

AN ABSTRACT OF THE THESIS OF

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The study examined dimensions of the family context associated with variations in parent involvement and parent perceptions of children's school achievement using data from 1,085 male and 2,239 female respondents with a child between the ages of 5 and 18 years collected in the 1987-88 National Survey of Families and Households. Small but significant differences in parent perceptions of school achievement were found in favor of children being raised in a first-married two-parent home. Negative effects on school outcomes were centered on children who experienced family disruption. Living in a one-parent household with a parent who was previous married was associated with parent reports of poorer performance for elementary school children and lower grades for adolescents. Neither living in a one-parent household with a continuously single parent nor living in a stepfamily was significantly related to achievement. Parent employment status was not directly related to children's achievement but did have indirect effects through parent involvement both at home and school.

Parent involvement at school and in child-centered home activities was associated with perceptions of improved school performance for elementary school children and higher grades for adolescents. Mothers were more likely to be involved in children's schooling than fathers. Single and cohabiting mothers were less involved at school than first-married mothers, but single fathers tended to be more likely to participate than their first-married counterparts. There were no significant differences between the home involvement of single mothers and their first-married counterparts but single fathers were more involved at home than first-married fathers. For both mothers and fathers, receiving tangible aid from a wide network of relatives and friends was associated with higher levels of school and home involvement.

Findings suggest that educators who have negative beliefs about single parents' engagement in school-family partnerships may be influenced by these parents' low presence at school. Recognizing that single parents are as involved with their children at home as parents in traditional families can lead to educational practices that support home involvement and result in positive effects on children's academic progress.

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on Perceptions of Children's School Achievement

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"To strive, to seek, to find, and not to yield . . . "

Alfred, Lord Tennyson

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# THE EFFECTS OF THE FAMILY CONTEXT AND PARENT INVOLVEMENT ON PERCEPTIONS OF CHILDREN'S SCHOOL ACHIEVEMENT

## CHAPTER ONE

### INTRODUCTION

American schools face a difficult period as the social milieu in which children are growing up is increasingly characterized by poverty, family disruption and mobility, and the blight of substance abuse (Maeroff, 1992). Efforts to provide effective instruction in this context often are impeded because parents may not reinforce education once children enter school. There is widespread agreement that if children are to achieve success, schools must establish cooperative relationships with parents and secure their involvement and interest.

During an education summit in 1989, then President Bush and the nation's governors established six National Education Goals to create a "world-class education system" by the year 2000. The first goal specifies that every child in America will start school ready to learn. To achieve this objective, parents must have access to training and support needed to fulfill their role as their child's first teacher (National Education Goals Panel, 1992). This initiative followed a report from the National Association of State Boards of Education urging the adoption of new initiatives to increase parent involvement in schools (Schultz & Lombardi, 1989).

Calls for increased parent involvement are based on a large body of research that finds parent support and encouragement essential to

children's school success, particularly for low-income and minority children (Coleman, 1987; Comer, 1988; Epstein, 1983; Reynolds, 1991, 1992; Stevenson & Baker, 1987). Epstein (1987a) notes compelling evidence that "parental encouragement, activities, and interest at home and participation in schools and classrooms affect children's achievements, attitudes, and aspirations, even after student ability and family socioeconomic status are taken into account" (p. 120).

At the same time educators are reaffirming the critical role parents play in achieving educational objectives for their children, they are confronted with a new reality of American families. Family structure has become considerably more diverse in recent decades. During the 1980s alone, every kind of "atypical" family increased in number, while the "typical family" consisting of a married couple with children actually declined by approximately 1% (Hodgkinson, 1991). And although the dual-earner family has been a modal type for the past 20 years (Hoffman, 1989), an ever-increasing number of mothers with school-age children are in the labor force. Single parents, who manage household responsibilities and child care without the support of a partner, may have less time and energy to spend with children on school-related activities. Working outside the home can further limit time available for participation in children's school activities.

As schools move toward forming stronger linkages with families, there is a need for research that sheds light on how these changing patterns of family life relate to actual parental involvement in children's education and to children's subsequent school performance.

Two major aspects of the family context, the family structure and the employment status of the mother, are of particular concern to educators as

they seek higher levels of parent involvement in children's schooling. The purpose of this study is to provide empirical evidence on how these characteristics and other aspects of the family context relate to parental involvement with their children and what effect such involvement has on school achievement.

### Changing Family Patterns

The number of children living in one-parent homes has increased markedly from 7.4% of all families in 1960 to over 24% in 1990. During the 1980s alone, mother-only families increased by 35.6% and father-only families grew by 29.1% (Hernandez, 1992). While in 1970, one out of every 10 families with children under 18 was a single-parent household, that proportion has recently increased to almost three out of every 10 families (Norton & Miller, 1992). Single mothers head the majority of these households with a small number being headed by single fathers. By 1991, 23.1% of all children under 18 years of age were living in mother-only households with an additional 3.2% in father-only homes (U.S. Bureau of the Census, 1992b).

Single parenthood varies considerably by race, ethnic background, and the route taken to single headship of family. Divorce is the most common path to single parenthood for Anglo-Americans whereas the route through non-marital fertility is more common for African-Americans (Wojtkiewicz, 1992; Wojtkiewicz, McLanahan, & Garfinkel, 1990). In 1992, approximately 78.7% of Anglo children lived with two married parents in comparison to 66.9% of children with an Hispanic background and only 38.5% of African-American children. In sharp

contrast, only 4% of Anglo children lived with a never-married single parent while 10.3% of Hispanic children and 33.1% of African-American children lived in this type of household (U. S. Census, 1992a). Estimates indicate that almost half of all children in America, approximately one-third of Anglo-American children and four-fifths of African-American children, will spend some portion of their childhood living in a single-parent home (Bumpass & Sweet, 1989).

The diversity of two-parent families has also changed over the past decade with more stepfamilies than ever before. Stepfamilies constituted 16.1% of all two-parent families with children under age 18 in 1980 but by 1990 that proportion had grown to 20.8% (Norton & Miller, 1992). Further, since the 1970s, there has been a great increase in cohabitation. This family arrangement appears to be relatively transitory as "about half of all cohabiting relationships result in either marriage or a break-up within one-and-a-half years, and 90% do so within five years" (Cherlin, 1992, p. 14).

Finally, women with children under the age of 18 have been entering the labor force at an ever increasing rate. The proportion of two-parent families in which both parents were employed expanded by more than one-half between 1970 and 1990 (Hernandez, 1992). Census data indicate 27.6% of married women with children under the age of 18 years were in the labor force in 1960 but by 1990, that percentage had grown to 66.3%. More single than married mothers were in the labor force during the earlier time, but in 1990, the differences between the two groups were considerably reduced (U. S. Bureau of the Census, 1992a).



## Images of Families

Even though family demographics have changed dramatically in recent decades, an idealized version of the traditional family as a two-parent home with a breadwinner father and a housewife mother is deeply ingrained in American culture (Bernard, 1981). Similar to the genetic code that provides a blueprint for development, an ideological code creates a blueprint of "the standard North American family" (Smith, 1993). This view of the normative family as a legally married couple sharing a household where the husband's primary role is to provide economic support for the family and the wife's primary role, regardless of her own employment, is caring for the husband, household, and children, is endemic throughout the school system. Integral to this conception is the mother's role in managing the children's education and serving as the family liaison to the public school system.

Many schools are still designed to educate children from these "traditional" two-parent families. When children come from families that do not fit this idealized image, they are often regarded by teachers as being deficient (Smith, 1993). Articles offering advice to teachers on meeting the needs of single-parent families are common in the education literature (Duncan, 1992; Olson & Haynes, 1992). Teachers are warned that children's academic achievement may lag, that they may behave inappropriately at school, and that they are likely to suffer from a poor self-concept (Wanat, 1992).

Stereotypes about the relationship of family structure to potential parent involvement may interfere with the formation of school-family partnerships, leading teachers to perceive both children and parents from

one-parent homes less favorably than those living in two-parent homes. Kamerman and Kahn (1988) point out that "the 'single parent family' is almost a euphemism in the popular culture for 'problem family' " (p. 1). Smith (1993) describes a colleague's and her own experience as single parents researching the work that mothers do in relation to their children's schooling: "we shared confidences, complaints, miseries . . . as being, vis à vis the school, 'defective families,' families that somehow did not match up to the parental roles defined as proper by the professional ideology of the school system" (pp. 53-54).

Evidence suggests that children from one-parent homes are perceived less favorably than children from two-parent homes. In a meta-analysis of family structure stereotypes, Ganong, Coleman, and Mapes (1990) found that children whose parents are married are evaluated more positively than children whose parents are not married. Teachers viewing a videotaped sequence of an eight year old rated the child as having lower levels of emotional adjustment and less ability to cope with stress when they thought the parents were divorced (Santrock & Tracy, 1978). The common description of a one-parent household as a "broken home" suggests a moral judgment has been made about the quality of family life when only one parent is present. These stereotypes are underscored by numerous research findings that point to lowered school achievement and social adjustment for children from single-parent homes, even after controlling for socioeconomic factors (Astone & McLanahan, 1991; Guidubaldi & Perry, 1984; Keith & Finley, 1988; Mulkey, Crain, & Harrington, 1992).

Family structure is related to teacher evaluations of both children and parents. When a child is from a one-parent home, teachers tend to

have lower expectations for achievement, rate the quality of the children's homework lower, and have negative associations for classroom behavior (Delaney, Richards, & Strathe, 1984; Epstein, 1990b; Fuller, 1986; Guttman & Broudo, 1989). Teachers also rate single parents as less helpful and less likely to follow through with home learning activities (Epstein, 1990b).

Are these stereotypes justified? Does family structure relate to measures of parent involvement? Family school partnerships imply a commitment from both school and parents to work together for children's success. On the side of the parents, these partnerships encompass a broad range of activities including (a) creating home conditions supportive of school learning (e. g., reading to a child or insuring that a child completes homework); (b) participating in school activities by volunteering in the classroom, coming to school to watch student performances, or attending school events; and (c) serving on policy and decision making bodies such as parent-teacher organizations or school policy committees (Epstein, 1987b, 1990a).

Research on the relationship between family structure and parent involvement is mixed. Single mothers spend more time interacting with children at home than mothers in two-parent families (Asmussen & Larson, 1991; Epstein, 1990b) but total interaction time (including fathers in two-parent families and extended family members in single-parent families) does not differ between the two types of households (Asmussen & Larson, 1991). Children in single-parent families, stepfamilies, and two-parent families with first-married parents report mothers equally likely to assist with homework and to talk over personal problems (Amato, 1987).

Single parenting is associated with significantly greater volunteer participation in religious but not educational activities (Sundeen, 1990). Married parents, in contrast to those who are single, spend more days in the school as volunteers, classroom helpers, or at school meetings than single parents. But single parents report spending more time helping their children at home than married parents (Epstein, 1990b).

Studies relating family structure variables to parent involvement in their child's schooling are limited in three ways. First, single parents are treated as a unified group. No distinction is made among those who have been previously married and those who have been continuously single. The route to single parenthood may be related to differing levels of parent involvement and children's school achievement but these questions have not been addressed.

Not only do research studies fail to distinguish between different types of single parents, but existing studies tend to focus on mother-only families. Father-only families accounted for 12% of single parent households in 1991 (U. S. Bureau of the Census, 1992b) and the proportion of this type of family has grown by 29% during the past decade (Hodgkinson, 1991). Comparisons of parenting relationships in father-only and mother-only families yield few differences. Research has shown single fathers fulfill both instrumental and expressive functions of parenting and report similar levels of parenting satisfaction to mothers (Grief, 1985; Risman & Park, 1988), but no information exists on the effect of parent gender on involvement in children's schooling.

A second limitation in existing research relates to methodology. Few of the existing studies focusing on parent involvement in school activities and organizations were based on random samples of nationally

representative populations, hampering the generalizability of any findings. Those which did rely on national data sets focused on either primary-aged children or adolescents and had limited access to variables describing the child's family context. Further, much of the data were collected in the early part of the 1980s. Changes in family demographics over the last decade coupled with renewed emphasis on parent involvement practices in school districts could make substantive differences in findings.

A third weakness in the existing empirical work is a lack of analysis of family processes that could affect levels of participation. In a recent review of parent-child relations, Demo (1992) argued that family researchers, influenced by traditional ideas of the normative family, have spent too much time comparing single parent to "intact" families and not enough effort on the correlates and processes that may mediate the effect of family structure on child outcomes. Parent involvement both in child-centered activities at home and in school-related activities affects children's school performance (Henderson, 1987; Hess & Holloway, 1984). But the relationship that parent involvement may play between family context variables and children's school outcomes has not been actively explored.

Explanations for variations in parent involvement are drawn from two theoretical perspectives. Mothers are more likely to be involved with children than fathers, both at home and in school-related activities and organizations, suggesting that parent involvement is a gendered activity (Lareau, 1987, 1989; LeBlanc, 1992). From an individualist perspective, this behavior is viewed as an enactment of an internalized gender role that has developed through past experience and socialization processes

(Chodorow, 1978, 1989; Maccoby, 1988). From a microstructural perspective, contextual factors are believed to be more important than internalized gender roles in determining levels of participation (Risman & Schwartz, 1989). Single fathers may have higher levels of participation than married fathers who have a spouse to carry out school-related activities. The salience of the parenting role, as measured by the degree of commitment to parenting activities (Stryker, 1980), may also depend upon situational factors.

### Purpose of Study

The purpose of this study is to explore dimensions of the family context associated with variations in parent involvement and then to link these dimensions to variations in children's school performance. Within the social ecology of the family, dimensions relating to children's educational progress are identified using a person-process-context model (Bronfenbrenner & Crouter, 1983). This ecological model provides a conceptual framework for going beyond a comparison of individuals at certain "social addresses" such as family structure, and proposes that the individual characteristics of the person, aspects of the family context, and psychological and social processes interact to produce outcomes. Parental characteristics (gender, education, age, and ethnicity), child characteristics (age, gender, and relationship to the parent) and the family context (family structure, parent employment status, family composition, family income, and social support) are all conceptualized as relating to parental involvement with children at home and in school activities, and to children's school performance.

The study is designed to determine which aspects of the family context are associated with variations in parent involvement in children's schooling and with children's school achievement. Specifically, the study seeks to:

1. Examine the effects of the family context and parent/child characteristics on the processes of parental involvement both at school and at home and,
2. Determine how the family context, the individual characteristics of parents and children, and the parent involvement processes affect children's school achievement.

Data from the 1987-88 National Survey of Families and Households (Sweet, Bumpass, & Call, 1988) are used to examine these questions. This national probability survey of 13,017 households oversampled minorities, single-parent families, cohabiting parents, and families with stepchildren making it particularly useful for examining the questions asked in this study. The survey has the advantage of providing information on a wide range of variables relating to family life that can be used to describe patterns relating to parent involvement in both child-centered activities at home and school-related activities and organizations. While the data are cross-sectional and hence, can only suggest causal relationships, the scope of the survey will permit an exploratory analysis of differing family contexts and their relationship to parent involvement and child school performance.

## CHAPTER TWO

### REVIEW OF LITERATURE

The review of literature begins with a brief historical description of parent involvement in children's education, which some readers may find useful in providing a context for the issues to follow. Next, theoretical perspectives offer explanations for variations in levels of parent involvement from individualist and microstructural perspectives. Implications for the effects of family structure on parent involvement will be drawn.

A short background analysis of the dramatic changes in demographic patterns that have created the diverse family types and living conditions that children experience today will be followed by a review of empirical studies relating family structure variables to children's school achievement and educational attainment. Then, after identifying typologies for distinguishing among parent involvement activities, empirical research relating parent involvement to children's school performance will be described. The next section centers on research findings documenting the effects of the family context and parent-child characteristics on parent involvement activities. Gaps in the knowledge base and limitations of existing studies will be identified.

An integrated model specifying the effects of the family context and parent-child characteristics on parent involvement activities and child outcomes will be proposed to provide a conceptual framework for studying parent involvement and its role in supporting children's school achievement and educational attainment.



## History of Parent Involvement in the Schools

In colonial America, the family was the primary institution for socializing and training children. Fathers bore the major responsibility for children's formal education. Under common law, it was considered the duty of parents to provide children with an education appropriate to their station in life. Legal authority for children was accorded to fathers with "mothers entitled to no power, but only to reverence and respect" (Mnookin & Weisberg, 1989, p. 179). However, fathers could delegate part of their parental authority to tutors or schoolmasters who then acted in loco parentis (or in place of the parent). Education and religion were intimately linked with the primary purpose of formal schooling directed toward teaching children to read the Bible (Moran & Vinovskis, 1986).

During the latter part of the 18th century, fathers continued to hold legal power for the children, but as families became gradually less involved in church life, responsibility for children's education tended to shift to mothers (Moran & Vinovskis, 1986). Children learned crafts and other occupational skills needed for adult life at home. But when specialized occupational skills grew in importance during the industrialization of the 19th century, schools became more common. Parents increasingly sought educational opportunities for their children outside the home as apprenticeship practices declined and people realized the important economic consequences of education (Vinovskis, 1992).

The major responsibility for educating children to become productive members of society began to move outside the family as schools flourished. The enactment of compulsory school attendance legislation set the stage for a nationwide cultural shift in responsibility for children's education

and a separation of spheres of influence. Parents provided economic and political support for the growing school system, but the control of schools gradually passed from the community to professional educators. Schools, extending the socializing process begun in the family, were responsible for educating children to become productive citizens while families, and mothers in particular, were viewed as instrumental in molding the child's character (Perry & Tannenbaum, 1992).

As the 20th century approached, substantial interest among middle- and upper-class mothers in children's growth and development led to the child study movement, directed toward educating parents and future parents. By 1932, parent education courses were offered in at least 25 states (Brim, 1965). Mothers were also becoming involved in children's schooling. In 1897, the National Congress of Parents and Teachers was organized by a group of mothers to achieve two major goals: parent education and the enlisting of parents in improving educational conditions for children. But as the educational bureaucracy grew and the expertise of educators increased, parent-teacher associations (PTAs) and parent-teacher organizations (PTOs) met some resistance in bringing parents into schools and classrooms in a teaching capacity and the gulf continued to widen between school and family roles in children's education. Analysts have suggested that these organizations became institutionalized ways of establishing boundaries between school and home (Lightfoot, 1978). Once children entered school, the professional staff became responsible for the "real" work of educating the children, with parents, through the PTAs, responsible for raising funds and organizing extracurricular events.

