Consequences of Father Participation: Multiple Regression Analyses

A set of six predictor variables—two control variables (total family income and father's education) and four father participation measures, (total interaction time, solo interaction time, child-care tasks and feminine home chores)—were entered into hierarchial multiple regression analyses with each of nine outcome variables described above. Because total interaction time and proportion of feminine chores were highly correlated with proportional interaction time (r = .54, $p<.001$ and r = .65, $p<.001$), proportional interaction time was not included.) Income and education are often found to affect well-being and therefore were entered as controls in the first step; the participation variables were entered in the second step in order to assess their importance once effects of income and education were taken into account. These analyses were done separately for four groups: fathers with employed and with non-employed wives; and employed and non-employed mothers.

In general, fathers' participation had relatively modest consequences for parents' well-being. Only six of the 36 analyses yielded significant

regression models. The data are discussed below.

Fathers with employed wives. Only when fathers' self-esteem and their evaluation of their spouse as a parent were outcome variables were the regression models significant (see Table 1 for the data). The model

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Insert Table 1 about here

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accounted for 19% of the variance in fathers' self-esteem ($F = 2.78$, $df = 6, 72$, $p < .05$). Fathers' self-esteem was positively and signficantly related to his educational attainment ($B = .22$, $F = 2.89$, df 1, 72, $p < .05$). Beyond the variance accounted for by the demographic variables of income and education, total interaction time was a significant predictor of self-esteem ($B = .31$, $F = 6.63$, df 1, 72, $p < .01$).

With evaluation of spouse as a parent as the outcome variable, the regression model accounted for 16% of the variance ($F = 2.24$, df 6, 72, $p < .05$). Only one predictor was significantly related to this outcome measure: fathers' solo interaction time ($B = -.33$, $F = 8.41$, df 1, 72, $p < .01$). Thus, the more time fathers with employed wives spent in solo interaction with their children, the lower their ratings of their wives as mothers.

Fathers with non-employed wives. Of the nine regression analyses for this subsample, two yielded significant results, those in which fathers' sense of involvement and fathers' sense of competence were the outcome variables. (See Table 2 for the data.)

Insert Table 13 about here

With father's sense of involvement as the outcome variable, the regression model accounted for 25% of the variance ($F = 4.00$, $df = 6, 72$, $p < .01$). The only significant predictor was fathers' total interaction time ($B = .38$, $F = .25$, $df = 1, 72$, $p < .01$).

The regression model predicting fathers' sense of competence as fathers accounted for 18% of the variance ($F = 2.61$, $df = 6, 72$, $p < .05$). Father's education was the only significant predictor ($B = .26$, $F = 4.98$, $df = 1, 71$, $p < .05$).

Employed wives. With the same set of six predictor variables, only two of the nine analyses yielded significant results: those for mother's life satisfaction and mother's rating of her spouse as a parent. The data for these two analyses are presented in Table 14.

Insert Table 14 about here

The six variable model accounted for 20% of the variance in mothers' life satisfaction ($F = 2.99$, $df = 6, 72$, $p < .05$). Father's solo interaction time was the only significant predictor ($B = -.34$, $F = 9.07$, df 1, 72, $p < .01$). The more time fathers spent alone interacting with their children, the less satisfied employed mothers were with their lives. This finding suggests that for employed mothers, husbands' spending time alone may arouse concern that they are not fulfilling their maternal responsibilities and hence may reduce their feelings of satisfaction.

For mothers' ratings of spouse as a parent, the six variable regression model accounted for 19% of the variance ($F = 2.86$, $df = 6, 71$, $p < .01$). Although the total model was significant, none of the individual predictor variables was signficantly related to this outcome variable.

Non-employed mothers. None of the regression analyses produced significant results.

In sum, the well-being consequences of father participation are modest. For fathers with employed wives, participation, especially total interaction time, increased fathers' self-esteem; for fathers with non-employed wives, participation, particularly total interaction time, enhanced fathers' sense of competence and involvement with the target child. However, for fathers with employed wives, participation, especialy solo interfaction time, was also associated with lower ratings of wives as mothers. Again we have evidence that fathers' participation in family work has mixed effects: attitudes toward aspects of the self are affected positively, while attitudes toward wives are affected negatively. Moreover, fathers' participation has mixed effects on wives, especially employed wives. Father participation, particularly solo interaction time, had a negative effect on employed mothers' satisfaction with life.

Consequences for Children

In this section we present descriptive statistics for child variables and results of correlational and regression analyses.

Gender Constancy. Table 20 presents the number of correct responses to the two gender constancy items for boys and girls.

Insert Table 20 about here

While equal numbers of boys and girls had attained gender constancy, more boys than girls gave two wrong answers. Table . presents response

Insert Table 21 about here

patterns by sex of stimulus figure. Girls succeeded in maintaining constancy better when the stimulus figure was a female; boys were more likely to give the correct answer when the stimulus figure was male. Gender constancy scores were not significantly correlated with children's stereotyping scores, maternal employment status, or any of the five father participation variables.

Children's occupational aspirations. Table 2. shows the

Insert Table 22 about here

traditionality and prestige ratings of children's occupational aspirations for each grade and sex. Boys consistently made more traditional choices with respect to sex typing than did girls, and fourth graders were less traditional than were kindergarteners. At both grade levels, there was greater variance in girls' choices than in boys.

With respect to the prestige of occupations, fourth graders aspired to more prestigious occupations than did kindergarteners, and boys aspired to more prestigious occupations than did girls, a difference more pronounced

among fourth graders.[8]

Zero-order correlations were examined between the two aspiration scores (traditionality and prestige) and the following variables: the five father participation variables, each parent's occupational prestige, maternal employment status, child's stereotyping score, and gender constancy (kindergarteners only). Traditionality was unrelated to any of these. Prestige was related only to father's occupational prestige (r = .16, $p<.05$).

Stereotyping. Tables 23 and 24 show the mean scores on the 11

Insert Tables 23 and 24 about here

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stereotyping subscales and on the photography measures for kindergarten and fourth-grade children by sex. While kindergarten boys and girls have similar levels of stereotyping, fourth-grade boys are consistently more stereotyped than fourth-grade girls.

As was noted, 9 of the 11 scales were combined (mean intercorrelation = .51) to create an overall stereotyping score, converted to z scores. Means and standard deviations for this score are presented by grade and maternal employment status in Table 25. Fourth graders are more

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Insert Table 25 about here

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stereotyped than are kindergarteners. Effects of grade, sex, maternal employment status and parental attitudes toward the male role on total

stereotyping score are reported below in the discussion of the multiple regression analyses.

Data on children's choices in the photography situation are presented in Table 2_, which shows the percentage of stereotyped choices by grade

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Insert Table 26 about here

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level and sex for each item. These data show a wide range in the degree to which children choose the sex-appropriate item and raise the question of how to sort out the influences of the children's sex-role flexibility, the monetary incentive used in this measure, and the attractiveness of the visual aids. The pairs of physician/librarian, police/secretary and snow shovel/serve dinner had surprisingly high frequencies of non-stereotyped choices. There are several possible explanations for these findings:

1. The monetary incentive was particularly effective in these choice situations.

2. The stimulus material for the sex-inappropriate occupations were more inherently attractive.

3. The sex-inappropriate choices are not perceived as such by the children.

To test the monetary incentive hypothesis requires presenting stimulus materials to an analogous sample of children without such incentives. We hope to carry out such a procedure; short of this, it seems unlikely that incentives would operate with such different powers on the various choice pairs.

The differential attractiveness hypothesis also requires a full scale test of the attractiveness of items to child judges (in the absence of monetary incentives). Thus it is not possible to evaluate this hypothesis at present.