Renewed efforts to involve parents directly in the life of the schools began in the 1960s when Great Society programs uncovered the depths of

exclusion, low self-esteem, and hopelessness felt by many low-income parents (Comer, 1980). Programs such as Head Start and its kindergarten counterpart, Follow Through, viewed parent involvement in all aspects of the program as being a key ingredient to children's healthy development and learning. Parents were encouraged to become involved not only in the classroom but both in program decision making and advocacy roles (Collins, 1993; Zigler, Styfco, & Gilman, 1993). Volunteering made a difference in parents' lives. As one parent noted:

I began volunteer work at Fuller School only because I hadn't anything else. Same old things every day: watch soap operas and game shows and I enjoyed doing that! But, my first day as a volunteer changed me. I learned that by being at school with my children, they would do good [sic], and I would learn along with them. The children are my future (quoted in Schlessman-Frost, 1993, p. 4).

Another thread leading to increased parent involvement in children's schooling can be traced to the 1970s. When the Education for All Handicapped Children Act of 1975 (P.L. 94-142) was passed in 1975, parents were given equal footing with teachers and specialists in planning educational programs for children. P.L. 94-142 mandated meeting handicapped children's needs in the least restrictive environment and became synonymous with the term "mainstreaming." For each child, an Individualized Education Program (IEP) is established jointly by teachers, parents, and any specialists who may be involved in the child's education. This emphasis on direct parent involvement in special education set the stage in many schools for strengthening of all family-school relations.

In the majority of American public schools during the 1960s and 1970s, however, home and school remained separate spheres of influence (Dixon, 1992; Lightfoot, 1978). With the publication of A Nation At Risk (National Council on Excellence in Education, 1983), calls for school

reform took on new urgency. As evidence mounted for the value of parent involvement, the necessity of establishing partnerships between schools and families to support children's healthy development and learning became apparent (Comer, 1988; Epstein, 1987a; Hess & Holloway, 1984). The 1980s saw schools moving from a role of professional dominance with parents as passive participants to schools attempting to form collaborative, equal relations with parents with greater reciprocity in levels of power and influence. In many districts, this has led to a realignment of relations between school staff and parents with increasing attention on the social context of family functioning (Powell, 1989).

The concept of a school-home partnership embodies this trend. Students and parents, acting in concert with schools, are viewed as "co-producers" of education. Children's educational success is no longer viewed as the exclusive responsibility of the schools nor is education something to be simply doled out by the schools. Responsibility for a child's education is shared by the school and the family (Davies, 1987). Parent involvement provides the link between home and school, a link crucial to developmental continuity, and an indispensable element for learning. The partnership philosophy emphasizes two-way communication, parental strengths, and problem-solving with parents as joint participants (Swap, 1993).

Increased attention from school personnel to developing family-school partnerships has led to a concomitant increase in parent involvement in a variety of school activities and organizations over the past decade. PTAs and PTOs (the latter being parent-teacher organizations which do not pay membership dues to the national PTA) have seen a gradually increasing membership, particularly in urban and suburban

areas. PTA membership tends to come from the middle class, with low representation from minorities. Participating parents tend to be well-educated women who have stable residence patterns within the community (LeBlanc, 1992).

In summary, all cultures teach their young skills to survive and function as productive adults in society. By the beginning of the 20th century, the major responsibility for these educational endeavors had shifted from the family to the schools. Parents provided school support in economic and political spheres but were involved in formal school activities primarily through PTAs and PTOs. These organizations tended to focus on parent education and ways parents could help to improve school conditions for their children, mainly through fundraising and other supportive functions. During the 1960s, educators and policymakers recognized the power of parent support to enhance children's school achievement, and through federal legislation, mandated that schools serving low-income children encourage active parent involvement in programs. By the 1980s, faced with a nationwide decline in children's school achievement, policymakers and educators identified parental involvement as a critical component in creating more effective schools, calling for the establishment of school-family partnerships where schools and parents worked together as co-producers of educational outcomes.

### Theoretical Perspectives on Parent Involvement

The responsibility for interacting with schools on behalf of children has been part of the wife-mother role in America since the early part of the 18th century. In an influential analysis of family roles, Bernard (1981)

points to a pervasive conception during this period of the father as a "good provider" who works outside the home to insure the family's economic well-being while the mother manages the household and cares for the children and her husband. Even when mothers are employed outside the home, this normative expectation for the fulfillment of household and child care duties does not change. To meet this expectation, women engage in what Hochschild (1989) has termed a "second shift," spending an average of 15 hours per week in household labor and child care in addition to time spent employed outside the home. Employed mothers typically use weekend and leisure time to catch up on housework while employed fathers are more likely to use this time for personal relaxation or in leisure activities with children (Hochschild, 1989).

Normative expectations for the homemaker-mother role extend beyond daily responsibilities of child care and, as children grow older, include supervising and monitoring children's educational progress. Mothers far outnumber fathers in school participation (except in leadership positions in PTAs or PTOs) suggesting that parent involvement in children's schooling continues to be a gendered activity (Lareau, 1987, 1989; LeBlanc, 1992).

Parenting behavior has typically been described as springing from biological and psychological roots defining the roles of men and women (Chodorow, 1978, 1989; Rossi, 1984). But recent evidence points to the importance of social forces as influential in parents' construction and enactment of the parenting role (LaRossa & LaRossa, 1989; Risman & Park, 1988). Barbara Risman and Pepper Schwartz (1989) have contrasted individualist theories that describe gendered behavior as internalized in the person with a microstructural approach based on symbolic

interactionism where gendered behavior continues to be shaped over the life course by the social setting. Distinguishing theories according to these dimensions offers a useful framework for examining variations in parent involvement.

Individualist theories. From a psychological perspective, gendered behaviors evolve in a person partially as a result of biological differences but primarily from socialization experiences that teach sex-typed gender roles. As girls and boys experience differential reinforcement patterns and gender-stereotyped expectations during childhood, they develop different personality traits, skills, and activity preferences that constitute gender roles (Maccoby, 1988). These gender roles are internalized representations of appropriate male and female behavior resulting from common cultural beliefs. In American culture, men are viewed as instrumental, dominant, and assertive in their behavior, and more achievement-oriented. In contrast, women tend to be characterized as more emotionally expressive, warm and caring, and sympathetic in their relationships with others.

When adults differentially respond to and reinforce children, even very young children begin to act in gender-stereotyped ways. For example, Fagot and her associates (1985) have shown communication patterns among 12-month-old children entering a toddler play group are similar for boys and girls. But as teachers begin to pay more attention to assertive communications from boys and to gentle communications from girls, the patterns begin to diverge.

Coming from a psychoanalytic orientation, Nancy Chodorow (1978, 1989) has theorized that these separate gender roles evolve from the mother-child relationship. She argues that mothers treat their boy infants

as different and separate from themselves whereas they are much more likely to relate to their girl babies as an extension of themselves. These differential modes of treatment yield different patterns of functioning. From this early time, children are hypothesized to develop either a self that is independent and autonomous in the case of boys or a self that is related and connected to others, in the case of girls. While family patterns create these internalized gendered personalities, Chodorow has emphasized that the social structure of the culture maintains and reinforces them. She believes that women's relationships are embedded in a diverse, intergenerational network of mothers, grandmothers, aunts, and other females whereas men tend to operate in a single-generation world not tied to kin where "relationships and responsibilities are defined by their specificity" (Chodorow, 1989, p. 57).

A related theoretical viewpoint in the individualist tradition suggests children construct cognitive schemas of gender-appropriate behaviors and relationships from their experiences (Martin, 1991; Martin & Halverson, 1981). According to this perspective, children organize information about gendered behaviors, traits, and roles into two types of schemas: superordinate categories (how males and females act in general) and subordinate categories (detailed plans of action for performing sex-appropriate behaviors). These two types of knowledge are thought to guide behavior. Thus, if children believe that taking care of children is a more appropriate behavior for mommies, girls may learn the action patterns of nurturing and caring for children better than boys. Gender schemas provide a cognitive structure for organizing information and a knowledge base of gender-appropriate behaviors.



Whatever the origin, Sandra Bem (1993) has contended that internalized ideas of gender-appropriate behavior create a kind of gender lenses that "make preprogrammed societal ways of being and behaving seem so normal and natural that alternative ways of being and behaving rarely even come to mind" (p. 151). The key to the individualist perspective is in the word "preprogrammed." Although this position recognizes the power of the context in reinforcing and maintaining gendered roles, the creation of these roles is highly dependent on socialization and the individual's past experiences.

Microstructural theory. From a sociological perspective, Risman and Schwartz (1989) have argued for the power of the immediate social situation in constructing self-identity and acting as a determining factor for gendered behaviors. Although the importance of structural variables at the macro or society level is recognized, microstructural theory emphasizes interpersonal relationships as forming the social link between the individual and society and thus, is a variant of symbolic interactionism. Symbolic interactionists posit that the self develops as a function of social interactions and the individual's perceptions of those actions. Interactions among humans become "symbolic" because they depend on the significance the individual attaches to the actions of others.

Microstructural theory argues that gendered behavior is continually constructed from expectations in social settings for gender-appropriate behavior. Interaction patterns become dynamic as individuals fit behavior to the changing situation and each other's expectations, gauging the adequacy of their actions by assessing the responses of others. By "doing" activities that are socially considered as gendered activities, one's gender is continually confirmed (West & Zimmerman, 1987).

Identity theory is a variant of symbolic interactionism that seeks to explain choices individuals make between courses of action when different expectations are symbolic of various social roles. Wells and Stryker (1988) have framed the central question of identity theory in graphic terms:

Why is it that on weekend afternoons on which it is possible to choose among these alternatives, one man opts for taking his daughter to the zoo, a second spends his time at the office catching up on work, and a third plays golf with his buddies? (Wells & Stryker, 1988, p. 196).

Stryker (1980) conceived of identities as being organized into a hierarchy with some being more salient than others. He suggested that the higher a given identity is in the salience structure, the more likely the identity will be invoked in a given situation. The social structure of the situation will also determine which identity will be invoked. A mother arriving at home after the day's work will shift from being a worker to being a parent and homemaker. Shifts between roles also can occur during the working day when children, arriving home from school, call mothers at work.

When several roles with conflicting expectations are appropriate in a given situation, the degree of commitment to a particular role will become important in determining how the individual acts. Commitment can be expressed both in terms of the intensity with which the individual enters into roles (affective commitment) or in terms of the sheer number of relations undertaken (interactional commitment). When commitment to an identity is high, that identity will also be high in the salience hierarchy (Stryker, 1980; Wells & Stryker, 1988).

Implications. Based on individualist theories, one might expect variations in parent involvement to depend primarily on gender, regardless of the situation. Fathers and mothers would be expected to

follow socialized patterns of behaving for their own gender. Single fathers, for example, might be no more likely to become actively involved in their children's schooling than married fathers because both would have similar internalized ideas of gender-appropriate behaviors for fathers. Similarly, although stepparents might have spent less time and perhaps have less intense emotional ties with stepchildren, still they would be as likely to participate in school as biological parents to the extent that they had adopted gender-appropriate parenting behaviors. Individual differences in participation rates among mothers and fathers would depend more on traditional versus egalitarian views of parenting roles than variations in the family context.

On the other hand, according to the microstructural approach advanced by Barbara Risman (1987), the family context would make a substantial difference in levels of parent involvement because gendered behavior is constructed through the expectations and demands of the situation. If men and women were to experience similar situational pressures and opportunities, apparent gender differences in responding would disappear. An empirical example can be found in the way employed mothers hire and deal with their child's caregivers. Normative gender roles suggest that mothers are caring and nurturing in their relationships with others. Yet when mothers hire caregivers, they tend to adopt an authoritarian patriarchal role, and instead of establishing cooperative give-and-take relationships, act as fathers "who without actually taking care of children, set the boundaries, the moral tone, the values, under which mothers could rear the children of men" (Rothman, 1989, p. 99). In addition, Risman and Park (1988), studying parent-child interactions in

mother-only and father-only families, find few differences in "mothering" behaviors solely as a function of parent gender.

Following this line of reasoning, Risman and Park (1988) have argued that when parents reside in households where non-normative behavior is necessary, they will act as the situation demands. Because the normative expectation is for mothers to supervise children's schooling, they do so. But when a single father has no wife to manage children's school experiences, he will become more involved than a father in a two-parent household. Similarly, fathers who experience non-normative expectations such as the admittedly unlikely event of a teacher calling and asking for volunteer help on a field trip may also become more involved in children's schooling.

Another implication of microstructural theory is that the commitment that a mother or father has to their identity as a parent may determine the choices they make and their level of involvement in their children's activities. Parents burdened with a variety of work and household responsibilities may still find time to coach a child's soccer team or attend a parent-teacher conference when the saliency of the parenting role is high. Stepparents, who may not have a strong emotional investment in their stepchildren, may show reduced levels of involvement, regardless of their gender.

In summary, both individualist and microstructural theories provide explanations of variations in gendered parenting behaviors. Individualist theories, which center on internalized gender roles as explanations for behavior, predict few variations based on family structure alone. In contrast, microstructural theory, which focuses on the demands and expectations found in the structure of the immediate social setting,

suggests that variations in the involvement of mothers and fathers might be expected as a function of different family types.

### Changing Demographic Patterns

The structure of American families has become considerably more diverse in recent decades. One result of this growing diversity is that the number of children living in one-parent homes has increased markedly. During the 1980s, mother-only families increased by 35.6% and father-only families grew by 29.1% in contrast to "typical" families of married couples with children who actually decreased by 1%. By 1991, 23.1% of all children under 18 years of age were living in mother-only households while an additional 3.2% were living in father-only homes (U. S. Bureau of the Census, 1992a). Estimates indicate that almost half of all children in America will spend some portion of their childhood living in a single-parent home (Bumpass & Sweet, 1989). For most of these children, the situation will not be short-term. Changing patterns of remarriage suggest that a majority will remain in single-parent households throughout their childhood (Bumpass, Sweet, & Castro-Martin, 1989).

Different routes lead to single headship of families. For those who have been married, single parenthood can result from the death of a spouse or separation and divorce. Another route lies in having children out-of-wedlock. Almost a quarter of total childbirths in 1985 were to unmarried women. The mother's age is related to this type of single parenthood as a much smaller proportion of adolescents are married. 45% of all births to teenagers were to unmarried women in comparison to only 11% to women aged 25 years or older (Bumpass & Sweet, 1989).

The proportion of single-parent families resulting from parental deaths, except for a period during the Viet Nam war years, has been decreasing over the last quarter century, dropping from 18% in 1970 to 6% in 1988 (Rawlings, 1989). On the other hand, the proportion due to marital disruption and non-marital fertility has increased more than threefold for Anglo-Americans and more than sixfold for African-Americans. Divorce is the most common path to single parenthood for Anglos whereas the route through non-marital fertility is more common for African-Americans (Wojtkiewicz, McLanahan, & Garfinkel, 1990; Wojtkiewicz, 1992).

Single parenthood, then, varies by race and ethnic background, and the route taken to single headship of family. In sheer numbers, almost two-thirds of all single parents are classified as Anglo-Americans. But when grouped by race and ethnic background, Rawlings (1989) reports that 59% of all African-American families with children under 18 years, 34% of Hispanic families, and 22% of Anglo families are single-parent situations.

The diversity of two-parent families has also changed over the past decade with more stepfamilies than ever before. Stepfamilies constituted 16.1% of all two-parent families with children under age 18 in 1980 but by 1990 that proportion had grown to 20.8% (Norton & Miller, 1992). One out of five of today's two-parent families does not fit the traditional model of a mother, father, and their biological or adopted children. Because women tend to receive custody of the children during a divorce, the most common stepfamily is one where children have a biological mother and a stepfather. The proportion of this type of two-parent family increased from 7.7% in 1980 to 9.8% in 1990. Blended families where parents have her, his, and their children are also becoming more common, increasing over the

same period from 7.5% to 10.3%. Least common is a stepfamily constituted by a biological father and a stepmother, this type accounting for less than 1% of all two-parent families (Norton & Miller, 1992).

Cohabitation, as a family type, has also become more common since the 1970s although these relationships tend to be highly volatile. Bumpass and Sweet (1989) report that almost half of persons younger than 35 have cohabited at some time during their lives, and about two-thirds of remarriages are preceded by a period of cohabitation. These same figures show over a quarter of all children born to unmarried women are born to cohabiting couples. About two-thirds of the women who give birth during the period of cohabitation eventually marry their partners, but approximately one-third do not. Cohabiting is less common among African-Americans than it is among Anglos or individuals with an Hispanic background. As a result of these variations in cohabiting, a greater proportion of out-of-wedlock children born to Anglo and Hispanic women eventually will live in two-parent families (Bumpass & Sweet, 1989).

Labor force participation. At the same time that these changes in family demographics have been emerging, women have entered the labor force at an ever increasing rate. While 27.6% of married women with children under the age of 18 years were in the labor force in 1960, by 1990 the figure had grown to 66.3% (U. S. Bureau of the Census, 1992b). For the past 20 years, the modal American family has been one with dual earners (Hoffman, 1989).

A substantially larger proportion of single mothers were in the labor force in 1960, but by 1990, the differences in employment status between married and single mothers were considerably reduced (U. S. Bureau of

the Census, 1992b). However, mothers who have never been married experience a somewhat lower participation rate than either married or previously married single mothers, perhaps due to their generally lower levels of educational attainment.

For two-parent families, maternal employment outside the home increases economic resources available to the family. But despite the high labor force participation of single mothers who head households, family income is extremely limited. Single parents who have not completed high school are at a particular disadvantage in finding jobs, let alone jobs that will provide enough money for them to support a family. Almost 23% of America's children under the age of five years, and 21% of school-age children live in poverty (the highest rate of any industrialized nation). A majority of these children live in single-parent households (Hodgkinson, 1991; Otto, 1988). Roughly one out of every two single mothers live below the poverty line in comparison to one out of five single fathers and only one out of twenty two-parent families. In 1992, the average family income for mother-only families stood at \$11,989 compared with \$23,919 for father-only families and \$40,067 for two-parent households, reflecting to some degree the differential earning capacities of men and women (Rawlings, 1989). Family income for two-parent and one-parent families not only varies by headship but also by race and ethnicity. In 1992, Anglo-American mother-only families had a median income of \$14,423, compared with a median of \$9,934 for Hispanic mothers and \$9,168 for African-American mothers (Rawlings, 1989).

Mothers bearing children out-of-wedlock are at greatest risk for poverty. Although a proportion of single mothers were poor before having children, a majority become poor when they divorce. Being poor affects



both mothers' psychological well-being and their ability to meet the needs of their children. Newly divorced mothers often have to move as a result of reduced economic resources, bringing losses of social networks and requiring adjustment to new neighborhoods and schools for both parent and children (McLanahan & Booth, 1989).

### Family Effects on Children's School Achievement

Schools recognize that changing demographic patterns create an impact on children's school performance. In a recent publication from the National Education Association on parent-teacher conferencing, teachers were told "research shows divorce reduces children's school achievement, chances of high school graduation, and completed years of school . . . (but) . . . maternal employment has neither positive nor negative effects on children" (Lawler, 1991, p. 40). Articles offering advice to teachers on "meeting the needs of single parent families" are common in the education literature (Duncan, 1992; Olson & Haynes, 1992). Teachers are counseled that children's academic achievement may lag, that they may behave inappropriately at school, and that they are likely to suffer from a poor self-concept (Wanat, 1992). What is the research basis for these conclusions? Does living in a single-parent household put a child at risk for reduced school achievement? And what is the effect on school achievement, if any, of having a mother who works outside of the home?

Family structure. Dividing households into those with one- and two-parents begins to describe the diversity of family households but even within these categories, there are wide variations. In addition, it is difficult to find terms to describe families that are not value-laden or

inaccurate. For example, using the term "intact" to describe families where children are living with their married birth or adoptive parents suggests that other types of families do not create an intact and cohesive unit. Thomson, McLanahan, and Curtin (1992) use the term "original" to describe those two-parent families where married parents are living with their biological or adopted children. But an original family could just as accurately describe a one-parent household where the parent has never married.

In this review, the term "first-married two-parent family" will be used to describe two-parent families where married parents are raising their own biological children or children they have adopted together. For shorthand purposes, these families will also be referred to as "traditional" families. Stepfamilies will be distinguished by the descriptor of "remarried" and both terms will be used to describe the situation where two married parents are raising at least one child who has a step relationship to one of the parents. Cohabiting families will refer to two individuals living together and raising children (who may be biological, adopted, or stepchildren) but who are not married. One-parent families will be described as mother-only or father-only households, with the route taken to single headship varying between those who have been continuously single and those who have been previously married.

The largest proportion of research relating family structure variables to children's school performance has contrasted mother-only families with first-married two-parent families, often paying little attention to the path taken to single headship. However, recent work using large national data sets has begun to discriminate among these differing family types. Two approaches have been used to study the effect of family

structure on children's school performance. The first compares children's educational progress as measured by school grades, ability, and achievement scores across various family types. The second and more recent approach uses national surveys to study the educational attainment of children who have grown up in traditional, single-parent, and step-families.

Studies relating children's achievement test scores and school grades to living in a one-parent home consistently find small but significant differences in favor of children from two-parent homes (Hetherington, Featherman & Camara, 1983; Milne, 1989; Scott-Jones, 1984). As an example of the small size of these differences, Salzman (1987), in a meta-analysis of 137 studies, found an average difference of only .3 standard deviations in achievement scores between the two groups and only three to seven months in grade level. But regardless of the magnitude of the effects, the studies were consistent in reporting differences. The negative effect of living with only one parent is seen as early as first grade where children from single-parent households average lower grades and are less socially competent than children from two-parent households (Epstein, 1983; Guidubaldi & Perry, 1984) and as late as high school where children from single-parent households are more likely to drop-out (Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990).

No study favors children in single-parent families over two-parent families, but the practical significance of the small differences is doubtful given the factors that might explain the relationship (Milne, 1989). As noted above, the majority of these studies contrast child outcomes for those living in mother-only families with those in traditional families.

Distinctions are not drawn between different types of mother-only households.

When high school completion and levels of adult educational attainment are considered, however, the effects of living in a non-traditional family are more substantive. Children living in both single-parent situations and stepfamilies attain significantly lower educational levels and are more likely to drop out before completing high school than children who continue to live in first-married two-parent families (Keith & Finley, 1988; Krein & Beller, 1988; McLanahan, Astone, & Marks, 1991; Sandefur, McLanahan, & Wojtkiewicz, 1992). Spending time in a single-parent household or in a stepfamily appears to have negative consequences for educational attainment. Remarriage may recreate a two-parent family, but it does not necessarily recreate the emotional commitment to children and other conditions supportive of children's achievement and educational attainment.

The relationship between family structure and children's school performance is complicated by a number of factors. The principal difficulty lies in the profusion of confounding variables associated with single parenting that are known to affect achievement and educational attainment (Blechman, 1982; Milne, 1989). The relationship appears to depend on a complex interaction among a number of factors, including socioeconomic status, ethnicity, the length of time spent in the single-parent home, child gender, family support systems, and family processes relating to parent-child relations such as parenting style and extent of supervision (Scott-Jones, 1984).

Socioeconomic status. The positive association between a child's socioeconomic status (SES) and a variety of indices of cognitive functioning

including achievement test scores, grades in school, richness of vocabulary, and inferential reasoning has been well documented (Alexander & Entwisle, 1988). Estimations of SES are frequently made in terms of the mother's educational level because this latter variable is closely linked to a wide variety of measures of children's achievement (Guidubaldi & Perry, 1984; Laosa, 1982; Lareau, 1987; Stevenson & Baker, 1987; Thompson, Alexander, & Entwisle, 1988).

Controlling for SES as measured by parent education significantly diminishes the negative effect that living in a one-parent home has on children's achievement (Hetherington, Featherman, & Camara, 1983; Milne, 1989; Salzman, 1987). Similarly, having a mother with a high school degree or more improves a student's chances of finishing high school in comparison to having a mother with less than a high school degree (Sandefur, McLanahan, & Wojtkiewicz, 1992).

Family income has a varying effect depending on the type of single-parent family. Mulkey, Crain, and Harrington (1992) found low income to be weakly related to children's achievement in mother-only homes, more important for children in two-parent homes, and most highly correlated with children's achievement scores when children were living in father-only homes. The authors suggest the negative relationship between children's achievement and income in single parent homes is spurious since a family's financial status is reflective, in large measure, of parent education and occupational level. Because of the gender differential in salaries, there is more variability in the educational level of single mothers. Single mothers with a low income may have high levels of education but single fathers with few financial resources are far less likely to be highly educated. Thus, the results of this study point to parent

education as a more important indicator of children's achievement than income.

Mulkey, Crain, and Harrington (1992) tested a path model that proposed the relationship between living in a one-parent family and a student's educational performance was mediated by the family economic conditions and the student's own behavior (absenteeism and not doing homework, for example). After controlling for parent education and race, small but significant direct effects were found between family composition and grades. But while statistically significant, the indirect path through the family's economic background was weak in comparison to the much stronger indirect path through the student's behavior. The authors concluded that among single-parent families, economic status plays less of a role in student achievement than does student behavior.

On the other hand, McLanahan, Astone, and Marks (1991) use high school completion as a dependent variable and show that family income accounts for a major portion of the difference in rate between mother-only families, and first-married two-parent families. Adjusting for differing levels of family income reduces the probability of dropping out of school, but students from mother-only and stepfamilies still run a significantly higher risk of not completing high school in comparison to students from traditional homes. Contrasting results may be partially explained by different dependent variables (achievement vs. educational attainment) and differences in methodology. McLanahan and her colleagues (1991) control for family income by simultaneously regressing a group of independent variables on child outcomes, while Mulkey, Crain, and Harrington (1992) disaggregate variables and explore potential mediating effects by estimating a series of equations.

Race and ethnicity. Ethnic differences in student's school performance and in high school completion are found consistently throughout the literature. Students from ethnic minority families tend to have lower grades and are more likely to drop out of school than Anglo-Americans (Steinberg, Dornbusch, & Brown, 1992). Nationwide statistics show that, in 1991, 9% of Anglo-American, 14% of African-American, and 35% of Hispanic 16- to 24 year olds had dropped out of high school (Kaufman & McMillen, 1991). Among poor families, African-American and Hispanic mothers tend to place greater importance on their child's academic achievement than Anglo mothers, perhaps seeing education as a route to economic security. But mothers from these same groups may have less information about their children's school progress than Anglos and, as a result, be more likely to overestimate the degree of success their children are having in school (Stevenson, Chen, & Uttai, 1990).

Family structure has been offered as one explanation for these patterns, in part because of the disproportionate number of single-parent families among ethnic minorities. But race tends to be a much stronger predictor of school achievement and educational attainment than family type (Krein & Beller, 1988; Watts & Watts, 1992). Controlling for race diminishes the effects of family structure on children's grades and achievement scores (Hetherington, Featherman & Camara, 1983; Mulkey, Crain, & Harrington, 1992) and on high school completion rates (McLanahan, Astone, & Marks, 1991). In a meta-analysis of studies exploring the effects of SES, race, and father absence on children's achievement, Salzman (1988) found only a .22 standard deviation superiority for children in Anglo two-parent families compared to Anglo mother-only families, and only a .24 standard deviation superiority for

children in African-American two-parent families compared to African-American mother-only families. These effects were not statistically significant. Similar small effects were found for both Anglos and African-Americans when SES was included in the analysis. Salzman explored the possibility of interactions between ethnic background and SES but failed to find any significant effects. However, about one-third of the studies failed to report both socioeconomic status and race, making it difficult to trace interaction effects.

Thompson, Alexander, and Entwisle (1988) compared the first grade progress of Anglo-American and African-American children living in one- and two parent homes, controlling for parent education. Children did not enter school with differentially depressed cognitive abilities, but African-American children in one-parent households made significantly fewer gains as the year progressed. The authors reported that "the reading performance of black students from solo parent homes [no extended family members in the household] falls short of teacher's expectations very early in the school year and the deficit mounts throughout the school year" (Thompson, Alexander, & Entwisle, 1988, p. 444). The authors concluded that the negative effects of living in a single-parent household are larger and more consistent for African-American children than for Anglos.

Similar results are found when years of educational attainment is the dependent variable. Anglos who have lived in single-parent homes complete more years of school than African-Americans living in similar households (Krein & Beller, 1988). But race differences often become nonsignificant when the family socioeconomic level is controlled (Milne, Myers, Rosenthal, & Ginsburg, 1986).



Child gender. Evidence indicates that both single parenting and stepparenting has differential effects on girls and boys, but the evidence is mixed regarding the effects on children's schooling. While children in both single-parent and stepfamilies have lower levels of achievement than children in traditional two-parent families, Keith and Finlay (1988) find no significant effects by gender for years of educational attainment. In contrast, Krein and Beller (1988) find a negative effect for boys but not for girls. Males who spend an average number of years in a single-parent household completed approximately a half year less of schooling than males whose childhood was spent in a first-married two-parent home.

The effects of living in a mother-only family are more negative for boys than for girls, while girls appear to have a harder time adjusting to a stepfamily than boys (Demo & Acock, 1988; Hetherington, Stanley-Hagan, & Anderson, 1989). In comparison to girls, boys living with single mothers have more behavior problems, exhibit greater deviancy, and are less compliant at school. These behaviors affect achievement. Examining children whose parents divorced, Kaye (1989) found that both girls and boys have lower achievement scores directly after parents divorced, but five years after the divorce, only the achievement test scores of the boys were adversely affected. Since mothers most often gain custody of children after a divorce, the effects on boys have been attributed to the lack of a same-sex role model in the home, but a recent analysis of the National Educational Longitudinal Study of 1988 has found no special academic benefits accruing to boys who live in father-only homes (Downey & Powell, 1993).

High school drop-out rates appear to be affected by an interaction of student gender with gender of the custodial parent. Zimiles and Lee (1991) reported that children living in a single-parent family with a same-sex

custodial parent are less likely to drop out of school. The results showed that boys living with fathers run a lower risk than boys living with mothers and similarly, girls living with mothers run a lower risk than girls living with fathers. The pattern is reversed in stepfamilies. When mothers remarry, the risk of dropping out is reduced for boys and increased for girls. The authors suggest that this effect results from the strong emotional bonds that develop between adolescents and same-sex parents in single-parent families, bonds that are often disrupted when the parent remarries.

Social support. Social support is linked to children's school achievement in single-parent families, but plays no demonstrated role on this variable for either traditional or stepfamilies. Single mothers of high-achieving children report significantly higher levels of social support than single mothers whose children average lower grades (Roy & Fuqua, 1983). The support systems in the neighborhood or community contribute to the well-being of single mothers (McLanahan, Wedemeyer, & Adelberg, 1981) and through this mechanism, may affect children's school achievement.

While social network contact with friends, neighbors, and relatives is not always advantageous and the effect on parental well-being depends on the quality of the support (Milardo, 1987), the availability of others who can offer both tangible and emotional support can have a beneficial effect on parent-child relations (Belsky, 1984). In the evaluation of Family Matters, an intervention program providing services for low-income mothers and their young children, Cochran (1988) reported that African-American single mothers who experienced higher levels of social support were more involved with their children who, in turn, exhibited higher levels of school readiness. For Anglo-American single mothers, higher

levels of social support were also related to higher levels of children's school readiness, but social support did not influence parent-child interactions. No effects between social support and child outcomes were found in two-parent families, regardless of ethnicity (Cochran, 1988).

In his ethnographic study of family life and African-American children's school achievement, Clark (1983) pointed out that parental ability to develop a support system was a discriminating characteristic of one-parent families with high-achieving children:

Importantly, these parents were responsible for having initially sought and received the support of certain kin and friends and for later having maintained these internal family support relationships . . . Although life in society had handed these parents a series of psychological and emotional bumps and bruises, they had basically managed with the support and encouragement of kin and friends to maintain a sense of emotional calm and rationality (Clark, 1983, p. 116).

In general, single mothers who are separated or divorced report experiencing higher levels of informational and emotional support from kin than married mothers (Landsman & Jaccard, 1987). Kin networks are particularly important for African-American single mothers, although recent evidence suggests they receive far less tangible support from kin than emotional assistance (Jayakody, Chatters, & Taylor, 1993).

In a rare study comparing "solo" single parenting with single parenting where other adults such as relatives or partners also live in the household, Thompson, Alexander, and Entwisle (1988) found African-American children living with at least two adults had better reading and math marks at the end of first grade than children living alone with a single parent. The conduct of children living in these former homes, termed "mother-extended" by the authors, also improved over the course of the school year. While children in both living arrangements had similar

abilities when they began school, Thompson and her colleagues noted that children living in an extended family situation appeared to profit from the social and cognitive support that additional adults brought to the home.

Employment status. Maternal employment is thought to affect children's school achievement differentially through two mechanisms: (a) creating a negative effect through a reduction of the amount of time the parent has to devote to the child, and (b) creating a positive effect by providing a role model for the occupational role when a mother is satisfied with her job (Barber & Eccles, 1992).

When mothers are employed, they may have less time and energy to devote to helping children with homework and supervising children's out-of-school activities. Interview studies show that employed mothers worry both about having "not enough time" for their children and the potentially destructive role their absence may play in their children's social development (Hoffman, 1989). But studies also show that employed mothers who have a high degree of commitment to their families typically compensate for this lack of time by increasing interactions with their children during nonwork hours and weekend time (Easterbrooks & Goldberg, 1985; Greenberger & Goldberg, 1989). Single mothers are more likely to work full-time than mothers in two-parent homes, but after controlling for the number of children in the family, there is little difference in the amount of time they spend with their children (Cohen, Johnson, Lewis, & Brook, 1990). Particularly for mothers with preschool-aged children who require more care and supervision than older children, the cost is that single employed mothers spend relatively less time devoted to themselves, perhaps accounting in part, for their experiencing higher

levels of family role strain and lower levels of well-being, as they juggle competing demands (Burden, 1986; Sanik & Mauldin, 1986).

After several decades of studying the relationship between maternal employment and children's school achievement, researchers have found very little differences between achievement levels of children whose mothers are employed and not-employed outside the home. Some evidence indicates that a curvilinear relationship may exist with more positive child outcomes associated with mothers who are employed on a part-time basis (Bronfenbrenner, Alvarez, & Henderson, 1984; Hoffman, 1989). Daughters of employed mothers tend to have higher levels of school performance scores than sons, particularly in middle-class homes (Hoffman, 1984). Other evidence suggests that the effect of maternal employment depends on a number of mediating variables, including maternal satisfaction with work status and the financial status of the family. For poor African-American families, maternal employment is positively related to school achievement (Heyns & Catsambis, 1986; Milne, Myers, Rosenthal, & Ginsburg, 1986). This positive effect may simply be a result of a family having more resources or it may result from mothers who work being more competent than nonemployed mothers and thus, better able to support their children's educational progress (Milne, 1989).

Researchers studying maternal employment and child outcomes have been criticized for taking an overly simplistic approach. Studies have compared the effects of being employed part-time or full-time for mothers at varying socioeconomic levels and the effects on children's achievement have been estimated without an exploration of the mechanisms and intermediary processes that might influence these relationships

(Bronfenbrenner & Crouter, 1983). Maternal employment by itself has not proven to be a robust variable in describing child outcomes.

Family composition. Evidence indicates that the size of the family affects school achievement with children in larger families experiencing lower levels than children in one- or two-child families (Scott-Jones, 1984). An explanation of this finding centers on the observation that children receive less parent attention per child and less adult stimulation in larger families. Large families are associated with less optimal child environments (Menaghan & Parcel, 1991). However, this variable is confounded with SES and ethnicity because minorities tend to have larger families and larger families are more likely to be found at lower socioeconomic levels. Coming from a large family has been linked to school absenteeism among primary-aged children (Thompson, Entwisle, Alexander, & Sundius, 1992), higher drop-out rates for teens (Rumberger et al., 1990), and lower levels of educational attainment (Krein & Beller, 1988).

In summary. Living in either a single-parent household or in a stepfamily has small but consistently negative effects on children's school achievement and educational attainment. The relationship is complicated by family structure being correlated with a number of variables also related to children's achievement. Controlling for SES and race decreases the magnitude of the negative effects but not the direction. Higher school achievement has been reported for children living in mother-only families when mothers experience social support and when there are other adults living in the same household. Living in a mother-only family has been shown to affect negatively the educational attainment of boys but not girls.

The effects of maternal employment on children's school achievement are mixed. Working part-time is related to more positive child outcomes, suggesting that full-time employment drains time and energy that might be devoted to interacting with children. Still, there is little evidence that employed mothers are less involved with their children when others factors are controlled. Daughters of employed mothers may fare better than sons in terms of educational attainment. And for children living in poverty, there are clear educational benefits to having an employed mother.

### Parent Involvement and Children's School Achievement

Research indicates that programs designed with a strong component of parent involvement produce students who perform better than those who have taken part in otherwise similar programs with less parent involvement (Henderson, 1987). When families become involved in school activities and decision-making processes, positive child outcomes typically result (Cochran & Dean, 1991; Coleman, 1987; Comer, 1988; Epstein & Dauber, 1991).