The possibility that the sex-inappropriate choices are not in fact viewed as sex stereotyped can be examined through inspection of data for analogous items on the questionnaire. Specifically, for these items we examined responses to three subscales of the adult occupational roles section of the questionnaire: perceived sex composition, interest (desire to have job); and stereotypes (how good an idea, etc.). We present a sample of the results of these analyses:

Librarian. With respect to sex composition, only 7.5% of male kindergarteners thought librarians were mostly men; no fourth-grade boys thought librarians were either "more men than women" or "almost all men." Nevertheless, 75% of male kindergartners thought they might want or would definitely want to be librarians, and 72.5% thought it was either "an OK idea" or "very good idea" for men to be librarians. Of fourth-grade boys, 60% approved of men being librarians.

Physician. Among fourth-grade girls, 60% thought physicians were either almost all men or more men than women. None thought there were more female than male physicians. Nevertheless, 55% either probably or definitely would be interested in becoming a physician. No girl thought it was a bad idea for a woman to be a physician, and 45% thought it was a very good idea.

This sampling of response patterns suggests that children were well

aware of the actual sex composition of these occupations. They nonetheless were interested in entering them even where sex inappropriate, and they approved of others doing so. Further understanding of choice patterns therefore awaits a study of the effects of visual attractiveness and monetary incentives.

Relationship of fathers' Participation Variables to Children's Stereotyping Measures: Correlational Analyses

Photography measure. There were no significant relationships between scores on the photography measure and any fathers' (or mothers') participation variable. Thus, under conditions of an incentive, behavioral flexibility was not found to be associated with patterns of parental child care and chores. However, difficulties concerning items in this measure as described above, may account for these results.

Stereotyping scores. Relationships between mean stereotyping scores and fathers' participation variables, and for comparison, mothers' participation variables, are shown in Table 27. The data are presented by

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Insert Table 27 about here

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grade and maternal employment status. The most striking finding is that only for fourth graders with employed mothers were fathers' participation variables significantly related to stereotyping in the expected (negative direction) Overall, correlations for kindergarteners were low, and among those with non-employed mothers, there were even weak positive relationships between stereotyping and fathers' total, proportional, and

solo interaction time. Fathers with non-employed wives may be more likely to hold traditional attitudes with respect to sex roles; increased time with such a father may therefore increase stereotyping. As was noted above, some researchers have argued that fathers are more likely to promote sex differentiation than are mothers, and that therefore increased exposure to a traditional father should result in increased stereotyping.

Among fourth graders with employed mothers, the forms of fathers' participation most strongly associated with lower stereotyping were the proportion of feminine chores the father did and the proportion of time he did the child-care tasks alone. This pattern is consistent with our previous study in which solo performance of child-care tasks, but not joint performance with the mother, was related to reduced stereotyping in preschool-age girls. The findings suggest that it is when fathers take charge of specific tasks that the counter-stereotyping influence is greatest.

Among fourth graders with non-employed mothers, the total interaction time spent by the mother was related to higher levels of stereotyping. Perhaps these mothers too hold traditional attitudes that promote increased stereotyping, the more time they spend with the child.

Children's Stereotyping: Multiple Regression Analyses

With mean stereotyping scores as the outcome variable, hierarchical multiple regression equations were estimated separately for kindergarten and for fourth-grade children. Separate equations were estimated for each of four father participation variables: proportional and solo interaction time, child-care tasks and feminine home chores. In the first step, the variables entered were child's sex, maternal employment status, maternal

attitude toward the male role, paternal attitude toward the male role, and one of the four participation variables. For kindergarteners only, gender constancy was also included in this first step. In the second step, one interaction term was entered per equation. To investigate whether the effects of father's participation on children's stereotyping are moderated or conditioned by the child's sex, mother's employment status, mother's attitude toward the male role, or father's attitude toward the male role, interaction terms were calculated for each of these times each father's participation vriable. Scores for mother's and father's attitudes were trichotomized into categories of high, medium, and low traditionality.

For kindergarten children, none of the 20 regression models thus tested was significant. For fourth graders, as can be seen in Table 2', 11 of the 20 models were significant.

Insert Table 28 about here

The first step of the model was significant for four of the father participation variables: total interaction time ($F = 2.46$, df 5, 61, $p < .05$); proportional interaction time ($F = 2.57$, df 5, 61, $p < .05$); child-care tasks ($F = 2.35$, df 5, 61, $p < .05$) and feminine chores ($F = 2.75$, df 5, 61, $p < .05$). As can be seen in Table 2', the predictive power of this step came primarily from the mother's attitude toward the male role, which was consistently the only significant individual predictor of children's stereotyping (betas ranged from .29 to .33). That is, children's stereotyping was significantly greater, the more traditional

the mother's attitude toward the male role.

In contrast, the father's attitude toward the male role had no significant main effect on children's stereotyping; rather, there was a very slight but consistent trend for children's stereotyping to be less, the more traditional the father's attitude was. This puzzling pattern is discussed further below.

The total models (Steps 1 and 2) were significant for at least one regression (i.e., one interaction term) for each of the five participation variables.

For total interaction time, the full models were significant when step 2 added the interaction terms of participation x father's attitude (F = 2.69, df 6, 60, $p < .05$) and participation x mother's attitude (F = 2.85, df 6, 60, $p < .05$). For proportional interaction time, models were significant for the interaction terms of father's participation x maternal employment status (F = 2.47, df 6, 60, $p < .05$); participation x father's attitude toward the male role (F = 2.71, df 6, 60, p .05) and participation x mother's attitude toward the male role (F = 2.45, df 6, 60, $p < .05$).

For solo interaction time, only the total model that included the interaction term of participation x mother's attitude was significant (F = 2.58, df 6, 60, $p < .05$).

For child-care tasks, models including the interactions of participation with maternal work status (F = 2.51, df 6, 60, $p < .05$) and with mother's attitude toward the male role (F = 3.62, df 6, 60, $p < .01$) were significant.

For feminine chores, interactions were significant with maternal

employment status ($F = 2.51$, df 6, 60, $p < .05$) mother's atti tude toward the male role ($F = 3.16$, df 6, 60, $p < .01$) and father's attitude toward the male role ($F = 3.84$, df 6, 60, $p < .01$).

The puzzling pattern concerning the effects of father's attitude on children's stereotyping—lesser stereotyping among children of more traditional fathers—is repeated with respect to the direction of effect of the interaction terms. The interaction of mother's attitude and father's participation is in the expected direction: among mothers with non-traditional attitudes, father's participation has a stronger counter-stereotyping effect on children. However, as is indicated by the negative Betas in Table 2?, father's participation has stronger negative effect on children's stereotyping when fathers hold traditional attitudes toward the male role.

Inspection of cell means indicated consistently that children whose fathers were highly participant, but believed in a traditional male role, were particularly low in stereotyping, lower than children whose fathers were highly participant and subscribed to non-traditional male role ideology. Perhaps a discrepancy between a father's behavior and his beliefs makes sex-role issues more salient and noticeable to children, creating a seed bed of "feminist" attitudes. In contrast, when men not only do a great deal of family work but believe they should do so, their pattern may seem unremarkable to their young children, who may therefore neither think about nor question conventional thinking about sex roles. Data already reported indicate that father's participation by itself does little to reduce children's stereotyping, but particular contexts may

catalyze a counter-stereotyping effect: a mother who endorses the father's behavior; or a father who calls attention to his non-traditional behavior, implictly or explicitly because of his traditional beliefs.

DISCUSSION

The data reported here address a variety of questions about the patterns, antecedents, and consequences of fathers' participation in family work. Findings on the nature and extent of participation indicate that the five forms examined here differ not only in the degree of fathers' involvement but in antecedents and consequences. The most strking example is solo interaction time--time spent in the absence of the mother--which appears to be a special and problematic form of participation. A father's being on duty and in sole charge seems associated with conditions that may themselves contribute to stress, such as parents working different time periods or shifts. This form of fathers' participation is related to role-strain variables for both fathers and mothers and is associated with lower life satisfaction and self-esteem in wives. Fathers who are "on duty" may experience conditions of strain, boredom, and isolation that women have found in intensive child care; wives may feel particularly distressed at needing husbands to take over in this way.

Because findings about the extent of fathers' participation depend so greatly on how a particular form of participation is defined, it is difficult to make meaningful comparisons with results of other studies. For example, studies often report the average time fathers spend with children on a typical day, but the time fathers spend on workdays and

non-work days often differ greatly in this respect. In our study, fathers often spent as much time on the two non-work days as on the five work days. Even more inconsistency is asscciated with the definition of the nature of interaction. Even when levels are distinguished, what is considered interaction in one study may be seen as being merely availability in another study. However, overall, our data on the proportion of time fathers spend relative to mothers, on amount of time in solo interaction, and on fathers' responsibility are consistent with studies reported in Pleck's review (1985).

The low level of responsibility reported in our study is often taken as evidence that men's involvement in family work is only superficial, that women must still do the "real" work of child care and home chores by planning and supervising the tasks that fathers do. An alternative interpretation should also be considered, however; that some women find it difficult to relinquish their special, central role in the family, to yield "turf" and thus may find that retaining responsibility allows them to stay in charge of family life (Hoffman, 1983; Lein, 1979).

With respect to the antecedents of fathers' participation, although these differed somewhat for the various forms, overall the major influence was the wife. For the sample as a whole, her employment status and her attitude toward the male role were the most consistent predictors of participation. Among families with employed wives, the number of hours she worked was the strongest predictor of fathers' participation, affecting all forms but solo interaction time. This pattern is consistent with Russell's report that in families where fathers were highly participatory, the

decision about roles has been mainly influenced by the wife.

Several caveats should be considered here, however. As Pleck (1983) points out, a wife's employment status and pattern is confounded with many other variables affecting families such as the husband's earning power, and thus is perhaps best seen as a carrier variable.

Moreover, the greater influence of wives' versus husbands' work hours may be an artifact of the greater range in wives' hours found in most studies (Pleck, 1983). It may also be the case that the number of hours a wife works influences how much family work she feels it is fair to ask of her husband.

With respect to parents' own socialization, we found evidence for the compensatory hypothesis concerning the influence of a father's experience with his own father in families in which the wife was not employed. For these fathers, the more negative their evaluation of the fathering they received, the more extensive their participation. It may be that only in families free from the constraints of wives' employment do such attitudes emerge as major influences.

The importance of maternal attitude toward the male role indicates the salience of beliefs as well as of predicted demands of child-care load and work hours. Similarly, among fathers with non-employed wives, a significant predictor of participation was fathers' beliefs about how important their income was, while their actual income was not.

With respect to characteristics of the child that may influence participation, the age of the target child, and the number of children in the family were consistently significant predictors of participation. The

child's sex was important only for fathers' performance of child-care tasks, and that effect came from the specific tasks of buying clothes and cleaning the child's room. It may be that studies showing more participation with male children measure participation in a different way, such as amount of such specific behaviors as vocalizing or play (Pleck, 1983).

The relationship between fathers' participation and the two sets of consequences of participation assessed in the study—role strain and well-being—were found to be more pronounced in families in which wives were employed. For example, among employed wives, fathers' participation decreased their (the wives') sense of involvement with the child; among non-employed wives it did not. It is likely that when external demands rather than individual preference and style influence participation patterns, there is greater likelihood of feelings of role strain and decrements to well-being.

With respect to role strain, there was little evidence in support of the idea that fathers' increased participation will decrease wives' feelings of role conflict, tension, and guilt. Rather, for employed wives, participation was associated with perceiving husbands as dissatisfied with their (the wives') role pattern and with feeling that their work was interfering with their family life. Employed wives' perceptions were consistent with results for fathers; participation was associated with fathers' reports of dissatisfaction with wives' patterns, and with complaints of interference with their (the fathers') careers. These findings are consistent with Russell's and Radin's report (1983) that in

revisits to families with highly participant fathers, parents reported having experienced a great deal of strain; in 50% of cases families had reverted to more traditional patterns.

Consequences with respect to well-being were relatively modest for fathers and mothers both in families with employed and with non-employed wives. For fathers, the main benefits of participation appear to occur in self-esteem and in the parental role around sense of involvement and competence. Satisfaction in the parental role did not show a similar pattern, perhaps because greater participation means more conflicts, and a more realistic appraisal of the parent role (Lamb, 1983). The costs of participation to fathers appear to center around the marital relationship, as reflected in a sense of inequity and a more critical evaluation of the wife as a parent. The latter finding, however, rather than indicating a hostile attitude, may reflect a father's being more confident of his own parenting skills and less impressed with his wife's.

Effects on mothers of fathers' participation were in some contrast to findings for fathers. Mothers' evaluations of fathers as parents improved, but mothers themselves experienced some decrement in life satisfaction, especially as a function of fathers' solo interation time, and of sense of involvement with their children. Mothers' satisfaction with the parent role did not increase with greater participation by fathers perhaps because, as Hoffman (1983) argues, fathers' involvement requires more negotiation about child-rearing and makes parenting less of an "ego trip" for women.

The modest level of well-being consequences may reflect the restricted

range of fathers' participation in this study and thus could be different in a different sample. However, if increased levels of participation by fathers become the norm, the consequences for role strain and well-being could differ in two directions. If participation were less novel or less deviant, perceptions of resentment and interference with the fathers' career might decrease, or greater participation might result in an actual and perceived increase in strain and anger.

In evaluating the consequences for children, particularly pertinent is Pleck's argument that fathers' participation in family work, like maternal employment, is not a unitary variable, and further that the effects must depend upon the context of participation, especially on parental attitudes about men's roles. While zero-order correlations indicated the greater effect of fathers' participation on older children, and on children whose mothers are employed, multiple regression analyses pointed strongly to maternal attitude toward the male role both as a direct predictor of children's stereotyping and as a moderator of effects of fathers' participation. Similarly, fathers' own attitudes, while not having a significant direct effect upon children's stereotyping scores, did have a moderating effect upon the relationship of participation to stereotyping. As was noted previously, a child's increased exposure to a father who believes, or whose wife believes, that men should not have to do family work, cannot be expected to reduce the child's stereotype attitudes nor to promote sex-role flexibility.

Footnotes

1. Role-strain variables, Pleck has proposed, may also mediate the relationship between fathers' participation in child care and the well-being of each parent. For example, the effect of father's solo interaction time upon his marital satisfaction may depend upon the degree to which he feels he has too little time for his career.
2. With respect to differences between families with employed and non-employed wives, the father's income was somewhat lower in families with employed wives. Otherwise, the two groups were similar with respect to total income, education, prestige of the father's occupation, and number of children.
3. Data were also collected on child care and home chores performed by persons other than parents on a regular, paid basis. These measures proved unrelated to the variables of interest and were not analyzed further.
4. Scoring categories for the income variables were as follows: 1 = 0 - $3,999; 2 = 4,000 - 6,999; 3 = 7,000 - 9,999; 4 = 10,000 - 15,999; 5 = 16,000 - 20,999; 6 = 21,000 - 28,999; 7 = 29,000 - 39,999; 8 = 40,000 - 64,999; 9 = 65,000 +.
5. No fathers or mothers thought the mother alone should support the family; 29 fathers and 36 mothers thought both parents should do so.
6. A standard equity question was used: "If you were asked to assess who was getting a better deal in your relationship as a whole, considering what you put into it and what you get out of it, and what your partner

puts into it and gets from it, how would you say your total relationship "stacks up?" Subjects responded on a 7-point scale from 1 = partner gets a much better deal to 7 = I get a much better deal.