Definitions of parent involvement. A review of the literature finds varying approaches to defining parent involvement in children's education. Some studies measure parent-teacher contacts, others identify volunteer participation in school activities and organizations or in school governance, while still others focus on the supportive role parents play at home. In a widely used typology, Epstein (1987b, 1990a) lists five possible types of parent-school involvement. Type 1 is described as the basic obligation of parents to insure children's healthy development, to prepare

them for school, and to establish home conditions that support school learning; Type 2 is the basic obligation of schools to communicate with parents to keep them informed about children's progress and school programs; Type 3 is parent involvement at school as volunteers or as supportive spectators of children's activities; Type 4 is parent involvement in learning activities at home that are coordinated with classroom activities; and Type 5 is parent involvement in governance and advocacy referring to parent participation in school organizations and advocacy groups with decision-making capacities.

Epstein's first three types focus on traditional roles for families and schools while the fourth and fifth types describe new roles, established in the interest of forming genuine family-school partnerships to support children's education. Epstein and Dauber (1991) reported that both volunteering and participating in home-learning activities that are coordinated with the school curriculum are a function of children's age and grade level. Both types of involvement are more common when children are in elementary grades.

While typologies indicate many ways for parents to participate in school-related activities, the focus of school policy regarding parent involvement has changed in the last decade. In the past, parent involvement was considered to be strong if parents participated in school activities such as conducting bake sales, volunteering to help with field trips, and sitting on school advisory councils. Now, particularly in schools that serve high-risk populations, parent involvement is "largely used to suggest parents' efforts to socialize their children at home both in informal and in school-directed learning tasks" (Ascher, 1988, p. 120).



Following this lead, researchers often categorize parent involvement in terms of location with one type occurring within the home and another within the school setting. Reynolds (1991) suggested two separate categories for parent involvement: (a) at home, where any interactions between a parent and child that may contribute to a child's learning are included, and (b) any parent participation with a child's school that is undertaken in the direct interest of the child's learning. In both cases, these categories focus on direct assistance to the child, rather than the more indirect effects achieved when parents participate in organizations aimed at strengthening the overall school program. For this paper, these two categories will be used to review the effects of parent involvement on children's school achievement.

Parent involvement in home activities. In general, research finds that building a strong learning environment at home is closely related to children's school achievement. Parents who spend time reading, playing, and interacting with children at home help children to develop social competencies and cognitive skills that prepare them for school success (Becher, 1984; Henderson, 1987). A meta-analysis of elementary school-based programs designed to increase the educationally stimulating qualities of the home environment found that increased parent involvement in these home activities has a positive effect on children's school achievement (Graue, Weinstein, & Walberg, 1983).

Heyns (1982) compared elementary school children's achievement scores in September, June, and the following September and found that most children made gains during the school year, but the children who showed improvements over the summer when school was out were different in that they experienced more stimulating home environments.

These children were being read to by their parents and enrolled in summer programs at the library, or other enriching activities. Other studies have shown that parents who hold high expectations for their child's school achievement are more likely to spend time reading, playing, and interacting with children at home than parents with lower expectations (Laosa, 1982; Marjoribanks, 1979). Spending time together in child-centered activities has a positive effect on achievement, particularly for low SES children (Benson, Medrich, & Buckley, 1980). If teachers involve parents in learning activities at home, children make gains on reading achievement scores (Epstein, 1992). When children begin to fall behind in school, they can often be set back on track if parents are given training in home-teaching techniques (Barth, 1979; Lazar & Darlington, 1982; Olmstead, 1991).

The verbal environment of the home as measured by variables such as communication and reading to children is a foundation for language and literary development and is closely linked to children's achievement (Hess & Holloway, 1984). Children who hear substantial amounts of language and routinely participate in conversations in the early years develop larger vocabularies (Huttenlocher, Haight, Bryk, Seltzer, & Lyons, 1991). Reading to children at home is associated with gaining literacy skills at school. Parents who read interactively by questioning children, commenting on text and pictures, clarifying meaning, and making inferences are most effective in promoting literacy development (Laosa, 1982; Taylor & Dorsey-Gaines, 1988; Teale, 1986; Wells, 1986).

Scott-Jones (1987) reported that African-American children who showed a high readiness for kindergarten had at least 10 books in their homes. Mothers of these children tended to be responsive to their

children's interests and questions. In the low readiness group, mothers were more didactic, giving children directions and often failing to use language to elaborate or follow through. Mothers with low readiness children expressed high aspirations for children's achievement, but also gave them double messages by warning them "You gonna have to repeat" and "If you don't stop acting dumb, you're gonna be in the first grade ten years" (Scott-Jones, 1987, p. 30). In a study with a similar sample, Bradley, Rock, Caldwell, Harris, and Hamrick (1987) found young children's school achievement to be highly correlated with parental responsiveness and the emotional climate of the home. The relationships were stronger for girls than for boys.

Parent involvement in school activities. Parental participation in school activities, parent-teacher conferences, and parent-teacher organizations consistently has been linked to increases in children's school achievement, to positive classroom behavior, and to a positive school climate (Comer, 1988; Haynes, Comer, & Hamilton-Lee, 1989; Iverson, Brownlee, & Walberg, 1981; Stevenson & Baker, 1987). Parent involvement at school during the early grades is a significant predictor of low-income children's academic achievement and social emotional maturity (Klimes-Dougan, Lopez, Nelson, & Adelman, 1992; Reynolds, 1989, 1992) and contributes to higher grades for middle and high school students (Baker & Stevenson, 1986; Fehrmann, Keith, & Reimers; 1987; Useem, 1992).

Direct involvement on the school premises is low for most parents, however. About 4% of elementary school parents are active at school 25 days or more each year and over 70% never volunteer (Epstein, 1986). Comparing low and high achieving children in his ethnographic study of ten poor black families, Clark (1983) reported that in families with low

achieving children, "parents almost never visit the school, except in response to the school's request resulting from the child's misbehavior or poor work" (p. 196). On the other hand, parents with high achieving children "tend to believe that it is possible to get sound training from the neighborhood school, but that this requires parental input" (p. 140). Parents of high achieving children are likely to visit the school intermittently and to be involved in parent-teacher groups and other school activities.

Studying a sample of "counterculture" families who were attempting to live in non-traditional ways according to their ideals, Weisner and Garnier (1992) reached similar conclusions, as they noted parents of higher achieving children "working in the classroom, talking with their children's teachers, attending school meetings, or going to school board meetings" (p. 626). Although a number of these parents were raising children in one-parent households, no differences in achievement were found as a function of family structure.

Parent involvement in school-related activities declines with each passing grade and level of schooling (Epstein & Dauber, 1991; Stevenson & Baker, 1987). Still, when parents are involved, children have better school attendance and both parents and students have more positive perceptions of classroom and school climate (Haynes et al., 1989).

The mechanism for this relationship may lie with involved parents acquiring greater knowledge of the student's school progress, making sure the student attends school regularly, and stressing the value of schooling (Baker & Stevenson, 1986). Parents who are active in parent-teacher organizations and attend conferences or other school events become integrated into the school ecology, connecting with teachers and other

parents. Important information about the school is gained from these informal networks, as parents talk at sports or other school events, make carpooling arrangements, trade child care, or meet at the grocery store. Being informed aids parents in managing their children's education, both in monitoring actual performance and in helping the student to solve school-related problems (Baker & Stevenson, 1986; Useem, 1992).

In summary. Children's school achievement is supported and enhanced when parents value education, have high expectations for their children's school attainment, and create a learning environment at home supportive of children's learning needs as they progress through school. When parents become involved outside the home in school organizations and activities, they gain important information about their child's progress and are often in a position to advocate for better educational opportunities for their child. By building a bridge between home and school, parents model their commitment to education and reinforce the children's identification with the values of the school community.

### Family Effects on Parent Involvement

Many parents are not as involved in school-related activities as teachers would like and when parents are not involved, teachers often attribute this lack to family situations and parental disinterest in their children. For example, teachers rate single parents as less helpful and less likely to follow through with home learning activities (Epstein, 1990b). But variations in parent involvement appear to be the outcome of a variety of complex factors, including family structure, maternal work status, gender, SES, and ethnicity.

Family structure. Research findings on the relationship between family type and parent involvement vary depending on the type of involvement measured and the age of the child. Single mothers spend more time interacting with children at home than mothers in two-parent families (Epstein, 1990b; Hoover-Dempsey, Bassler, & Brissie, 1992) but total interaction time with adults (including fathers in two-parent families and extended family members in single-parent families) does not differ appreciably between the two types of households (Asmussen & Larson, 1991).

Using data from the 1980 High School and Beyond study and controlling for family background variables, Astone and McLanahan (1991) find that high school sophomores in single-parent families report both less parent involvement with homework and less supervision outside the home than students in traditional families but these students also report spending more time simply talking with their parents. The authors note this finding is consistent with the confidant role that family therapists often describe children playing in disrupted families.

High school students living in stepfamilies also report less parent involvement with homework than students in first-married two-parent families and while reported levels of supervision are about the same, experience lower educational aspirations from their parents. Lower levels of emotional attachment between a stepparent and a stepchild may account for these differences (Astone & McLanahan, 1991).

Contrasting results were reported in a survey of Australian children, half of whom were in third and fourth grades and half of whom were sophomores and juniors in high school (Amato, 1987). For both age groups, children in one-parent families, stepfamilies, and traditional

families were equally likely to report that mothers talked to them a lot, were interested in them, provided assistance with homework, and talked over personal problems but levels of supervision varied for children in one-parent families. Primary-aged children reported stricter limits while adolescents experienced a relatively low degree of control. These latter differences are consistent with other studies that have found children in single-parent families experience relatively greater degrees of autonomy than children in traditional families.

Parent involvement in school-related activities depends to a certain extent on parents being asked to participate. Thus, different degrees of parent involvement may result from different approaches taken by teachers. Epstein (1990b) surveyed 1,269 parents of first, third, and fifth graders, of whom approximately 24% were mothers living in one-parent households. Single parents, in comparison to married parents, spent less time in the school as volunteers, classroom helpers, and at school meetings but were equally likely to spend time with children helping with homework or working on home-learning activities.

Significant differences were found in the frequency of requests teachers made for involvement from single parents, however. Regardless of whether parents had high or low levels of educational attainment, single parents, in comparison to those who were married, received more requests from their children's teachers to help with learning activities at home. But for married parents, those with less education, in comparison to parents with higher levels of schooling, received more requests from teachers for home learning activities.

Although no controls were included for children's level of achievement, these findings suggest that teachers may respond more to

the marital status of the parent in requesting parent involvement than to SES as measured by parent education. In a further analysis of the survey data, Epstein grouped teachers by proven ability to involve parents in the school program. Teachers who were rated as leaders in this area had expectations both for children's achievement and parent involvement that were independent of family structure.

Employment status. Being employed outside the home reduces the amount of time mothers have to commit to being actively involved in their children's schooling. But employed mothers tend to compensate for their absence by increased interaction time with their children during nonwork and weekend hours (Hoffman, 1989). For families with school-age children, Nock and Kingston (1988) found no significant difference in the total amount of time mothers in single-earner and dual-earner families spent in child-centered activities. And although the amount of time a mother worked in the labor force was negatively associated with her overall level of parent involvement, the effect disappeared when education was controlled (Stevenson & Baker, 1987). Mothers' monitoring of children's homework and school activities does not differ among dual- and single-earner families, although boys who are less well monitored receive lower school grades (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990).

Being employed reduces parent involvement at school but not in home activities. Mothers who work outside the home are less likely than other parents to volunteer or to come to school for meetings (Espinoza, 1988; Hoover-Dempsey, Bassler, & Brissie, 1992). In a survey of 1,269 parents of first, third, and fifth grade children, Epstein (1986) found that 42% of parents who were not active at school were in the labor force during



school hours. But, regardless of employment status, parents were active in home-learning activities. Almost all (92%) parents reported helping their child with reading and math homework during the school year.

Maternal age. The mother's age is related to involvement both in home-learning activities with her children and school-related activities. Older mothers are more likely to volunteer at school and participate in organizations than younger mothers (LeBlanc, 1992). Similarly, Baharudin and Luster (1992) found that mothers who are older at the time their first child is born provide a more stimulating home environment for their primary-aged children. This is consistent with studies of mother-infant interactions that find teen mothers providing less verbal stimulation and less supportive environments than older mothers (Garcia Coll, Hoffman, & Oh, 1987; Helm, Comfort, Bailey, & Simeonsson, 1990). Maternal age is related to a number of other variables including education, and by itself, may not be as powerful an indicator of parent involvement as maternal education.

Family composition. Children's age and gender are related to varying levels of parent involvement. As children grow older and become more involved with their peers, parents spend less time directly involved in their children's activities. For example, parents spend about half as much time reading to, talking to, and playing with children aged 5 - 12 years as they do with children under age 5 (Hill & Stafford, 1980).

Research has shown the gender of the children in the family to have an effect on fathers' involvement but not on that of mothers. From birth on, fathers tend to play more with their boy than with their girl children (Lamb, Pleck, & Levine, 1987; Morgan, Lye, & Condran, 1988). In a study of paternal involvement in child-centered activities at home, Marsiglio

(1991) found that fathers are more likely to take children on outings and are more involved in leisure activities such as playing, doing projects, and talking with children when the children are boys. Similarly, Katzev, Warner, and Acock (in press) have found higher degrees of paternal involvement when there is at least one boy in the family.

Socioeconomic status. Middle class parents take a more active role in children's schooling than parents at lower SES levels. They are more likely to attend parent conferences, volunteer in the classroom, and come to school meetings (Ascher, 1988; LeBlanc, 1992; Lightfoot, 1978; Stevenson & Baker, 1987).

In an ethnographic study, Lareau (1987) contrasted parent involvement in two schools, one serving upper-middle-class families and the other serving working-class families. Teachers at both schools actively sought parent participation, but over the course of the first grade year, 100% of the parents in the upper-middle-class school attended parent-teacher conferences compared to 60% of the working-class families. A similar picture emerged for active involvement in the classroom. At the upper-middle-class school, 43% of the parents volunteered in the classroom sometime during the school year compared to only 3% of the parents at the working-class school.

The educational level of the parents may be the most important aspect of SES for studying family effects on children's school behavior. Stevenson and Baker (1987) examined the relationship of maternal education to parent involvement using data from 1981 Time Use Longitudinal Panel Study. Teachers rated the extent to which parents participated in school activities such as parent-teacher organizations and parent-teacher conferences. Mothers with more education tended to have

higher levels of involvement in these types of activities, although there were differences depending on the gender and age of their child. For boys, there was a strong, positive relationship between mothers' education and parent involvement with the highest degree of parent involvement occurring when the boys were young. No comparable relationship was found for girls. The authors suggested that the gender difference may have resulted from educated mothers' awareness of the slower start that boys make in school and the need that young sons have for greater support and monitoring.

Teachers are influenced by parents' educational level, both in terms of how helpful they rate parents and the number of requests they make for parents to conduct home-learning activities. Parents with only a high school education are viewed as being less helpful and less likely to follow through on home-learning activities than parents with a college education. In addition, less educated parents report a higher frequency of teacher requests for conducting home learning activities (Epstein, 1990b).

A possible explanation of these effects can be found in Lareau's (1987) observations and interview data. Lareau concluded that lower levels of participation among working-class parents were linked to both parents' own lack of educational attainment, many being high school dropouts, and to parents' view of the appropriate division of labor between home and school. As one mother put it,

My job is here at home. My job is to raise him, to teach him manners, get him dressed and get him to school, to make sure that he is happy. Now her (the teacher's) part, the school's part, is to teach him to learn. Hopefully, someday he'll be able to use all of that. That is what I think is their part, to teach him to read, the writing, any kind of schooling (Lareau, 1987, p. 79).

Lareau pointed out that this mother knew that her son's teacher wanted the child to practice reading at home, but she didn't read with the child because she felt it was the teacher's job to teach the boy to read. Parents in both communities felt strongly about the importance of children's educational achievement and wanted their children to do well. They simply differed in that the working-class parents tended to delegate educational responsibility to the school, whereas parents in the upper-middle-class school were actively involved in their children's schooling and viewed education as a shared undertaking.

Gender. Regardless of SES, mothers are much more likely than fathers to be involved in all aspects of children's schooling (Hoover-Dempsey, Bassler, & Brissie, 1992; Lareau, 1987, 1989). Even mothers' labor force participation does not shift the responsibility for overseeing children's educational progress to fathers (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990). Lareau's description of one family highlights this division of labor:

When one mischievous boy fell behind in his spelling lessons at school, his mother (who worked twenty hours per week) had him do his spelling lessons at home in the evening (at the same time that she worked on her bookkeeping). While his father was informed of this development, it was his mother who made arrangements with the teacher to send home the spelling words, negotiated with her son regarding when he would do his homework, supervised him to ensure that it was done correctly, and reminded him to bring it back to school the next morning. His father gave him [sic] son words of encouragement (and criticism at times), reviewed his papers when they were sent home, and supported the endeavor (Lareau, 1989, p. 87).

Lareau further notes that the only exception to this pattern of maternal responsibility and father passivity was in the area of math and science education due to "mothers' alleged lack of knowledge" (p. 88).

Overwhelmingly, it is mothers who regularly attend children's school presentations and events, volunteer in the classroom, go on field trips, participate in children's after school sports activities, and help children with schoolwork.

Race and ethnicity. Studies in schools serving largely low-income families have found that race and ethnic background are related to varying levels of parental participation in children's schooling. In a study of parent involvement among an ethnically-mixed group of low-income, kindergarten and first grade parents in the Los Angeles area, Klimes-Dougan and her colleagues (1992) reported that "the quantity and frequency of parent involvement was moderate at best" (p. 190). Parents reported participating in approximately 25% of school activities such as parent-teacher conferences, school performances, back-to-school nights, and parent-teacher organizations. Of these parents, Hispanics reported significantly less knowledge about school activities and more barriers to participation. Hispanic parents who were not proficient in English had a higher level of school involvement than parents who were more proficient, but the authors suggested this resulted more from their participation in adult education classes designed for immigrant and Spanish-speaking groups than from involvement in their children's classes.

Stevenson, Chen, and Uttal (1990) surveyed parents of first, third, and fifth graders in Chicago schools and found similar results. While Hispanic and African-American mothers rated the importance of helping their children with schoolwork more highly than did Anglo-American parents, Hispanic mothers were significantly less involved in school-related activities than either of the other two groups. African-American mothers reported spending the most time helping children, with Anglo-

Americans reporting less time and Hispanic parents the least amount of time of the three groups. Even though Hispanic parents reported less involvement, the authors indicated that both "the black and Hispanic families represented in this study had enthusiastic attitudes about education and attempted to provide supportive environments for academic achievement in their young children" (p. 521).