7. For the total sample, the zero-order correlations of maternal work status with participation were significant for: proportional interaction ($\underline{r} = -.31$, $\underline{p} < .001$); solo performance of child care tasks ($\underline{r} = -.23$, $\underline{p} < .01$); and proportion of feminine chores ($\underline{r} = -.24$, $\underline{p} < .001$). These reflect the father's participation relative to that of the mother.

8. Because high-prestige occupations are male-dominated, a boy's choice of a non-traditional occupation is likely to result in a lower prestige score, thus confounding traditionality and prestige.

References

Aberle, D.F., & Naegele, K.D. Middle-class fathers' occupational role and attitudes toward children. Journal of Orthopsychiatry, 1952, 22, 366-378.

Baruch, G. & Barnett, R. Fathers' participation in the care of their preschool children. Sex Roles, 1981, 7, 1043-1054.

Bem, S.L. The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 1974, 42, 155-162.

Bem, S.L. & Lenney, E. Sex typing and the avoidance of cross-sex behavior. Journal of Personality and Social Psychology, 1976, 33, 48-54.

Blood, R.O., Jr., & Wolfe, D.M. Husband and wives. Glencoe, IL: Free Press, 1960.

Brannon, R., Juni, S., & Grady, K. A scale for measuring attitudes about masculinity. Brooklyn College, City University of New York, 1982.

DeVries, R. Constancy of generic identity in the years three to six. Monographs of the Society for Research in Child Development, 1969, 34, (3).

Ericksen, J.A., Yancey, W.L., & Ericksen, E.P. The division of family roles. Journal of Marriage and the Family, 1979, 41, 301-303.

Goldberg, R.J. Adapting time budget methodology for child development research: Effects of family variables on allocation of time to child rearing activities and developmental outcomes. Paper presented at Society for Research in Child Development, Boston, 1981.

Hoffman, L.W. Increased fathering: Effects on the mother. In M. Lamb & A. Sagi (Eds.), Fatherhood and social policy. Hillsdale, NJ: Erlbaum, 1983.

Hoffman, L.W. Parental power relations and the division of household tasks.

In F.I. Nye & L.W. Hoffman (Eds.), The employed mother in America. Chicago: Rand McNally, 1963.

Johnston, M. Sex role learning in the nuclear family. Child Development, 1963, 34, 319-333.

Johnston, J., Ettema, J., & Davidson, T. An evaluation of freestyle: A television series to reduce sex-role stereotypes. Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan, 1980.

Keshet, H.F. & Rosenthal, K.M. Fathering after marital separation. Social Work, 1978, 23, 11-18.

Kohlberg, L. A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. Macobby (Ed.), The development of sex differences. Stanford, CA: Stanford University Press, 1966.

Kotelchuck, M. The infant's relationship to the father: Experimental evidence. In M. Lamb (Ed.), The role of the father in child development. New York: Wiley, 1976.

Lamb, M. (Ed.), The role of the father in child development. New York: Wiley, 1976.

Lamb, M. Consequences of paternal involvement. In J. A. Levine, J. H. Pleck, M. E. Lamb & D. Klinman (Eds.), The future of fatherhood, forthcoming, 1984.

Lein, L. Parental evaluation of child care alternatives. The Urban and Social Change Review, 1979, 12, 11-16.

Levine, J.A. Who will raise the children? New options for fathers (and mothers). Philadelphia: J.P. Lippincott Co., 1976.

Levine, J.A., Pleck, J.H., Lamb, M.E., & Klinman, D. The future of

fatherhood. Forthcoming, 1984.

Lynn, D.B., & Sawrey, W.L. The effects of father-absence on Norwegian boys and girls. Journal of Abnormal and Social Psychology, 1959, 59, 258-262.

Marantz, S.A. & Mansfield, A.F. Maternal employment and the development of sex-role stereotyping in five to eleven year old girls. Child Development, 1977, 48, 668-673.

Mortimer, S., Hall, R., Hall, R. Husbands occupational attributes as constraints on wives' employment. Paper presented at meeting of American Sociological Association, 1976.

Mussen, P., & Rutherford, E. Parent-child relations and parental personality in relation to young children's sex-role pereferences. Child Development, 1963, 34, 589-607.

Nash, J. The father in contemporary culture and c· ·ent psychological literature. Child Development, 1965, 56, 261-297.

Parsons, T. Family structure and the socialization of the child. In T. Parsons, & R.F. Bales (Eds.), Family, socialization and interaction processes. Glencoe, IL: Free Press, 1955.

Perrucci, C., Porter, H.R. & Rhodes, D.L. Determinants of male family-role performance. Psychology of Women Quarterly, 1978, 3, 53-66.

Pleck, J. Husbands' paid work and family roles: Current research issues. In H. Lopata & J. Pleck (Eds.), Research in the interweave of social roles, Vol. 3: Families and jobs. Greenwich, CT: JAI Press, 1983.

Pleck, J. Changing patterns of work and family roles. Paper presented at meeting of American Psychological Association, Los Angeles, 1981.

Radin, N. Child rearing fathers in intact families. Merrill Palmer Quarterly,

1981a, 27, 489-514.

Radin, N. Wives of childrearing men. Paper presented at meeting of Society of Research in Child Development, Boston, 1981b.

Radin, N. & Russell, G. Increased father participation and child development outcomes. In M. Lamb & A. Sagi (Eds.), Fatherhood and social policy. Hillsdale, NJ: Erlbaum, 1983.

Rosenberg, M. Society and the adolescent self-image. New Jersey: Princeton University Press, 1965.

Russell, G. The father role and its relation to masculinity, femininity, and androgyny. Child Development, 1978, 49, 1174-1181.

Russell, G., & Radin, N. Increased paternal participation: The fathers' perspective. In M. Lamb & A. Sagi (Eds.), Fatherhood and social policy. Hillsdale, NJ: Erlbaum, 1983.

Sears, R.R., Rau, L., & Alpert, R. Identification and child-rearing. Stanford, CA: Stanford University Press, 1965.

Siegel, P.M. Prestige in the American occupational structure. Unpublished doctoral dissertation. University of Chicago, 1971.

Taylor, M.C. & Hall, J.A. Psychological androgyny: Theories, methods, and conclusions. Psychological Bulletin, 1982, 92, 347-366.

Vedovato, S. Exploring androgyny in children and their parents. Paper presented at meeting of American WP, Pittsburg, 1978.

Zuckerman, Personal communication, 1983.

FIGURE 1

THE SAMPLE

SEX OF CHILD / MATERNAL EMPLOYMENT STATUS		KINDERGARTEN	FOURTH GRADE
GIRLS	MOTHER WORKING	20	20
	MOTHER NOT WORKING	20	20
BOYS	MOTHER WORKING	20	20
	MOTHER NOT WORKING	20	20

Table 1

The Five Major Father Participation Variables

Variable	Operational Definition
Total interaction time	Number of hours per week the father spends in intermittent and intensive interaction with child.
Proportional interaction time	Ratio: Time the father spends per week in intermittent and intensive interaction divided by the total time both parents spend in such interaction.
Solo interaction time	The number of hours per week the father spends in intermittent and intensive interaction when the mother is out of the house or not interacting at all.
Solo performance of child care tasks	The mean proportion of the time the father alone performs 11 child-care tasks.
Performance of feminine chores	Ratio: The number of hours per week the father spends doing 5 traditionally feminine chores divided by the total time both parents spend doing those chores.

Table 2

Intercorrelations Between Father Participation Variables

Participation	2	3	4	5
1. Total interaction time	.54***	.30***	.28***	-.15*
2. Proportion of interaction time	-	.25***	.42***	.65***
3. Solo interaction time		-	.17*	.23**
4. Child-care tasks			-	.37***
5. Feminine home chores				-

Note: N = 160.

*p < .05. **p < .01. ***p < .001.

Table 3

Mean Interaction Times by Level for Fathers and Mothers as a Function of Child's Age, Workday Versus Non-Workday, and Maternal Employment Status

Fathers (n = 160)

Conditions	Level	Wife Employed $\bar{X}$	Wife Employed SD	Wife Non-Employed $\bar{X}$	Wife Non-Employed SD
Kindergarten[a]					
Workday	1	1.45	2.47	2.33	4.75
Non-Workday	1	4.03	2.98	4.03	3.42
Workday	2	6.20	4.92	4.95	5.17
Non-Workday	2	8.60	4.07	7.72	3.87
Workday	3	8.78	5.38	8.08	5.29
Non-Workday	3	8.73	3.86	9.10	4.67
Fourth Grade[b]					
Workday	1	4.23	3.75	3.15	3.56
Non-Workday	1	4.39	3.78	4.60	3.86
Workday	2	6.95	4.14	6.53	4.45
Non-Workday	2	7.61	4.08	7.63	3.87
Workday	3	7.74	4.26	7.00	4.33
Non-Workday	3	6.00	2.94	6.70	3.71

(Table continues)

Mothers (n = 160)

Conditions	Level	Employed $\bar{X}$	Employed SD	Non-Employed $\bar{X}$	Non-Employed SD
Kindergarten[a]					
Workday	1	6.33	6.35	8.82	6.12
Non-Workday	1	3.98	3.05	3.82	3.18
Workday	2	13.13	6.52	17.90	7.59
Non-Workday	2	8.03	3.69	9.00	3.39
Workday	3	16.03	6.58	20.97	7.06
Non-Workday	3	9.13	3.31	8.41	3.93
Fourth Grade[b]					
Workday	1	5.13	4.75	6.48	6.00
Non-Workday	1	4.42	3.92	5.13	3.20
Workday	2	12.23	5.25	14.30	6.09
Non-Workday	2	8.08	4.27	8.48	3.89
Workday	3	11.64	5.94	12.53	5.30
Non-Workday	3	5.79	3.19	6.65	4.41

[a] $n = 80$.

[b] $n = 80$.

Table 4

Mean Solo Interaction Time for Fathers and Mothers as a Function of Maternal Employment Status and Child's Grade

	Fathers (n = 160)	
	Wife Employed	Wife Non-Employed
Kindergarten[a]		
M	6.56	5.85
SD	5.98	5.57
Fourth Grade[b]		
M	4.54	4.78
SD	3.48	3.68

	Mothers (n = 160)	
	Employed	Non-Employed
Kindergarten[a]		
M	20.88	29.15
SD	9.96	10.80
Fourth Grade[b]		
M	11.79	15.70
SD	5.84	7.53

Note. The values represent mean number of hours for a typical week.

[a] n = 80. [b] n = 80.

Table 5

Time Fathers Spend in Home Chores as a Function of Sex Type of Chore and Maternal Employment Status

Type	Wife Employed		Wife Not Employed	
Feminine Chores				
Meal preparation	18		12	
Laundry	13		5	
Groceries	19		17	
Clean house	17		11	
Meal clean up	29		22	
Total Feminine Chores	19	SD = .3	13	SD = .12
Masculine Chores				
General repairs	70		75	
Pay bills	48		49	
Yard care	64		54	
Car care	44		58	

Note. The values represent mean percentages of the total time spent in each chore by both mothers and fathers.

Table 6

Intercorrelations Between Antecedents and Fathers' Participation for Fathers with Employed Wives

Antecedents	Father Participation: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Employment status and Pattern					
Hours worked per week					
Father	.11	.14	.12	.06	-.02
Mother	.39***	.44***	-.17	.37***	.41**
Flexibility of hours					
Father	.01	.10	.18	-.01	-.12
Mother	-.28**	-.18*	-.05	-.04	-.09
Demographics					
Age					
Father	.01	.21*	-.12	-.06	.04
Mother	.01	.18	-.07	-.13	.04
Education					
Father	.11	.19*	.11	.26**	.29**
Mother	.13	.27**	.05	.19*	.22*
Income					
Total family	-.08	.24*	.00	.23*	.32**
Mother	.27*	.21*	.05	.25*	.37***
Father	-.35***	-.19*	.07	-.30**	-.30**

(Table continues)

	Father Participation				
Antecedents	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Occupational prestige					
Father	.14	.18	.09	.36***	-.02
Mother	.17	.24*	.06	.28*	.05
Family structure					
Grade	-.28**	.09	-.22*	-.03	.04
Sex	.16	.03	-.20*	-.02	.01
No. of children	.05	.03	-.03	-.00	-.17
Child-care load	.22*	-.05	.17	.06	.05
Parental attitudes					
Belief re: Economic responsibility					
Father	20*	.21*	.02	.25*	.41***
Mother	19*	.11	-.13	.17	.35***
Importance of spouse's income					
Father	.16	.14	.06	.30**	.33**
Mother	-.05	-.08	-.12	-.10	.01
Importance of own income					
Father	.06	-.12	.12	-.36***	-.19*
Mother	.17	.08	.10	.30***	.24*

(table continues)

Antecedents	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Attitude toward male role					
Father	.04	-.14	-.02	-.12	-.40***
Mother	-.15	-.17	-.31**	-.01	-.31**
Parental socialization					
Evaluation of fathering received					
Father	.09	-.13	.01	-.05	-.09
Mother	-.06	.02	.01	-.03	-.17
Perceived quality of fathering received					
Father	.01	.03	-.05	-.10	.12
Mother	-.02	.01	.02	-.07	.01
Perceived availability of own father					
Father	-.02	.01	-.04	-.07	.11
Mother	.10	.06	.02	.03	-.05
Parents' task allocation					
Father	-.01	.09	-.00	.09	.13
Mother	.17	.02	-.07	.06	-.39***

Note. N = 80.

*p < .05. **p < .01, ***p < .001.

Table

Intercorrelations Between Antecedents and Fathers' Participation for Fathers With Non-Employed Wives

Antecedents	Father Participation: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Employment status and pattern					
Hours worked per week					
Father	.15	-.32**	-.08	-.17	-.08
Flexibility of hours					
Father	.13	.13	.03	-.17	.13
Demographics					
Age					
Father	.05	-.04	-.01	-.09	.03
Mother	.04	.02	-.05	-.07	.01
Education					
Father	.22*	.23*	.08	.01	.09
Mother	.04	.08	.12	-.02	.08
Income					
Total family	.06	.11	.04	.05	-.08
Father	.06	.11	.04	.05	.08
Occupational prestige					
Father	-.18	-.12	.04	-.06	.04

(table continues)

Father Participation

Antecedents	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Family structure					
Grade	-.12	.33**	-.11	.02	-.14
Sex	-.07	-.04	-.05	-.23*	-.08
No. of children	.03	.25*	.23*	.01	.05
Child-care load	.05	-.07	.12	.08	.05
Parental attitudes					
Belief re: economic responsibility					
Father	.11	-.06	-.14	-.02	.02
Mother	-.11	-.07	.10	.09	.18
Importance of own income					
Father	.16	.29**	.26*	-.02	-.02
Importance of spouse's income					
Mother	-.07	-.11	-.19*	-.18*	-.10
Attitude toward male role					
Father	-.18	-.10	-.07	-.08	-.22*
Mother	-.24*	-.21*	-.10	-.11	-.20*
Parental socialization					
Evaluation of fathering received					

(table continues)

	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Home Chores
Father	-.25*	-.22*	-.20*	-.24*	-.01
Mother	.06	.06	.13	-.09	-.01
Perceived quality of fathering received					
Father	-.20*	-.09	-.12	-.01	.03
Mother	.07	.06	.06	-.14	-.02
Perceived availability of own father					
Father	-.18	-.21*	-.22*	-.04	-.04
Mother	-.10	-.03	-.00	-.10	-.04
Parents' task allocation					
Father	-.17	-.10	-.11	.05	.17
Mother	-.12	-.02	-.16	-.03	-.04

Note. N = 78.