Lower levels of involvement among Hispanics may result from these parents lacking an understanding of how best to help their children. In an ethnographic study of six children born in this country to immigrant families, Delgado-Gaitan (1992) found that these Hispanic parents tended to turn to friends in the workplace or in church for information and help regarding children's school problems more commonly than they approached the school personnel. Although supportive, the former individuals were less likely to provide information that would have helped the parents conduct home-learning activities or monitor their child's homework. The author reported that the parents were well-intentioned and had high aspirations for their children, but often "felt frustrated because they did not understand how to help their children with homework tasks" (p. 511).

In summary. One truth stands out in all the empirical research on parent involvement in children's schooling. Just as "women do the lion's share of family work" (Thompson & Walker, 1991, p. 89), so mothers do the lion's share of supervising children's educational progress, whether at home or at school. Mothers are the managers of the day-to-day activities, making sure homework is completed, attending school programs and athletic events, volunteering in the classroom, providing class treats for special occasions, and monitoring children's school progress. Fathers

tend to play a more passive role of encouraging children but are not actively involved in school-related activities.

Middle-class parents are more involved in school activities than working-class parents, with the mothers' educational level providing the closest link between home and school involvement. Mothers in one-parent homes with primary-aged children spend relatively more time with their children in home activities in comparison to mothers in traditional homes, but are less likely to participate in school-related activities. Employment status may affect the school participation of single mothers because they are more likely to be working full-time than mothers in traditional homes. When children are older, the pattern of involvement appears to shift, as single parents pay less attention to homework and supervising school progress and relatively more time talking with the adolescent, perhaps in a "confidant" role. The key to parent participation in schooling does not simply lie in the number of parents available in the home, because parents in stepfamilies have lower levels of involvement than parents in traditional families, but rather in the commitment of the parent to the child's educational attainment.

Mothers who work outside the home on a full-time basis are less likely to be involved in school activities than mothers who are part-time workers or who are not employed, but mothers' work status does not appear to affect the amount of time spent with children at home on learning activities. Although lower levels of parent involvement have been found among ethnic minorities, race by itself appears to be a less important factor in determining parent involvement than the educational level of the parents.

## Limitations of Existing Studies

Although a sizable body of research examines family structure and parent involvement variables as they affect children's school success, fewer studies tease out factors that relate to parent involvement. While findings shed some light on patterns of parent involvement, they are limited in three ways.

First, although comparisons of school achievement have been made for children living in first-married two-parent families, stepfamilies, and with single parents, the effects of cohabitation on school outcomes has not been examined. Single parents are treated typically as a unified group. Only rarely are distinctions drawn between single parents who have been continuously single and those who have experienced a family disruption due to separation, divorce, or the death of a spouse. In addition, studies focus on mother-only families. Father-only families account for a small proportion (12%) of the total number of single-parent households, but this type of household has increased markedly over the last decade (U. S. Bureau of the Census, 1992a). Comparisons of parent-child relationships in father-only and mother-only families find few differences in parent perceptions of child behavior or socialization practices (Greif, 1985; Risman & Park, 1988; Thomson, McLanahan, & Curtin, 1992), suggesting that the context plays an important role in determining "mothering" behavior. When fathers are single parents, they may be as involved in school-related activities as mothers are, but no empirical studies have examined this relationship.

A second general limitation of the current data base is that only a few studies examine parent involvement using samples from national



probability studies, hampering the generalizability of any findings (Laosa, 1991). Studies using these national data bases have not covered the entire span of children's school years, analyzing parent involvement with either primary-aged children, as in the National Longitudinal Survey of Youth, or with adolescents in the High School and Beyond Study. Even when national samples are analyzed, there is still concern because much of the data were collected in the early part of the 1980s. Changing family demographic patterns over the last decade, coupled with renewed emphasis on parent involvement practices in school districts could make substantive differences in findings. In addition, research on parent involvement has tended to focus only on maternal participation, partially because data from fathers is rarely available.

A third problem in the existing empirical work is a relative lack of analysis of family process and context variables that could affect levels of participation. In a recent review of parent-child relations, Demo (1992) argued that family researchers, influenced by traditional ideas of the normative family, have spent too much time comparing single-parent to traditional two-parent families and not enough effort on the correlates and processes that may mediate the effect of family structure on child outcomes.

Stryker (1980) theorized that interactional commitment is one form of the saliency of a particular role. Commitment to parenting as evidenced by increased involvement in child-centered activities in the home and involvement in school-related activities may be a mediator between family structure and children's school performance, but no study to date has examined this relationship.

Social support has been related to child outcomes through increasing parent well-being (Dunst & Trivette, 1988). Both tangible and emotional support from others may have an effect on parent involvement by creating a more positive family situation and increasing the free time parents have to spend with their children. No studies have examined the potential positive effects these aspects of social support may play in parent involvement. However, there is evidence that emotional support can relieve the stresses and daily hassles that parents of preschool children experience (Crnic & Booth, 1991) and young mothers who have adequate physical and emotional support are better able to respond to their children with consistency and warmth (Belle, 1982; Cochran & Dean, 1991). Additionally, social support is associated with positive parent-child interactions for both single and married mothers (Turner & Avison, 1985; Weinraub & Wolf, 1983).

### Conceptual Model

Parents and children live in an ecology of social settings where relationships at school, in the community, and at the workplace interplay with family relationships to influence behavior and development. Increasing numbers of studies have explored relationships within this ecology. Bronfenbrenner and Crouter (1983) see the new emphasis on the ecology of human development as a paradigmatic shift in studying the effects of the environment on behavior. They point out that early research approaches described persons at a particular "social address," comparing contrasting categories of individuals on a variety of outcome measures, and then moved to focusing on processes that affected the development of

these individuals. The recognition in the 1960s that the effect of processes could vary in differing environments has gradually led to the evolution of "a person-process-context model, because it takes into account the characteristics of each of these elements and the interaction among them" (Bronfenbrenner & Crouter, 1983, p. 376).

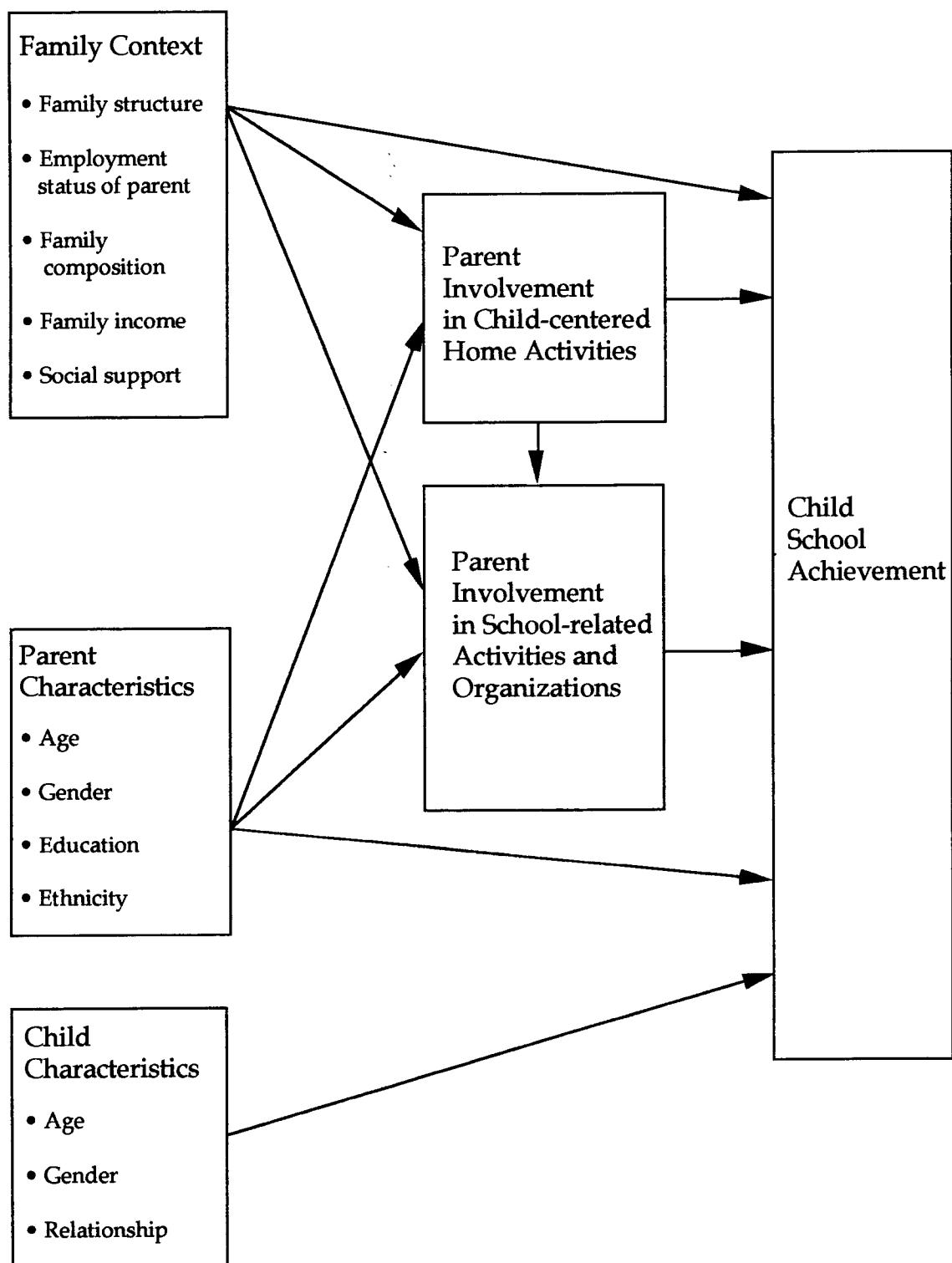
With this approach in mind, the conceptual model, presented in Figure 2.1, was designed to provide a framework for (a) exploring the dimensions that influence parent involvement and (b) linking these factors to children's school performance through the process of parent involvement practices. In the model, a child's school achievement is directly affected by aspects of the family context, individual characteristics of both the parent and the child, and parent involvement in child-centered activities at home and in school-related activities and organizations. Additionally, the effects of the family context and parent-child characteristics on children's school performance are mediated by both types of parent involvement.

The family context sets the stage for parent-child interactions that can support or detract from child outcomes. Evidence indicates that children in single-parent and stepfamilies have lower levels of achievement and educational attainment than children in traditional two-parent families (Astone & McLanahan, 1991; McLanahan, Astone, & Marks, 1991; Milne, 1989). These effects are hypothesized to operate through differential levels of parent involvement. Under conditions of lower involvement, children are less likely to be high achievers (Clark, 1983; Comer & Haynes, 1991; Henderson, 1987).

Mothers who are employed outside the home may spend similar amounts of time interacting with their children at home as mothers who

Figure 2.1

A conceptual model for examining perceptions of children's school achievement as a function of family context and parent-child characteristics



are not employed but may be less likely to participate in school-related activities (Epstein, 1986; Nock & Kingston, 1988). Direct effects of maternal employment on children's school performance may depend on the proportion of time the mother is employed (Hoffman, 1989). The model identifies family composition as a factor in children's school achievement because the number of children in a family has a negative effect on school achievement and high school drop out rates (Scott-Jones, 1984; Rumberger et al., 1990). The age of the youngest child in the family and gender composition are hypothesized to affect school achievement only indirectly through their effects on parent involvement (Epstein & Dauber, 1991; Hill & Stafford, 1980; Katzev, Warner, & Acock, in press; Marsiglio, 1991). Family income is included in the model since children living in poverty are somewhat less likely to be high achievers than more advantaged children (McLanahan, Astone, & Marks, 1991; Mulkey, Crain, & Harrington, 1992).

Social support is conceptualized as having indirect effects on children's achievement through its relationship to parent involvement (Cochran, 1988). Under conditions of high social support, it is anticipated that parents will spend time with children both in child-centered activities at home and in school-related activities and organizations and thus, have children with better school performance. Clark (1983) found that parents of low-achieving children could not count on any reliable help or support from other adults.

Individual characteristics of the parent are conceptualized as having direct effects on children's achievement and indirect influence through school/home involvement. Children born to older parents tend to have better school outcomes than children born to teens (Scott-Jones, 1984). In comparison to younger mothers, those mothers who are older provide a

more stimulating home environment and are more likely to volunteer at school (Baharudin & Luster, 1992; LeBlanc, 1992).

The model specifies that parent gender has a direct effect on both types of involvement but no direct effect is anticipated on children's school performance. This relationship is based on evidence that mothers are much more likely than fathers to be involved in all aspects of children's schooling, from volunteering at school to monitoring children's homework (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990; Lareau, 1989). Mothers' educational level is closely associated with children's school performance (Laosa, 1982; Sandefur, McLanahan & Wojtkiewicz, 1992), involvement in child-centered activities in the home (Hess & Holloway, 1984; Lareau, 1987, 1989), and involvement in school-related activities (Stevenson & Baker, 1987).

Research suggests that the race and/or ethnic background of the parent plays a direct role both in influencing their children's school achievement and in affecting levels of their own involvement in school-related activities and with the children at home. Students from ethnic minority families tend to have lower grades and are more likely to drop out of school than Anglo-Americans (Steinberg, Dornbush, & Brown, 1992). Minority parents are less likely to be involved in school activities and organizations (Klimes-Dougan et al., 1992; LeBlanc, 1992).

The model also specifies that certain child characteristics will affect school achievement. Throughout school, girls tend to get higher grades than boys even though achievement scores show boys excelling in science and math by tenth grade (National Center for Education Statistics, 1992). However, the effects of gender may depend on family types. Boys tend to do less well in single-parent homes but girls often have a harder time in

stepfamilies (Demo & Acock, 1988). When mothers remarry, the risk of dropping out of school is reduced for boys and increased for girls (Zimiles & Lee, 1991). The child's age may be associated with measures of school performance since younger children tend to be evaluated more broadly on the basis of effort and work habits while older children are evaluated more narrowly on test performance (Gullickson, 1985). Child age also has a direct effect on parent involvement both in home activities and in school activities and organizations. Parents are more likely to be involved when children are younger (Epstein & Dauber, 1991; Stevenson & Baker, 1987).

Finally, the model recognizes the role differing family contexts may play in structuring levels of interactional commitment by conceptualizing parent involvement at two separate levels: (a) participation in child-centered activities in the home setting and (b) spending time at school, participating in classroom-related activities and school organizations (Ascher, 1988; Epstein, 1987a, 1990b). Previous research has found both constructs to be related to children's school performance since spending time interacting with children enhances their cognitive development, and participating in school-related activities provides information that allows parents to be more effective in monitoring their children's school progress (Henderson, 1987; Reynolds, 1989; Scott-Jones, 1984). A final path indicates a relationship between home involvement and school involvement. Parents who spend increased amounts of time with their children at home may have a higher degree of commitment to parenting and this commitment may spillover and be related to greater involvement in school activities and organizations.

## CHAPTER 3

### METHODOLOGY

This study is designed to determine aspects of the family context associated with variations in parent involvement in children's schooling and children's performance at school using data from the 1987-88 National Survey of Families and Households (Sweet, Bumpass, & Call, 1988). There are two parts to the study. First, the study evaluates the utility of the conceptual model proposed in Chapter Two to explain the effects of family context variables and parent-child characteristics on children's school performance. Next, the effects of the family context and parent-child characteristics on parent involvement are examined.

The National Survey of Families and Households (NSFH) is well-suited for the purposes of this study for several reasons. First, it provides a national probability sample with an oversampling of minorities, single-parents, cohabiting parents, and parents with stepchildren. It is essential to have an adequate representation of these often hard to access family groupings to study the effects of family characteristics on parent involvement. The sampling strategy of the NSFH, which has yielded a data base that allows contrasts of these differing family types, is thus ideal for the purpose of this study.

A second advantage of utilizing the NSFH data base is its breadth of content on family issues from both women and men respondents. The conceptual model advanced in Chapter Two requires information on contextual variables, family processes, and child outcomes. Data in these areas are contained in the NSFH. Survey questions provide information on



the degree of parent involvement in both child-centered activities in the home and in school-related activities and organizations. Respondents also reported on different types of help and support received from people outside the immediate household and rated their children's school achievement.

Another advantage of utilizing the NSFH data base is that parent involvement can be estimated for all school-aged children, from kindergarten through high school. Finally, the size of the NSFH sample provides the necessary statistical power for the complex multivariate analysis needed to make contrasts and examine the conceptual model proposed in this study.

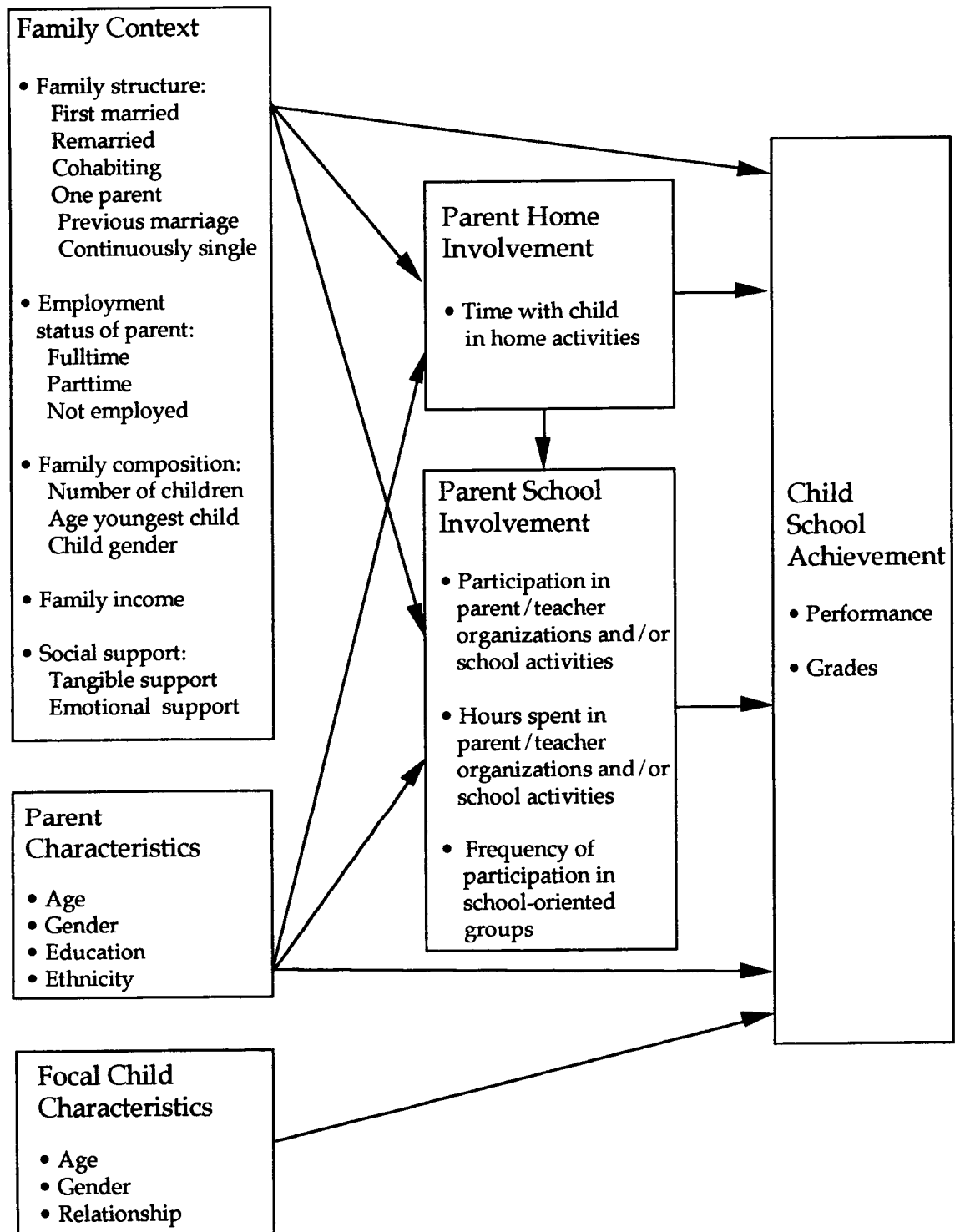
### Research Design

The specific objectives of this study are twofold. The first part of the study is designed to examine children's school achievement using a person-process-context model of human development (Bronfenbrenner & Crouter, 1983). Variables are specified (see Figure 3.1) for the conceptual model presented in Chapter Two. Arrows indicate the direction of effects. Correlations among exogenous variables have been omitted to simplify the figure.

Person variables posited to have direct effects on achievement include both parent characteristics (age, education, and ethnicity) and characteristics of the child for whom school achievement data are available (age, gender, and relationship to responding parent). Context variables with direct effects on children's achievement include family structure, parent employment status, the number of children in the family, and family income. Process variables include parent involvement with children in home-centered

Figure 3.1

Model identifying variables for examining perceptions of children's school achievement as a function of family context, and parent-child characteristics



activities, and parent involvement in school-related activities and organizations.

The model also shows indirect effects on achievement through parent-home involvement and parent-school involvement. Some elements of the family context, including social support, the age of the youngest child, and child gender composition of the family are posited to affect achievement only indirectly through parent involvement and are not directly related to children's school achievement.

The second part of the study is designed to examine the associations among parent involvement and two sets of variables: (a) dimensions of the family context, including family structure, parent employment status, family composition, income, and social support; and (b) parent characteristics, including age, gender, education, and race/ethnicity. The study will address the following research questions:

1. Does parent involvement either in child-centered home activities or in school-oriented groups and activities affect perceptions of children's school achievement? Do aspects of the family context including family structure, parent employment status, number of children in the family, and family income affect perceptions of children's school achievement? Do parent and child characteristics affect perceptions of children's school achievement?

2. Do levels of school achievement vary as a function of the family structure or parent employment status?

3. Does parent involvement in child-centered home activities affect parent involvement in school activities and organizations? Do parent characteristics or aspects of the family context including family structure,

parent employment status, family composition, family income, and social support affect parent involvement in school activities and organizations?

4. Do parent characteristics or aspects of the family context including family structure, parent employment status, family composition, family income, and social support affect parent involvement in child-centered home activities?

5. Does the time parents spend in school-oriented groups and activities or in child-centered home activities vary as a function of the family structure or parent employment status?

### Data and Procedures

The 1987-88 National Survey of Families and Households (NSFH) is a national cross-sectional survey providing a wide range of information on the type and functioning of American families. Personal interviews with a probability sample of 13,017 respondents age 19 and older, living in households, and able to be interviewed in either English or Spanish were conducted between March 1987 and May 1988. The sample includes a main sample of 9,643 households plus a double sampling of blacks, Puerto Ricans, Mexican Americans, single-parent families, families with stepchildren, cohabiting couples, and recently married persons.

One adult per household was randomly selected as the primary respondent interviewed either in English or Spanish. Portions of the interview were conducted by having the respondent supply answers to a self-administered questionnaire to insure privacy for sensitive areas (such as family conflict and sexual habits) and to break-up the monotony of a long interview that took an average of 90 minutes. To collect data on child

behavior and school performance, a single child was selected from the household roster. If more than one child was present, the child whose name came first in the alphabet was selected as the focal child.

About halfway through the survey, an incentive payment of \$10 was instituted to facilitate cooperation from targeted respondents. Interviewers also returned to respondents who previously refused with the offer of an incentive payment for participation. The overall response rate for the interviews was 74.3% (73.5% for the main sample and 76.8% for the oversample).

### Sample

This study utilizes a subsample of 3,321 respondents who have at least one biological, adopted or stepchild between the ages of 5 and 18 years and for whom data were complete on parent involvement questions. Of these respondents, 1,085 are fathers and 2,239 are mothers, reflecting both oversampling strategies accessing single-parent households and the greater tendency of women to participate in surveys. Table 3.1 shows the distribution of female and male respondents by family structure; employment status of the responding parent; race/ethnic background of the parent; whether the family is composed of girls only, boys only, or both girls and boys; and the relationship of the focal child to the parent. All percentages are based on unweighted data as they are intended to be descriptive of the subsample used in the analysis.

Family structure is determined by analyzing the relationships between the children and parents in the family and by assessing the

Table 3.1

Sample distribution by family structure, parent employment status, race/ethnic background, child gender, and relationship of focal child to parent

	Females		Males	
	n	%	n	%
<u>Family structure</u>				
First-married two-parent home	899	40.2	708	65.3
Remarried two-parent home	304	13.6	216	19.9
Cohabiting two-parent home	96	4.3	57	9.6
One-parent home				
Previously married	753	33.6	102	9.4
Continuously single	187	8.4	2	0.2
Total	2,239		1,085	
<u>Parent employment status</u>				
Fulltime employment (30+ hours)	1,198	53.5	980	90.3
Parttime employment (5 -29 hours)	224	10.0	15	1.4
No employment outside home	817	36.4	90	8.3
Total	2,239		1,085	
<u>Race/ethnic background</u>				
African-American	505	22.6	163	15.0
Hispanic origin	221	9.8	83	7.6
White, not of Hispanic origin	1,513	67.6	839	77.3
Total	2,239		1,085	
<u>Gender of family children</u>				
All boys	639	28.5	318	29.3
All girls	637	28.5	294	27.1
Both sexes	962	43.0	473	43.6
Total	2,239		1,085	
<u>Focal child</u>				
Age 5 - 11 years				
Females	473	51.5	231	49.9
Males	445	48.5	232	50.1
Total	918		463	
Stepchild or partners' child	17	1.9	77	16.6
Age 12 - 18 years				
Females	497	48.9	200	44.9
Males	33497	51.1	245	55.1
Total	973		445	
Stepchild or partners' child	36	3.7	79	17.8

Note. Percentages are based on unweighted data and are not intended to estimate characteristics for the U. S. population

parents' marital status. Two-parent families are divided into three separate groups. First-married parents (40.2% of the women and 65.3% of the men) are those where all children in the family are either biological progeny of both parents or have been adopted by both parents. Stepfamilies (13.6% of the women and 19.9% of the men) are remarried parents where at least one child in the household is a stepchild. Cohabiting parents (4.3% of the women and 9.6% of the men) are those not married but living with a partner, and who have at least one biological, adopted, or stepchild within the designated age range. Of the total subsample, 33.3% of the cohabiting parents had never been married while 66.6% had been previously married.

Single parent households, those where only one parent is present, comprise 31.4 % of the total subsample with the proportion of mother-only families (42.0%) far outnumbering that of father-only families (9.6%). Mother-only families are distinguished as having been continuously single (8.4%) or married in the past (33.6%). Too few father-only households (0.2%) fell into the never married category to make a useful distinction for men.

The racial/ethnic background and employment status of the respondents are varied. Approximately 70.8% of the subsample are non-Hispanic whites (67.6% of the women and 77.3% of the men), 20.1% are African-Americans (22.6% of the women and 15% of the men), and 9.1% have an Hispanic background (9.8% of the women and 7.6% of the men). Although it is recognized that Mexican-Americans, Chicanos, Latinos, Puerto Ricans, Cubans, and those with other Hispanic origins have different cultural backgrounds, these people are included in a single category since separating them would not provide a large enough sample for data analysis. Other racial/ethnic categories contained too few

respondents for analysis and those individuals were omitted from the subsample.

Employment status was estimated in terms of the number of hours/week the respondent spent working outside the home. There is more variation in female respondent's employment status than that of males. Not surprisingly, 90.3% of the fathers are employed 30 or more hours per week in comparison to 53.5% of the mothers. Only 9% of the fathers are not employed compared to 36.4% of the mothers. Respondents were considered to be employed parttime if they worked outside the home for 5 or more hours but less than 30 hours. Very few fathers (1.4%) in the subsample are parttime workers in comparison to 10% of the mothers.

Families are divided into those who are raising boys, those raising girls, and those raising both boys and girls. Of the subsample, 29.3% of the fathers and 28.5% of the mothers have boys only in the family, 27.1% of the fathers and 28.5% of the mothers have girls only, and the remaining respondents have both boys and girls. Focal children were randomly chosen from those in the household, as previously described, and as a result, boys and girls tend to be evenly distributed. But while approximately 18% of the focal children are related to male respondents either as a stepchild or as a partners' child, only about 2.5% of the focal children are related in this manner to female respondents.

Mean values of family context variables for female and male respondents by their family type are shown in Table 3.2. Mothers in one-parent households, whether they have been previously married or continuously single, report receiving significantly more tangible and emotional social support from a wider network of individuals ( $p < .05$ ) than



Table 32

Means for family context variables by sex of respondent and family structure

	Tangible support	Emotional support	Family income	Number of children	Age of youngest child
<u>Females</u>					
First-married two-parent home n = 899	1.78 (1.74)	1.24 (1.18)	44.85 (54.77)	2.19 (1.09)	8.34 (5.22)
Remarried two-parent home n = 304	1.60 (1.74)	1.19 (1.03)	43.14 (45.92)	2.21 (1.17)	8.26 (5.22)
Cohabiting two-parent home n = 96	1.84 (1.68)	1.10 (1.06)	27.77 *** (29.55)	2.36 (1.27)	6.86 ** (5.13)
One-parent home Previously married n = 753	2.25 *** (2.09)	1.37 * (1.15)	15.63 *** (13.88)	1.99 *** (1.02)	9.70 *** (5.01)
Continuously single n = 187	2.08 * (1.77)	0.91 *** (.90)	9.12 *** (7.60)	2.19 (1.14)	6.44 *** (4.63)
<u>Males</u>					
First-married two-parent home n = 708	1.59 (1.67)	.72 (.95)	43.95 (43.09)	2.17 (1.06)	8.17 (5.10)
Remarried two-parent home n = 216	1.39 (1.54)	.69 (.89)	43.46 (45.94)	2.19 (1.16)	7.93 (5.03)
Cohabiting two-parent home n = 57	1.62 (1.49)	.78 (.87)	33.92 (24.62)	2.17 (1.18)	7.30 (4.77)
One-parent home n = 104	1.65 (1.66)	.93 † (.93)	29.52 ** (22.25)	1.58 *** (.75)	11.61 *** (4.50)

Note: Family income has been divided by 1,000. Standard deviations are in parentheses. For each sex, significance levels are based on t-ratios, comparing first-marrieds to the other family types for each particular variable. Unweighted data are used in analyses.

† p ≤ .10 \* p ≤ .05 \*\* p ≤ .01 \*\*\* p ≤ .001

first-married mothers who are living with their spouses. Fathers in one-parent households tend to receive more emotional support than fathers in traditional two-parent households, but this difference is not significant ( $p < .10$ ).

Mothers in one-parent households, regardless of the route they took to single headship, have significantly lower incomes ( $p < .001$ ) than first-married mothers living in a two-parent home. Mothers who have been continuously single are most likely to be poor with an average income of only \$9,117 while previously married single mothers are somewhat better off economically with an average income of \$15,627. In both types of families, children are being raised on marginal financial resources in comparison to children in families with two married parents. The average income of fathers living in a one-parent home is \$29,519, significantly lower ( $p < .01$ ) than the average \$43,952 of first-married fathers but still, more than double the average income of single mothers. Cohabitors have generally lower incomes than married parents but the differences are significant only for the women respondents ( $p < .001$ ).

Families in the subsample have an average of about two children. Previously married single mothers have fewer children ( $p < .001$ ) and older children ( $p < .001$ ) than first-married mothers. Single mothers who have never married and cohabiting mothers both have significantly younger children than mothers in traditional two-parent families ( $p < .01$ ). Fathers in one-parent homes also have fewer children ( $p < .001$ ) and older children ( $p < .001$ ) than their counterparts living in a first-married two-parent household.

Mean values for parent-child characteristics of female and male respondents by their family type are shown in Table 3.3. Both cohabiting

Table 33

Means for parent-child characteristics by sex of respondent and family structure

	Education	Age	Age of focal child (5 - 11 years)	Age of focal child (12 - 18 years)
<u>Females</u>				
First-married two-parent home n = 898	12.87 (2.79)	37.24 (7.41)	7.61 (1.98)	15.16 (2.03)
Remarried two-parent home n = 304	12.65 (2.12)	34.77 *** (5.90)	8.43 *** (1.87)	14.77 * (1.85)
Cohabiting two-parent home n = 96	11.69 *** (2.19)	31.42 *** (6.10)	7.71 (2.06)	14.2 ** (1.81)
One-parent home Previously married n = 753	12.26 *** (2.56)	37.53 (7.55)	8.25 *** (1.98)	15.15 (1.84)
Continuously single n = 187	11.73 *** (2.14)	31.15 *** (5.91)	7.77 (1.87)	14.81 (1.87)
<u>Males</u>				
First-married two-parent home n = 708	13.38 (3.20)	39.37 (7.54)	7.63 (1.94)	15.06 (1.97)
Remarried two-parent home n = 216	12.93 * (2.90)	37.17 ** (8.62)	8.09 * (1.87)	14.53 * (1.83)
Cohabiting two-parent home n = 57	12.09 *** (3.01)	33.45 *** (9.55)	8.0 (2.340)	14.53 (1.96)
One-parent home n = 104	13.09 (2.85)	40.70 (7.63)	7.98 (1.79)	15.58 (2.16)

Note: Standard deviations are in parentheses. For each sex, significance levels are based on t-ratios, comparing first-marrieds to the other family types for each particular variable. Unweighted data are used in analyses.

† p ≤ .10 \* p ≤ .05 \*\* p ≤ .01 \*\*\* p ≤ .001

mothers and mothers living in one-parent homes have lower levels of education than mothers in traditional two-parent households ( $p < .001$ ). Continuously single mothers and cohabiting mothers, on average, have less than a high school education. Cohabiting fathers and fathers living in stepfamilies both have significantly less education than first-married fathers ( $p < .05$ ), but there is not a significant difference in education between these latter fathers and fathers who are raising children by themselves.

Mothers who have never married, cohabiting mothers, and remarried mothers are all younger ( $p < .001$ ) than first-married mothers. There is not a significant difference in age, however, between previously married mothers in one-parent homes and first-married mothers. Similarly for fathers, those who are cohabiting ( $p < .001$ ) or who have remarried are younger ( $p < .01$ ) than first-married fathers. Reflecting random selection procedures, the age of the focal child does not vary appreciably by either sex of the respondent or family structure. Although there are some statistically significant differences among the groups, they are small and make little substantive difference. For the younger age group, the focal child is approximately 8 years old while for the older group, the focal child is about 15 years.

The subsample is limited to respondents who had complete data on three parent involvement measures. Approximately 20% of the respondents (776) who fit the selection criteria for inclusion in the sample had missing data on one or more of these variables. Because excluding these cases can threaten both the internal and external validity of the results, a selection correction procedure was used to test for the unique composition of the remaining cases (Berk, 1983; Heckman, 1979). Biased

estimates can occur if the variables that influence the selection of a subsample (in this case, those without missing data) also influence the dependent variables. The selection correction procedure involves estimating an equation that predicts the likelihood that an individual will have incomplete data. This was done using logistic regression with measures of the respondents' educational level, number of marriages, and race/ethnicity regressed on cases with missing information. Results of this regression are shown in Appendix A.

A new variable was created using the probability estimates from the logistic equation as a measure of selection bias. This new variable, entitled "missing" was included in the equations predicting school achievement. As shown in Appendices B and C, this regressor was nonsignificant, suggesting that the missing cases did not significantly affect the outcome of the model.

## Measures

The NSFH reports parents' ratings of children's school achievement, but this information is available only for the focal child in each family. Other questions about parenting practices were included in the self-administered portion of the interview and were asked of all respondents who had a child aged 5 - 18 years living in the household, regardless of focal child status. Measures of the variables in the mid-level conceptual model are summarized in Table 3.3. Variables were chosen within the constraints of the NSFH data set.

Children's school achievement. The dependent variable used in the model is the parents' perception of the focal child's school achievement.