*p < .05. **p < .01. ***p < .001.

Table 6

Simultaneous Multiple Regression Analyses of Antecedents on Father Participation Variables for the Total Sample

	Father Participation Variables									
	Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child-Care Tasks		Feminine Home Chores	
Antecedents	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Employment status and pattern										
Hours worked per week										
Father	-.06		-.05		.07		-.05		.01	
Maternal employment status	.02		-.2[illegible]	11.21**	-.07		-.26	8.30**	-.14	
Demographics										
Total family income	-.05		.0-		.01		.16		.08	
Education										
Father	.18		.1[illegible]		.12		.08		.07	
Mother	-.05		.0[illegible]		-.01		-.02		.01	
Family structure										
Sex of child	.05		-.03		-.15		-.18	4.95**	-.04	
Child's grade	-.25	6.71*	.18		-.22	5.59*	-.07		-.03	
No. of children	.10		.16	4.48*	.19	6.07*	.06		.03	
Child-care load	-.05		.05		.06		.15		.04	
Parental attitudes										

(table continues)

	Father Participation Variables									
	Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child-Care Tasks		Feminine Home Chores	
Antecedents	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Importance of own income										
Father	.22	6.63*	.13		.24	8.64**	-.20	5.61*	-.02	
Attitude toward male role										
Father	-.03		.01		.02		-.04		-.18	4.53*
Mother	-.22	6.04*	-.21	6.04*	-.27	9.65**	-.04		-.16	
Beliefs re: economic responsibility										
Father	.09		.11		-.00		.12		.14	
Mother	.10		-.01		-.08		.03		.22	5.64*
Parental socialization										
Perceived quality of fathering received										
Father	-.16	3.92*	-.18	6.02*	-.16	4.50*	-.10		-.02	

Note. N = 158

[a]Standardized regression coefficients.

[b]Only F scores significant at $p < .05$ are reported.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 9

Simultaneous Multiple Regression Analyses of Antecedents on Father Participation Variables for Fathers with Employed Wives

	Father Participation Variables									
	Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child-Care Tasks		Feminine Home Chores	
Antecedents	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Employment status and pattern										
Hours worked per week										
Mother	.39	6.30*	.58	13.62**	-.04		.37		.31	5.14*
Flexibility of hours										
Mother	-.13		.04		-.07		.19		.02	
Demographics										
Income										
Father	-.14		.10		.21		-.05		.05	
Mother	.01		-.02		.12		-.02		.12	
Education										
Father	.05		-.03		.20		.08		.17	
Mother	-.08		.14		-.15		.15		-.07	
Family structure										
Child's grade	-.25	4.64**	.05		-.20		-.14		.03	
Parental attitudes										
Belief re:										
Economic responsibility										

(table continues)

Father Participation Variables

Antecedents	Total Interation Time		Proportional Interaction Time		Solo Interaction Time		Child-Care Tasks		Feminine Home Chores	
	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Father Attitude toward the male role	-.11		-.01		.10		-.04		.22	
Father	.02		.04		.07		-.08		-.18	
Mother	-.23	3.81*	-.24	4.02*	-.36		.03		-.24	10.00*

Note. N = 80

[a]Standardized regression coefficients.

[b]Only F scores significant at $p < .05$ are reported.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 10

Simultaneous Multiple Regression Analyses of Antecedents of Father Participation Variables for Fathers with Non-Employed Wives

	Father Participation Variables									
	Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child Care Tasks		Feminine Home Chores	
Antecedents	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Employment status and pattern										
Hours worked per week										
Father	-.10		-.25	6.57*	-.05		-.18		-.07	
Demographics										
Fathers' income	.10		.17		.05		.10		.07	
Fathers' education	.06		.07		-.04		-.04		.01	
Family structure										
Sex of child	-.06		-.03		-.06		-.25		-.13	
Child's grade	-.20		.09		-.24	4.91*	-.02		-.17	
No. of children	.08		.12	5.14*	.28	6.50*	.08		.11	
Parental attitudes										
Importance of own income										
Father	.20		.20	4.01*	.30	7.06**	-.07		.02	
Attitudes toward the male role										

(Table continues)

Father Participation Variables

Antecedents	Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child Care Tasks		Feminine Home Chores	
	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]	B[a]	F[b]
Father	-.05		.02		-.02		-.00		-.13	
Mother	-.25	4.09*	-.22		-.19		-.14		-.17	
Parental socialization										
Perceived quality of fathering received										
Father	-.27	6.48**	-.2-	6.17*	-.24	4.86*	-.23		-.02	

Note. N = 78.

[a]Standardized regression coefficients.

[b]Only F scores significant at p .05 are reported.

*p < .05. **p < .01. ***p < .001.

Table 11

Intercorrelations Between Fathers' Participation Variables and Role-Strain Consequences for Fathers with Employed Wives

	Fathers' Participation Variables				
Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Too little time or energy for:					
Family	.00	-.03	-.05	.07	.06
Work	.09	.16	.16	.31**	.25*
Self	.01	.14	-.03	.15	.13
Spouse	.00	.13	.12	.20*	.27**
Friends	.27**	.28**	.14	.21*	.15
Role conflicts					
Work with family	-.08	.10	.02	.19	.20*
Family with work	.08	.09	.06	.23*	.22*
Time for children	.13	.19*	.14	.00	.06
Time for chores	.10	.16	-.15	.02	-.02
Satisfaction with work flexibility	.19*	.25*	-.02	.17	.17
Spouse's role conflicts					
Work with family	.11	.22*	.21*	.43***	.43***
Family with work	.00	.15	-.04	.09	.20*

Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
	Fathers' Participation Variables				
Attitudes toward spouse					
Want spouse to do more/less child care	-.25*	-.23*	-.12	-.31*	-.16
Want spouse to do more/less chores	-.23*	-.05	-.09	-.10	-.12
Preference for wife's work status	.23*	.15	-.00	.06	.34***
Satisfaction with spouse's work schedule	-.37***	-.44***	-.40***	-.31**	-.32**
Satisfaction with spouse's time allocation	-.25	-.35***	-.43***	-.25*	-.22*
Perceived attitudes of spouse to self					
Spouse desires more/less/time for child care	.12	.28**	.15	.03	.11
Spouse desires more/less time for chores	-.13	.08	-.16	-.13	.13
Spouse's satisfaction with own time allocation	.10	.02	-.13	-.0-	.2-*

(table continues)

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 12

Intercorrelations Between Fathers' Participation Variables and Role-Strain Consequences for Employed Mothers

	Fathers' Participation Variables				
Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Too little time or energy for:					
Family	.14	.20*	.25*	.28**	.40***
Work	-.11	-.04	.21*	.06	.09
Self	.02	.00	.04	.13	.17
Spouse	.00	.03	.33***	.09	.09
Friends	.14	.13	-.05	.05	.05
Role conflicts					
Work with family	.12	.20*	.07	.23*	.48***
Family with work	-.05	-.09	-.15	.11	.17
Time for children	-.23*	-.17	.13	-.19	-.02
Time for chores	-.19*	-.13	-.18	-.13	-.04
Satisfaction with work flexibility	-.21*	-.23*	-.19*	-.07	-.05
Spouse's role conflicts					
Work with family	.02	.02	.07	.01	-.11

Role Strain	Fathers' Participation Variables				
	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Attitudes toward spouse					
Want spouse to do more/less child care	.10	-.01	-.08	.22*	-.16
Want spouse to do more/less chores	-.16	-.11	-.18	-.20*	.10
Preference for wife's work status	.11	.08	.09	.13	.32**
Satisfaction with spouse's work schedule	.20*	.15	.08	.04	.12
Satisfaction with spouse's time allocation	.10	.02	-.13	-.04	.24*
Perceived attitudes of spouse to self					
Spouse desires more/less/time for child care	.10	-.01	-.08	.22	.16
Spouse desires more/less time for chores	.04	-.05	-.12	.07	-.11
Spouse's satisfaction with own time allocation	-.14	-.23*	-.29**	-.26**	-.11