Table 3.4

Summary table: Variables and measures

Variable Description	Measure
<u>Child School Achievement</u>	
School performance	Parent report of how well child aged 5-11 is doing in school from 1 as near the bottom of the class to 5 as one of the best students in the class
School grades	Parent report of grades for youth aged 12-18 from 1 as mostly F's to 5 as mostly A's
<u>Parent School Involvement</u>	
Weekly school participation	1 if some participation during average week in school-related activities and/or organizations, 0 if no participation
Weekly school hours	Number of hours spent in an average week participating in a parent-teacher organization or other school activities
School-oriented groups	Frequency of participation in school-oriented groups from 1 as never to 5 as several times a week
<u>Parent Home Involvement</u>	
Home activities	Mean frequency of time parent spends with child in the following four activities: a. in leisure activities (like picnics, movies, or sports) b. playing or working on projects c. having private talks d. helping with reading or homework rated from 1 as never or rarely to 6 for almost every day.
<u>Family Structure</u>	
First-married two-parent home	Reference group
Remarried two-parent home	1 if remarried parent, 0 otherwise
Cohabiting two-parent home	1 if cohabiting, 0 otherwise
One-parent home	1 if single parent, 0 otherwise
Single parent, previously married	1 if previously married, 0 otherwise
Single parent, continuously single	1 if never married, 0 otherwise

Table 3.4 (continued)

Variable Description	Measure
<u>Parent Employment Status</u>	
Not employed	Reference group
Part-time employment	1 if working 5-29 hours outside home, 0 otherwise
Full-time employment	1 if working 30+ hours outside home, 0 otherwise
<u>Family Composition and Income</u>	
Number of children	Total number of children under age 18 living in household
Age of youngest child	Age of youngest child in family in years
All girls	Reference group
All boys	1 if only boys in family, 0 if otherwise
Both sexes	1 if both boys and girls, 0 if otherwise
Family income	Total household income in dollars, divided by 1000
<u>Social Support</u>	
Tangible support	Sum of types of individual from whom tangible help was received in last month in the four following categories: a. transportation, b. repairs to home or car, c. baby-sitting or child care, and d. other kinds of work around the house. Scale is from 0 to 20.
Emotional support	Sum of types of individuals from whom advice, encouragement, emotional or moral support was received in last month. Scale is from 0 to 5.
<u>Parent and Child Characteristics</u>	
Gender	1 if parent is female. 0 if male
Race/ethnic background	Reference group
Non-Hispanic white	1 if African-American, 0 if otherwise
Black	1 if Hispanic origin, 0 if otherwise
Hispanic	
Education	Parent education in years
Age	Parent age in years
Age of focal child	Age in years of focal child
Gender of focal child	1 if female, 0 if male
Stepchild	Relationship of focal child to parent: 1 if step or partners' child, 0 if otherwise

For a focal child aged 5 - 11, parents reported how well their child was doing in school on a 5-point Likert-type scale from 1 as one of the best students in class, 2 as above the middle, 3 as in the middle, 4 as below the middle, and 5 as near the bottom of the class. For a focal child aged 12 -18, parents reported on grades, categorizing the child's achievement from 1 as mostly A's, 2 as A's and B's, 3 as mostly B's, 4 as B's and C's., 5 as mostly C's, 6 as C's and D's, 7 as mostly D's, 8 as D's and F's, and 9 as mostly F's. Coding was reversed for both questions so that a high score would indicate a higher level of achievement.

Parent school involvement. This variable is measured in three ways. All parents with children aged 5 - 18 years, regardless of the focal child's age, reported on their involvement in school activities and organizations. Parents estimated the number of hours they spent in an average week participating in a parent-teacher organization or other school activities. As shown by the frequency distribution in Appendix D, responses to this question were highly skewed with 67.5% of the entire subsample (79.1% of all fathers and 61.3% of all mothers) indicating that they spent 0 hours in an average week and only 4.5 % of all fathers and 12.7% of all mothers spending more than 2 hours per week. To measure involvement vs. no involvement, a dichotomized variable was constructed with 0 coded as spending no time during an average week in school-related activities and organizations and 1 as spending at least some time.

The actual amount of time spent participating is also used as a measure of involvement. Because of the skewness, preliminary equations were computed using both the hours the parent reported participating and the natural logarithm of those hours. There were no substantive differences in these analyses. Since less than 1% of the mothers and



fathers reported participating at school anywhere from 21 to 60 hours in an average week, the maximum amount of participation time was set at 20 hours to minimize reporting biases.

Regardless of whether children were present in the household, respondents were asked about their participation in various types of organizations. The question was, "How often, if at all, do you participate in school related groups?" Responses were given as 1 for never, 2 for several times a year, 3 for about once a month, 4 for about once a week, and 5 for several times a week. Thus, while the other measures focus on spending time in organizations or school activities during an average week, this measure provides an estimate of the frequency that an individual is involved in school-oriented groups during the year.

Parent home involvement. All parents with children aged 5 - 18 years, regardless of the focal child's age, reported on their involvement in child-centered home activities. The variable "home activities" describes how often parents reported spending time with their children (a) in leisure activities away from home like picnics, movies, and sports; (b) at home working on a project or playing together; (c) having private talks; and (d) helping with reading or homework. Responses were given as 1 for never or rarely, 2 for once a month or less, 3 for several times a month, 4 for about once a week, 5 for several times a week and 6 for almost everyday. A principal components factor analysis indicated that these four items formed a single factor. Hence, the mean rating for these four activities was used to measure frequency of parent-child interaction at home (Cronbach's alpha for fathers = .71 and for mothers = .71).

Family context. Family structure is first divided into four categories for both female and male respondents. Three dummy variables measure

differing family types against a reference group of first-married two-parent homes. If a respondent is married and there is either a stepchild in the family or a child that is not the biological or adopted child of the spouse, the respondent is coded 1 for being in a remarried two-parent home, and 0 for otherwise. If a respondent is not married but living with a partner and has either a biological, adopted, or stepchild, that respondent is coded as 1 for cohabiting and 0 for otherwise. If a respondent is a single head of a household, not living with a partner, and has a biological or adopted child, the parent is coded as 1 for single parenting and 0 for otherwise. Respondents in this latter group are further subdivided, with those who have been previously married coded as 1 for ever married and 0 for otherwise, and those who have been continuously single coded as 1 for never married and 0 for otherwise.

Employment status is assessed by the number of hours the parent reported working at a job. Hours reported at a second job are also included in the total. Those who work at least five hours but less than 30 hours outside the home are coded 1 for working part-time and 0 for otherwise. Parents who work more than 30 hours outside the home are coded as 1 for working full-time and 0 for otherwise. The reference group for employment status is parents who did not report working any hours outside the home.

Family composition is measured in several ways. The number of children in the family includes all children under the age of 18 years, regardless of their status as biologically-related to the parents, adopted, step, or foster children. The age of the youngest child in the family is used as an estimate of whether the family has younger or older children. Families are also coded as having only boys, both girls and boys, or only

girls. For the gender composition of the family, having only girls is used as the reference group.

Household income is the family's total income, including child support and any interest, dividends, or income from other investments. A figure for total household income is only available when the respondent is also the householder. In a small proportion of the cases where the respondent lived in someone else's home, the total income (including any from interest, dividends, and other investments) of either the couple or, in the case of a single parent, the respondent, is used to estimate total household income. In approximately 10% of the cases, respondents did not report any income information. These respondents were assigned the median income for their sex and family type. These values are shown in Appendix E.

The amount of social support received by the parent is estimated for both emotional and tangible support. Parents were asked if they had received help and support during the past month from individuals not living in the immediate household. Tangible support is composed of help received in four separate areas: (a) with transportation, (b) repairs to home or car, (c) baby sitting or child care, and (d) other kinds of work around the house. Emotional support is a single question on receipt of advice, encouragement, and emotional or moral support. The amount of social support is a summative index constructed by adding together help received from five different groups of people: (1) friends, neighbors, and co-workers; (2) sons and daughters over 19 years of age; (3) parents; (4) brothers and sisters; and (5) other relatives. The indices for tangible and social support range from 0 as receiving help from no one to a possible 5 for emotional support and 20 for tangible support.

Parent and child characteristics. Parent gender, age, education, and ethnicity are utilized in the analysis. Education is measured by the years of schooling completed by the parent. Two dummy variables were created for race and ethnic background to estimate effects for African-American parents and Hispanic parents in comparison to non-Hispanic white parents. For analysis purposes, there were too few respondents (1.5% of the entire subsample) who were either Asian-American, Native American, or from other racial/ethnic groups and these individuals were omitted from the subsample. The age and gender of the focal child and that child's relationship to the responding parent are also included in the analyses when school achievement is the dependent variable.

### Data Analysis

Sample weights are available for the NSFH that estimate an individual's probability of selection. Initial analyses conducted on weighted data resulted in no substantive differences. Hence, all reported analyses are based on unweighted data. Weighting the data would better approximate the proportions of individuals in the population at large. But the interest in this study is on the relationship between children's school achievement and parent involvement for the differing family types who were oversampled. Thus, weighting the analyses would reduce the effects of oversampling single parents, parents in stepfamilies, cohabiting parents, and ethnic minorities. Since both family type and race/ethnicity are important for this study, results are reported in terms of unweighted data.

A series of regression equations are utilized to analyze the relationships in the mid-level conceptual model presented in Figure 3.1. Each endogenous variable is regressed on its associated predictors. The empirical results are presented in the form of a series of tables with both unstandardized and standardized coefficients when ordinary least squares regression equations are computed and odds ratios and probabilities when logistic regression is used. While the overall model is recursive and has the format of a path diagram, path analysis is inappropriate to analyze the entire model because of the presence of an endogenous variable that is dichotomized. Path analysis assumes that all variables are measured on an interval scale (Pedhazur, 1982).

The second set of research questions center on parent involvement as a dependent variable. Ordinary least squares regression analysis is used to estimate effects of the exogenous variables on the time spent with children and participation in school organizations, since these are both continuous variables. Because time in school-related activities is a binary variable measuring school participation vs. no school participation and the model also includes continuous predictors, a logistic regression procedure is used to obtain a maximum likelihood estimate for the model. The linear logistic model has the form:

$$\text{logit}(p) = a + b'x$$

where  $a$  is the intercept parameter, and  $b$  is the vector of the slope parameters. The results of logistic regression models are presented as ratios that specify the odds for the proportion of responses to non-responses. Odds ratios are calculated for individual coefficients as  $e^{-b'x}$  where  $b$  is the coefficient and  $x$  is the value of the variable under

consideration and for the entire equation as antilog of logit  $(p) = e^{-(a + b'x)}$ . Odds ratios less than one indicate reduced odds for a response, while odds ratios greater than one indicate increased odds that a response will occur (Morgan & Teachman, 1988).

Estimated parameters are difficult to interpret since they are expressed in natural logarithms. Exponentiating the coefficients can be misleading since odds-ratios do not have a linear relationship to probabilities (Roncek, 1991). Hence, parameters also are used to calculate the probability of a given response Y according to the following formula:

$$p(Y) = e^{-(a + b'x)} / (1 + e^{-(a + b'x)})$$

Probabilities can then be subtracted from each other to calculate the effects of group membership on a dichotomous dependent variable.

The least-squares procedure in SAS's general linear model is used to estimate mean levels of school achievement and parent involvement for differing family types (SAS Institute Inc., 1989). The results provide adjusted means with all control variables held at their respective mean values. Significance levels for these adjusted means are then computed from *t*-ratios. Thus, the estimated mean of time spent either in school-related activities or in child-centered activities at home is the expected value for each family type where the family is average on all control variables. While this procedure does not control for type 1 errors (a false rejection of the null hypothesis), it is useful in estimating mean values in an unbalanced design where cells are unequal. These adjusted means are simply estimators of the marginal means that would be expected if the design had been balanced. To insure an overall protection level, only probabilities associated with pre-planned comparisons are reported.

## CHAPTER 4

### RESULTS

The first research question focuses on the relationship of parent involvement, the family context, and parent-child characteristics to children's school achievement and asks whether: (a) parent involvement either in child-centered home activities or in school-oriented groups and activities, (b) elements of the family context including family structure, parent employment status, number of children, and family income, or (c) parent/child characteristics affect perceptions of children's school achievement. Descriptive statistics for school achievement and parent involvement variables are shown in Table 4.1.

Women and men respondents do not differ in their appraisals of children's school achievement but they do differ significantly on the parent involvement variables. Mothers are more likely to be regular participants ( $t(3,319) = -10.49, p < .001$ ) and spend more time in school activities during an average week ( $t(3,319) = -7.89, p < .001$ ) than fathers. Mothers also participate in school-oriented groups more frequently than fathers do ( $t(3,319) = -6.55, p < .001$ ) and report more frequent involvement in home activities with children, such as going on outings or helping with homework ( $t(3,319) = -5.44, p < .001$ ).

The effects of parent involvement, the family context, and parent/child characteristics on children's school achievement are modeled separately for a focal child aged 5 - 11 years and for a focal child aged 12 - 18 years since the dependent variables are measured differently for each of

Table 4.1

Descriptive statistics for school achievement and parent involvement variables

	Range	Women			Men		
		<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>
<u>Perceptions of school achievement</u>							
School performance Age 5 - 11 years	1 - 5	(942)	3.94	.98	(471)	3.95	.89
School grades Age 12 - 18 years	1 - 9	(978)	6.67	1.66	(451)	6.82	1.71
<u>Parent involvement</u>							
Weekly school participation		(2,239)	.387***	.487	(1,085)	.209	.407
Weekly school hours	0 - 20	(2,239)	1.17***	2.78	(1,085)	.45	1.52
School-oriented groups	1 - 5	(2,239)	1.92***	1.02	(1,085)	1.68	.91
Home activities	1 - 6	(2,239)	4.05***	1.24	(1,085)	3.79	1.24

Note: Higher school achievement scores signify perceptions of higher achievement. Weekly school participation is coded 1 for at least some participation and 0 as no participation. Significance levels are based on t-ratios, comparing mothers to fathers.

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$



the two age groupings. For the younger child, the parent rated school performance in relation to other students in the class. Estimations ranged from being one of the best students in class to near the bottom of the class. Appendix F presents the zero order correlations for this model. For the older child, the parent reported school grades. Zero order correlations for these relationships are shown in Appendix G.

Appendices F and G show that the zero order correlations between the school involvement variables are highly significant, ranging from  $r = .29$  to  $r = .54$ . Conceptually, the three measures tap the same behavior, but each question is framed slightly differently. Because of multicollinearity among the three variables and because the variables are assessing the same parent activities, separate regression equations were computed for each measure of school involvement. Preliminary analyses found no significant interaction effects between parent gender and family structure, child gender, or the relationship of the child to the parent on the school outcome variables so separate equations are not computed for mothers' and fathers' estimations of their child's school achievement.

#### School Performance of Child Aged 5 - 11 Years

Table 4.2 presents the ordinary least squares (OLS) regression of the parent involvement and family context variables, and parent-child characteristics on parent perceptions of the school performance of a focal child, aged 5 - 11 years. Model 1 shows the effects when weekly school participation is dichotomized as at least some participation during an average week vs. no participation. Model 2 shows the effects when the number of hours the parent spends per week in school-related activities

Table 4.2

Effect of parent school involvement, parent involvement in home activities, family context, and parent-child characteristics on school performance of focal child, aged 5 - 11 years, OLS estimates

Independent Variables	Model 1		Model 2		Model 3	
	b	$\beta$	b	$\beta$	b	$\beta$
<u>Parent involvement</u>						
Weekly school participation	.017	.009	—	—	—	—
Weekly school hours	—	—	-.011	-.030	—	—
School-oriented groups	—	—	—	—	.061*	.064
Home activities	.078***	.090	.082***	.095	.070***	.081
<u>Family Context</u>						
Remarried parent	-.062	-.023	-.064	-.023	-.062	-.023
Cohabiting parent	-.167	-.040	-.170	-.040	-.163	-.039
Previously married parent	-.146*	-.064	-.145*	-.063	-.139*	-.061
Continuously single parent	-.125	-.035	-.133	-.037	-.113	-.032
Part-time employment	.090	.026	.094	.027	.080	.023
Full-time employment	.079	.040	.078	.039	.077	.039
Number of children	.022	.024	.023	.025	.017	.019
Family income	.022	.036	.001	.036	.001	.039
<u>Parent Characteristics</u>						
Gender	.072	.035	.085	.042	.052	.026
Education	.052***	.146	.052***	.147	.048***	.134
Age	.002	.011	.002	.014	.001	.005
Black	-.082	-.034	-.077	-.032	-.081	-.034
Hispanic	-.197*	-.063	-.198*	-.063	-.198*	-.063
<u>Focal Child Characteristics</u>						
Gender	.283***	.148	.280***	.147	.283***	.148
Age	-.028*	-.056	-.027*	-.056	-.028*	-.057
Stepchild	-.069	-.018	-.069	-.018	-.059	-.016
Intercept	2.886		2.860		2.922	
R <sup>2</sup>	.0876		.0894		.0911	
N	1,379		1,379		1,379	

Note: Analyses are conducted with unweighted data. Model 1 measures school involvement by weekly participation. Model 2 measures school involvement by hours spent per week. Model 3 measures school involvement by participation in school-oriented groups. Weekly school participation is coded 1 if some weekly participation and 0 if no participation. Remarried, cohabiting, previously married, and continuously single are dummy variables with first-married parents as the reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. Gender is coded 1 if female and 0 if male. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group. Stepchild refers to the relationship of the focal child to the reporting parent and is coded 1 if a partner's child or a stepchild and 0 if a biological or adopted child.

\*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

and organizations is used as the measure of school involvement. Model 3 presents the effects when school involvement is measured by the frequency of parent participation in school-oriented groups.

Neither weekly parent participation in school activities and organizations nor the absolute number of hours a parent spends in these pursuits affects perceptions of the school performance of children in the younger age group. But parent involvement in school-oriented groups is positively associated with children's school progress, as shown in Model 3. Frequent participation in these parent-teacher organizations is related to parental reports of higher class standings for their school-age child. Parent involvement in home activities such as taking children on excursions, playing with them, and helping with projects is also associated with stronger school performance. Parents who spend time with their children in these type of activities report that their child is doing better in school, in comparison to other students in the same class.

While the direction of the coefficients in all three models indicates that living in non-traditional families tends to have a negative impact on school outcomes, the effects are of an extremely small magnitude and may have little substantive significance. The only living arrangement that is significantly different from living with first-married parents is living in a one-parent household with a previously married parent. The unstandardized coefficient for this dichotomized variable shows that this latter family type is associated with a decrease in school performance by a factor of approximately .14. It is doubtful whether this size of an effect would be enough to move a child from one category, such as performing "above the middle of the class" to the next lower one, performing in "the middle of the class."

Parent employment status is not significantly related to younger children's school performance, nor is the number of children in the family. And although the zero order correlation for family income shows a significant relationship to school performance ( $r = .11, p < .001$ ), this effect disappears when other variables are controlled within the models.

Two parent characteristics are associated with younger children's school performance. Parents with more education report better than average school performance for their children. This is one of the strongest effects in the models with a standardized coefficient ranging from .134 in Model 3 to .147 in Model 2. The other significant parent characteristic relates to ethnic background. Parents with an Hispanic ethnic background report significantly lower school performance for their youngsters in comparison to either African-American parents or Anglos.

The characteristics of younger children that relate to school performance, net of the other model variables, are gender and age. Parents report better school progress for their girl children than for their boys. Along with parent education, the gender of the focal child is one of the strongest predictors of class standing. Interaction effects between the child's gender and family type were nonsignificant and are not shown. Age also makes a difference in children's school success and is negatively related to performance. The older children become, the less likely parents are to report them as being one of the best students in the class. The child's relationship to the reporting parent is not a significant predictor of school performance. Parents are as likely to report good progress for their stepchildren as for their biological or adopted children. The variables in the total model explain approximately 9% of the variance in younger children's school performance.