(table continues)

	Fathers' Participation Variables				
Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Husband's attitude towards wife work status	.11	.08	.09	.13	.32**

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 13

Intercorrelations Between Fathers' Participation Variables and Role-Strain Consequences for Fathers with Non-employed Wives

	Fathers' Participation Variables				
Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Too little time or energy for:					
Family	-.36***	-.14	-.02	-.04	-.06
Work	.06	-.02	.02	.26**	.06
Self	-.08	.04	.21*	.31***	.06
Spouse	-.19*	-.15	.21*	-.03	.01
Friends	.09	.18	.26**	.06	.17
Role conflicts					
Work with family	-.05	-.02	.02	.09	.01
Family with work	.01	.04	-.03	.33**	.14
Time for children	.03	.10	.14	.03	.05
Time for chores	.17	.21*	.06	.01	-.09
Satisfaction with work flexibility	.18	.11	-.02	.05	.05

Role Strain	Fathers' Participation Variables: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Attitudes toward spouse					
Want spouse to do more/less child care	-.01	-.20*	-.27**	-.31	-.03
Want spouse to do more/less chores	.07	.04	.07	-.10	-.01
Preference for wife's work status	-.18	-.03	.02	-.02	-.21*
Satisfaction with spouse's time allocation	.02	.06	-.06	-.01	-.05
Perceived attitudes of spouse to self					
Spouse desires more/less time for child care	.21*	.16	.13	.08	.11
Spouse desires more/less time for chores	-.02	.03	-.09	.09	.05
Spouse's satisfaction with own time allocation	.15	.14	-.00	.03	.07

*p < .05. **p < .01. ***p < .001.

Table 14

Intercorrelations Between Fathers' Participation Variables and Role-Strain Consequences for Non-Employed Mothers

	Fathers' Participation Variables				
Role Strain	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Too little time or energy for:					
Family	.07	.02	-.12	-.12	-.23*
Work	.04	-.05	-.02	.08	-.04
Self	.10	.11	.05	.02	.03
Spouse	.03	-.03	.07	.01	.01
Friends	.12	.16	.03	.15	.10
Role conflicts					
Time for children	.03	-.01	.03	.01	-.03
Time for chores	-.05	-.10	-.07	-.15	-.11
Spouse's role conflicts					
Work with family	-.06	-.05	-.04	.06	-.10
Family with work	-.01	-.03	.14	.07	-.06
Attitude towards spouse					
Want spouse to do more/less child care	.25*	.14	.24*	.21*	.27**
Want spouse to do more/less chores	-.02	.10	-.08	.17	.02

(table continues)

Role Strain	Fathers' Participation Variables				
	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Satisfaction with spouse's work schedule	.06	.01	-.01	.01	.26**
Satisfaction with spouse's time allocation	.06	-.12	.11	.01	.23*
Perceived attitudes of spouse to self					
Spouse desires more/ less time for child care	-.07	-.10	-.02	-.12	.07
Spouse desires more/ less time for chores	-.07	-.03	-.09	-.06	-.08
Spouse's satisfaction with own time allocation	-.05	-.24*	.00	-.13	.08
Husband's attitude toward wife's work status	-.09	-.07	-.10	.07	-.13

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 15

Intercorrelations Between Fathers' Participation Variables and Well-Being Consequences in Families with Employed Mothers

Consequences	Father Participation Variables: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Fathers with Employed Wives (n = 80)					
Parent Role					
Involvement	.17	.29**	.18	.29**	.14
Competence	.30**	.25*	.17	.28**	.21*
Attitude	-.04	-.17	-.14	-.02	-.01
Marital Role					
Satisfaction	.00	-.07	-.17	-.12	.06
Equity	-.28**	-.38***	-.15	-.18	-.18*
Rating of spouse as a parent	.06	-.14	-.29**	-.07	.02
General					
Work schedule satisfaction	.19*	.16	-.09	-.10	.00
Life satisfaction	-.12	-.02	-.12	-.01	.01
Self-esteem	.31**	.33**	.15	.18*	.14

(table continues)

Consequences	Father Participation Variables				
	Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Employed Mothers (n = 80)					
Parent Role					
Involvement	-.24*	-.27*	-.09	-.17	-.09
Competence	-.06	-.07	.02	.02	.13
Attitude	-.18*	-.16	-.22*	.09	.07
Marital Role					
Satisfaction	.00	.02	-.11	.02	.06
Equity	-.02	.03	.02	.06	.05
Rating of spouse as a parent	.18*	.17	-.06	.31**	.33**
General					
Work schedule satisfaction	-.21*	-.23*	-.25*	-.01	-.09
Life satisfaction	-.16	.11	-.36**	-.12	.06
Self-esteem	.22*	.21*	-.04	.21*	.15

* $p < .01$. ** $p < .01$. *** $p < .001$.

Table 16

Intercorrelations Between Fathers' Participation Variables and Well-Being Consequences in Families with Non-Employed Mothers

Consequences	Father Participation Variables: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Fathers with non-employed wives (n = 80)					
Parent Role					
Involvement	.45***	.34***	.07	.31**	.02
Competence	.30**	.16	.08	.20*	.10
Attitude	.04	.02	.04	.01	.00
Marital Role					
Satisfaction	-.14	-.11	-.17	-.11	-.14
Equity	-.14	-.21*	-.11	.00	-.06
Rating of spouse as a parent	-.07	-.10	-.00	-.15	.17
General					
Work schedule satisfaction	.08	-.04	-.1[illegible]	.01	-.04
Life satisfaction	-.06	-.11	-.13	-.17	.21*
Self-esteem	.16	.17	-.03	.19*	.17

(table continues)

Consequences	Father Participation Variables: Total Interaction Time	Proportional Interaction Time	Solo Interaction Time	Child-Care Tasks	Feminine Chores
Non-employed mothers (n = 80)					
Parent Role					
Involvement	.12	-.02	-.07	.04	.07
Competence	.02	-.13	-.13	.04	-.12
Attitude	-.15	-.10	.04	-.16	.02
Marital Role					
Satisfaction	-.16	-.15	-.12	.08	-.07
Equity	.10	.19*	.02	.19*	.09
Rating of spouse as a parent	.26*	.22*	.13	.19*	.11
General					
Life satisfaction	-.14	-.09	.05	.09	.04
Self-esteem	.01	.05	-.10	.20*	.14

* $p < .01$. ** $p < .01$. *** $p < .001$.

Table 17

Hierarchical Regression Analysis: Consequences of Fathers' Participation[b] - Fathers with Employed Wives

Predictor Variables	Step	Outcome Variables: Father's Self-Esteem B[a]	Father's Self-Esteem R^2	Father's Rating of Wife as a Mother B[a]	Father's Rating of Wife as a Mother R^2
Control Variables					
Total income	1	.15	.10*	-.26	.04
Father's education		.22*		.10	
Fathers' Participation					
Total interaction time	2	.31**	.19**	.10	.16*
Solo interaction time		.07		-.33**	
Child-care tasks		-.03		-.07	
Feminine home chores		-.06		.14	

Notes: $n = 80$.

[a]Standardized regression coefficient from the last step.

[b]Only analyses yielding significant F's are reported.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 18

Hierarchical Regression Analysis: Consequences of Fathers' Participation[b] - Fathers with Non-Employed Wives

		Outcome Variables			
		Father's Sense of Involvement		Father's Sense of Competence	
Predictor Variables	Step	B^a	R^2	B^a	R^2
Control Variables					
Total income	1	-.04	.03	.07	.11*
Fathers' education		.11		.26*	
Fathers' participation					
Total interaction time	2	.38**	.25**	.19	.18
Solo interaction time		-.04		-.04	
Child-care tasks		.21		.12	
Feminine home chores		-.10		.02	

Notes: $n = 80$.

[a]Standardized regression coefficient from the last step.

[b]Only analyses yielding significant F's are reported.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 19

Hierarchical Regression Analysis: Consequences of Fathers' Participation[b] - Employed Mothers

Predictor Variables	Step	Outcome Variables: Mother's Satisfaction With Life B^a	R^2	Outcome Variables: Mother's Rating of Husband as a Father B^a	R^2
Control Variables					
Family income	1	.18	.05	.03	.09*
Father's education		.06		.17	
Fathers' Participation					
Total interaction time	2	-.07	.20**	.09	.19**
Solo interaction time		-.34**		-.16	
Child-care tasks		-.13		.17	
Feminine home chores		.13		.19	

Notes: $n = 80$.

[a]Standardized regression coefficient from the last step.

[b]Only analyses yielding significant F's are reported.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 20

Gender Constancy Responses

	Both Answers Incorrect	One Answer Correct	Both answers Correct
Boys	22	2	16
Girls	17	7	16

Note: N = 80

Table 21

Gender Constancy Scores on Male and Female Items by Sex: Percent Correct

	Boys	Girls
Male stimulus	51.3	47.5
Female stimulus	41.0	57.5

Note: N = 80

Table 22

Children's Occupational Aspirations: Means and Standard Deviations of Traditionality and Prestige

	Traditionality		Prestige	
	$\bar{X}$	SD	$\bar{X}$	SD
Kindergarten				
Girls	2.11	1.17	50.83	15.44
Boys	2.82	0.72	51.03	13.95
Fourth Grade				
Girls	1.82	1.31	53.65	16.38
Boys	2.76	0.83	56.32	13.07

Table 23

Means and Standard Deviations: Children's Sex Role Stereotyping Measures: Kindergarten (n = 80)

	Boys		Girls	
	$\bar{X}$	SD	$\bar{X}$	SD
Scales: Total[a]				
Activities				
Preference	2.37	.23	2.28	.20
Competence	2.57	.22	2.42	.49
Stereotypes	2.02	.42	2.02	.50
Adult Occupational Roles				
Preference	2.27	.26	2.27	.43
Stereotypes	2.05	.38	2.02	.54
Perceived difficulty	-.09	.46	.46	.46
Competence	2.50	.22	2.41	.48
Sex composition	2.51	.22	2.43	.63
Adult Family Roles				
Stereotypes	2.50	.27	2.37	.72
Difficulty	.11	.48	.39	.56
Own family	2.51	.26	2.39	.63
Photography[b]	14.29	2.42	13.98	2.91

[a]All scales (except photography measure) are 3-point scales

[b]Range = 9-18

Table 24

Means and Standard Deviations: Children's Sex Role Stereotyping Measures: Fourth Grade (n = 80)

	Boys		Girls	
	$\bar{X}$	SD	$\bar{X}$	SD
Scales: Total Activities				
Preference*	3.04	.26	2.81	.57
Competence**	3.82	.31	3.58	.65
Stereotypes*	2.35	.45	2.17	.54
Adult Occupational Roles				
Preference*	2.95	.32	2.69	.52
Stereotypes*	2.45	.52	2.05	.51
Perceived difficulty*	.60	.45	.54	.33
Competence**	3.74	.29	3.48	.86
Sex composition**	4.00	.30	3.91	.67
Adult Family Roles				
Stereotypes**	3.70	.43	3.57	.62
Difficulty*	.36	.51	.55	.38
Own family**	3.78	.36	3.70	.68
Photography[a]	14.23	2.01	13.41	1.71

*4-point scale

**5-point scale

[a]Range = 9-18

Table 25

Mean Stereotyping Scores by Grade and Maternal Employment Status

	Kindergartners (n = 80)		Fourth Graders (n = 80)	
	$\bar{X}$	SD	$\bar{X}$	SD
Means				
Mother				
Employed	-.73	.32	.79	1.03
Non-employed	-.76	.65	.74	.44
Total	-.74	.51	.76	.78

Table 26

Percent Stereotyped Responses:

Photography Situation

Item	Kindergarten		Fourth Grade	
	Boys	Girls	Boys	Girls
Football/jump rope	61.0	70.0	77.5	46.2
Train/dollhouse	68.3	65.0	79.5	53.8
Model kit/embroidery	51.2	50.0	62.5	66.7
Pilot/nurse	78.0	60.0	85.0	56.4
Police/secretary	46.3	55.0	27.5	71.8
Doctor/librarian	22.0	47.5	22.0	20.5
Shovel snow/serve dinner	61.0	52.5	40.0	23.1
Fix pipe/clean house	53.7	52.5	52.5	53.8
Fix car/baby care	73.2	50.0	80.0	48.7

Table 27

Zero-Order Correlations of Children's Mean Stereotyping and Fathers' and Mothers Participation Variables

	Kindergarten		Fourth Grade	
Participation	Employed	Non-Employed	Employed	Non-Employed
Fathers				
Total interaction time	.06	.15	-.30*	-.03
Proportional interaction	.08	.16	-.25	-.22
Solo interaction time	-.13	.10	.05	-.09
Child-care tasks	.09	.04	-.36*	.07
Feminine home chores	-.06	.01	-.39*	.03
Mothers				
Total interaction time	-.15	-.06	-.06	.28*
Proportional interaction	-.01	-.16	.25	.22
Solo interaction time	-.12	-.17	.02	.05
Child-care tasks	.10	-.05	-.01	-.04

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 28

Multiple Regression Analyses:

Stereotyping Scores of Fourth Grade Children

		Father Participation Variables									
		Total Interaction Time		Proportional Interaction Time		Solo Interaction Time		Child-Care Tasks		Feminine Home Chores	
Predictors	Step	B[b]	R^2	B[b]	F^2	B[b]	R^2	B[b]	R^2	B[b]	R^2
Control Variables[a]											
Child's sex		-.12		-.12		-.14		-.13		-.13	
Maternal employment status		-.04		-.06		-.03		-.07		-.10	
Mother's attitude	1	-.02	.17*	-.03	.17*	-.03	.14	-.06	.17*	-.10	.18
Father's attitude		.31*		.32*		.33*		.32*		.29*	
Father's participation		-.16		-.18		.01		-.18		-.23	
Interactions											
Participation x:											
child-sex[c]	2[d]	-.14	.17	.33	.18	.24	.15	-.58	.19	-.45	.20
maternal employment status	2	.65	.19	1.10*	.20	.32	.15	1.30*	.24	1.00**	.28
mother's attitude	2	1.25*	.22	-1.13*	.26	.36	.16	2.12**	.29	.65*	.24

Predictors	Step	Father Participation Variables: Total Interaction Time B^b	R^2	Proportional Interaction Time B^b	F^2	Solo Interaction Time B^b	R^2	Child-Care Tasks B^b	R^2	Feminine Home Chores B^b	R^2
Father's attitude	2	-.92*	.21	-.133*	.21	-.75*	.20	-.75	.20	-.72**	.28

Note. N = 67. High stereotyping scores reflect high stereotyping.

[a]For step 1, df = 5, 61.

[b]For step 1 standardized regression coefficients are reported before the interactions were entered.

[c]Separate equations were estimated for each participation variable with each interaction term.

[d]For step 2, df = 6, 60.

*p < .05. **p < .01.

I.D.# _____

SAMPLE APPENDIX

TYPICAL SCHOOL WEEK

		7 a.m.	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
MONDAY	Child																	
	Dad												2	2	3			
	Mom											2	2	2	3			
TUESDAY	Child																	
	Dad																	
	Mom																	
WEDNESDAY	Child																	
	Dad																	
	Mom																	
THURSDAY	Child																	
	Dad																	
	Mom																	
FRIDAY	Child																	
	Dad																	

APPENDIX

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