## School Achievement of Child Aged 12 - 18 Years

Table 4.3 presents the OLS regression of the parent involvement and family context variables, and parent-child characteristics on the school grades of a focal child, aged 12 - 18 years. Model 1 shows the effects when weekly school participation is dichotomized as at least some participation during an average week vs. no participation. Model 2 shows the effects when the number of hours the parent spends per week in school-related activities and organizations is used as the measure of school involvement. Model 3 presents the effects when school involvement is measured by the frequency that the parent participates in school-oriented groups. Effects are similar to those for younger children's school performance with several exceptions.

For the older children, regular weekly parent participation in school-related activities and organizations is associated with higher grades ( $p < .05$ ), as shown in Model 1. Similar to the results with younger children, the absolute number of hours the parent spends does not make a difference in the student's achievement. But the parent's frequent participation in school-oriented groups also tends to be associated with higher grades for the focal child ( $p < .06$ ). The amount of time parents spend with their adolescents at home, including working on projects together and helping with homework, is positively related to school grades. The more frequently parents report being involved in these child-centered activities, the higher the grades the student is likely to have.

The effects of family context variables on older children's grades are similar to the effects for younger children with one notable exception. School outcomes for adolescents are negatively affected both by living with

Table 4.3

Effect of parent school involvement, parent involvement in home activities, family context, and parent-child characteristics on school grades of focal child, aged 12 - 18 years, OLS estimates

Independent Variables	Model 1		Model 2		Model 3	
	b	$\beta$	b	$\beta$	b	$\beta$
<u>Parent involvement</u>						
Weekly school participation	.209*	.057	—	—	—	—
Weekly school hours	—	—	.005	.007	—	—
School-oriented groups	—	—	—	—	.087 <sup>†</sup>	.051
Home activities	.127***	.097	.141***	.107	.127***	.096
<u>Family Context</u>						
Remarried parent	-.233	-.052	-.242	-.054	-.234	-.052
Cohabiting parent	-.697**	-.072	-.727**	-.075	-.690**	-.071
Previously married parent	-.512***	-.142	-.522***	-.145	-.502***	-.139
Continuously single parent	-.174	-.018	-.183	-.019	-.156	-.017
Part-time employment	-.028	-.004	-.012	-.002	-.019	-.003
Full-time employment	.031	.008	.032	.009	.028	.008
Number of children	-.004	-.003	-.001	-.001	-.006	-.004
Family income	.001	.030	.001	.028	.001	.026
<u>Parent Characteristics</u>						
Gender	.026	.007	.055	.015	.036	.009
Education	.083***	.141	.088***	.149	.084***	.143
Age	.022**	.093	.023**	.095	.023**	.096
Black	.221 <sup>†</sup>	.052	.223 <sup>†</sup>	.053	.219 <sup>†</sup>	.052
Hispanic	.187	.028	.188	.028	.202	.031
<u>Focal Child Characteristics</u>						
Gender	.582***	.173	.590***	.176	.592***	.177
Age	-.068**	-.078	-.073**	-.084	-.071**	-.081
Stepchild	.067	.011	.063	.010	.063	.010
Intercept		5.046		5.018		4.931
R <sup>2</sup>		.1080		.1051		.1074
N		1,411		1,411		1,411

Note: Analyses are conducted with unweighted data. Model 1 measures school involvement by weekly participation. Model 2 measures school involvement by hours spent per week. Model 3 measures school involvement by participation in school-oriented groups. Weekly school participation is coded 1 if some weekly participation and 0 if no participation. Remarried, cohabiting, previously married, and continuously single are dummy variables with first-married parents as the reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. Gender is coded 1 if female and 0 if male. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group. Stepchild refers to the relationship of the focal child to the reporting parent and is coded 1 if a partner's child or a stepchild and 0 if a biological or adopted child.

<sup>†</sup>  $p < .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

a cohabiting parent and by living in a one-parent household with a previously married parent. Living with a cohabiting parent decreases an adolescent's grades by a factor of approximately .7 while living with a single parent who was previously married decreases grades by a factor of about .5. These factors are large enough to reduce average school grades from the category of receiving B's and C's (the mean for youngsters living with first-married parents) to the lower category of receiving mostly C's. Finally, although the direction of the coefficient suggests a negative relationship, Table 4.3 shows that living in a stepfamily is not a significant predictor of older students' grades.

Net of the other variables in the models, neither the employment status of the parent, the number of children in the family, or the family income is significantly related to older students' grades. As with the younger children, zero order correlations show family income to be significantly associated with grades ( $r = .11, p < .001$ ). But here too, when parent education is controlled, the effects are substantially diminished.

Among parent characteristics, educational level has the strongest effect on children's school achievement, with the standardized coefficients shown in Models 1, 2, and 3 ranging from .141 to .149. The more education the parent has, the higher are the older child's school grades. In addition, parent age is significantly related to older children's achievement. Having an older parent is associated with receiving higher grades in school. Race is positively related to school grades. African-American parents tended to report higher school grades for their adolescent children than parents of Anglo-American students ( $p < .06$ ).

Examining child characteristics, we can see that child gender continues to be a strong predictor of school achievement. Parents report

that adolescent girls have significantly higher grades than teenage boys. However, in an analysis not shown, there were no significant interaction effects between child gender and family type. Student age also makes a difference. Parents report that younger children in junior high school receive higher grades than older youngsters who are in high school. But as within the younger age grouping, the child's relationship to the parent is not a significant predictor. Being a stepchild or the child of a partner in comparison to being the parent's biological or adopted child does not significantly alter the parent's report of school achievement. The variables in the total model explain approximately 10.5% of the variance in older children's school grades.

### Variations in School Achievement

The second research question asks if levels of school achievement vary as a function of the family structure or parent employment status. A preliminary analysis (not shown) found a significant interaction effect on younger children's school performance between levels of employment and family structure, but only for women. To examine this relationship, means for school performance and school grades were estimated by family type and levels of maternal employment using the SAS general linear model least-squares procedure which holds all the variables in the model at their respective mean values (SAS Institute, Inc., 1989).

Table 4.4, presented below, shows the results of these analyses. The number of part-time workers was too few to disaggregate the effects of partial employment on children's achievement so the estimated means compare mothers who are employed for at least five hours per week with



Table 4.4

Estimated means for school achievement by family structure and maternal employment

Family structure	Women			
	School performance Focal child aged 5 - 11 yrs		School grades Focal child 12 - 18 yrs	
	Maternal employment		Maternal employment	
	0 - 4 hours/week	5 or more hours/week	0 - 4 hours/week	5 or more hours/week
First-married two-parent home	4.03 (147)	4.00 (233)	7.01 (111)	6.89 (253)
Remarried two-parent home	3.89 (42)	3.94 (74)	6.89 (41)	6.63 (103)
Cohabiting two-parent home	3.84 (20)	3.92 (21)	5.85 <sup>a b</sup> (8)	6.08 <sup>a b</sup> (23)
One-parent home Previously married	3.59 <sup>a b</sup> (87)	4.04 <sup>c</sup> (186)	6.39 <sup>a b</sup> (114)	6.44 <sup>a b</sup> (272)
Continuously single	3.83 (58)	3.89 (50)	6.54 (22)	6.91 (24)

Note: Analyses are conducted with unweighted data. Numbers in parentheses are the sample size on which each mean is based. Estimated means are adjusted for the effects of parent involvement in school-oriented groups and home activities, number of children, family income, mother's education and age, and child's age by holding these variables at their respective mean values. Significance levels are based on t-ratios and letters are used to show which comparisons are significant at the .05 level.

An "a" signifies that the school achievement of children living in that type home is significantly different from the achievement of a child living in a first-married two-parent home with a non-employed mother. A "b" signifies that the school achievement of children living in that type home is significantly different from the achievement of a child living in a first-married two-parent home with an employed mother. A "c" indicates that the achievement of a child with an employed mother is significantly different from living with a non-employed mother for that family type.

mothers who have no weekly paid employment. To insure an overall protection level, only probabilities associated with pre-planned comparisons are reported.

Differences in younger children's school performance are not significant when maternal work status and remarried, cohabiting, and continuously single family types are crossed. But the school performance of children living with a previously married single mother who is currently not working is significantly lower than the performance of children living in a first-married two-parent home with either a non-employed or an employed mother. However, when the previously married single mother is employed outside the home, the child's school performance is significantly higher than when the previously married single mother is not employed. This pattern shows that younger children living with an employed previously married single mother do as well in school as the same age children who live with their first-married parents.

As with the younger children, differences in older children's school grades are not significant when maternal work status is crossed with remarried or continuously single family types. But regardless of maternal work status, children living with a previously married single mother or a cohabiting mother have significantly lower grades than children living in first-married two-parent homes. The same is not true for children living with continuously single mothers or with remarried mothers. Interestingly, their grades are not significantly different from the grades of children living in first-married two-parent homes.

Patterns of school grades do not vary by maternal work status among older students. The difference in school grades between those youngsters living with a previously married single mother who is not

employed and one who is employed is not significant. Unlike younger children, having an employed mother does not enhance older children's school achievement.

### Parent Involvement in School Activities and Organizations

The next series of research questions focuses on the relationship of the family context variables and parent characteristics on family processes, and in particular, parent involvement with children either at home or with the children's schools. Zero order correlations for these relationships are shown in Appendix H.

First, the question of whether (a) parent involvement in child-centered home activities; (b) aspects of the family context, including family structure, parent employment status, family composition and income, and social support; or (c) parent characteristics affects the likelihood that a parent will participate is examined. To answer this question, a logistic analysis was performed on the variable measuring weekly school participation. Results are shown below in Table 4.5. A preliminary analysis showed a significant interaction effect by parent gender and single parenthood. Hence, parent characteristics and family context variables were regressed on school participation separately for mothers and fathers.

Parent involvement in home activities increases the likelihood that parents will also participate in school-related activities and organizations. Both mothers and fathers who are involved at home are more likely to be regularly involved at school than their counterparts who report infrequent home activities with their children. These effects are not surprising and

Table 4.5

Logistic regression coefficients and odds ratios showing the effect of parent involvement in home activities, family context, and parent characteristics on weekly parent participation in school activities

Independent Variables	Mothers				Fathers			
	b	SE	Odds ratio	Probability	b	SE	Odds ratio	Probability
<u>Parent involvement</u>								
Home activities	.306***	.042	1.36	.576	.516***	.078	1.68	.626
<u>Family Context</u>								
Remarried two-parent home	-.376*	.149	.69	.407	-.170	.219	.84	.457
Cohabiting two-parent home	-.493*	.247	.61	.379	-.962*	.497	.38	.276
One-parent home	—	—	—	—	.490 <sup>†</sup>	.260	1.63	.620
Previously married	-.260*	.116	.77	.435	—	—	—	—
Continuously single	-.252	.195	.77	.437	—	—	—	—
Part-time employment	.473**	.166	1.61	.616	.315	.657	1.37	.578
Full-time employment	.053	.107	1.05	.513	-.158	.324	.85	.461
Number of children	.169**	.057	1.19	.542	.094	.096	1.10	.524
Age of youngest child	-.032*	.014	.97	.508	-.003	.024	.98	.499
All boys	-.083	.124	.92	.479	-.195	.213	.82	.451
Both sexes	-.002	.126	.99	.499	-.391 <sup>†</sup>	.218	.68	.403
Family income	-.000	.001	1.0	.500	.001	.002	1.00	.500
Tangible support	.078**	.029	1.08	.519	.095 <sup>†</sup>	.054	1.10	.524
Emotional support	.178***	.049	1.19	.544	.039	.092	1.04	.509
<u>Parent Characteristics</u>								
Education	.097***	.021	1.10	.524	.138***	.029	1.14	.534
Age	.019*	.008	1.02	.505	.023 <sup>†</sup>	.013	1.02	.506
Black	.220 <sup>†</sup>	.124	1.02	.445	.254	.231	1.29	.563
Hispanic	.017	.182	1.02	.504	.189	.321	1.21	.547
Constant	-4.003				-6.265			
Model $\chi^2$ /df	238.675 / 18 df ***				119.646 / 17 df ***			
N	2,219				1,080			

Note: Analyses are conducted with unweighted data. Weekly school participation is coded as 1 for some participation and 2 for no participation. Remarried, cohabiting, and one-parent home for fathers with previously married one-parent home or continuously single one-parent home for mothers are dummy variables with first-married two-parent family as reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. All boys and both sexes are dummy variables with only girls in the family as the reference group. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group.

<sup>†</sup>  $p < .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

are supportive of the idea that if the parenting role is salient for an individual, consistent involvement with children will be seen across situations.

Family structure has a differential effect on parent school involvement depending on the gender of the parent. For mothers, living in either a stepfamily or cohabiting with a partner reduces the likelihood of weekly participation in school activities. Being a previously married single parent has a negative effect on participation. While the effect of being a continuously single mother is also negative, living in this type of family is not a significant predictor of school participation.

The likelihood of school participation is reduced for fathers living in either a stepfamily or cohabiting with a partner, in comparison to men in first-married two-parent homes. While both coefficients are negative, only the coefficient for the cohabiting fathers is significant at the .05 level. But the effect on parent school involvement is in the opposite direction for single fathers. Fathers in a one-parent home tend to be more likely to participate in their children's school activities than fathers living with a spouse or partner ( $p < .06$ ).

Employment status is related to maternal school participation but not to the involvement of fathers. Mothers who work on a part-time basis are more likely to engage in school-related activities and organizations than either those mothers who are not employed or those who are working full-time at a job outside of the home. Neither of the other two employment groups are significant predictors of school participation.

Other aspects of the family context do relate to maternal school involvement. Both the number of children and the age of the youngest child in the family affect the likelihood that mothers will participate.

Mothers are more likely to be involved when there are more children in the family and when the family includes a younger child. The gender composition of the family is not a significant predictor of mother's participation, but when the family consists of both boys and girls, fathers tend to participate less than when there are only girls in the family ( $p < .07$ ). Family income is not a significant predictor of school participation for either mothers or fathers.

Social support affects the likelihood of participation. Mothers with a wide network of individuals who provide tangible help with child care, transportation, and work around the home are more likely to spend time at their children's school than those individuals whose support network is narrow. There is also a tendency for this type of support to positively affect the likelihood that fathers will participate ( $p < .08$ ). Emotional support has a somewhat different pattern. Receiving emotional help in the form of advice, encouragement, or moral support significantly increases the likelihood of maternal involvement but is not significantly related to paternal participation.

Parental education increases the likelihood of school participation. Both mothers and fathers with higher levels of educational attainment are more likely to be involved than either mothers or fathers who have less education. Age is a significant predictor of the involvement of mothers and tends to be associated with the likelihood of engaging in school activities for fathers. Older parents are more likely to participate regularly in their children's school than younger ones. Ethnic and racial background plays a role, but only for mothers. African-American mothers are more likely to be involved than either mothers with a non-Hispanic white or an Hispanic background ( $p < .06$ ).

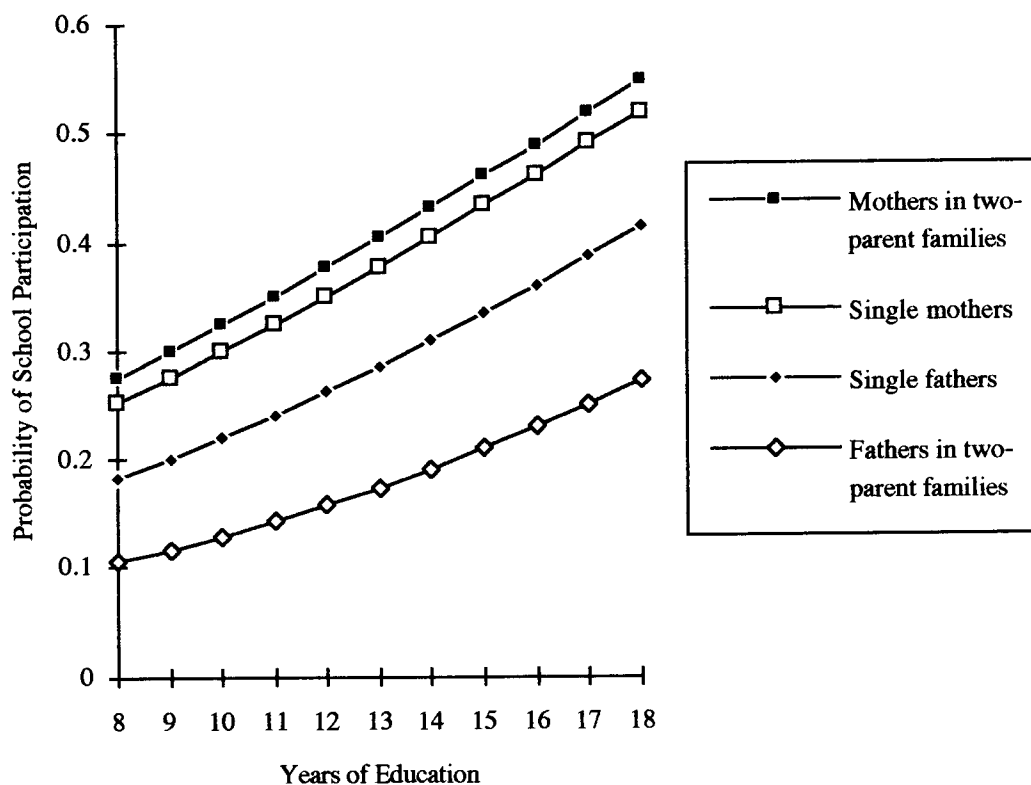
To further examine the differential effects of single parenting and gender on parent school involvement, individuals in a one-parent home were contrasted with those raising children in a two-parent home, regardless of work status or race. The results of the logistic regression model, presented in Appendix I, show the interaction term for single parenting by gender to be a significant predictor of school participation. To interpret the effects of this interaction, the probability of school participation for parents with different educational attainment was calculated by setting all the other variables in the model to the mean level for each sex and family type. These estimated probabilities (shown in Appendix J) are used to construct a graphic representation of the results, presented in Figure 4.1.

There is about a 38% chance of school participation for mothers with a high school education who are living in a two-parent family. At the same educational level, chance of participation drops to about 35% for single mothers, 26% for single fathers, and only about 16% for fathers in two-parent families. Subtracting probabilities from each other allows for the determination of the effects of group membership on the chance of school participation (Roncek, 1991). The difference in the probabilities of school participation for the two groups of mothers is relatively small (2.6%) with the additional percentage above the single mothers' probability of participation only 7.5%. But the difference of 10.4% for the two groups of fathers is substantial. This is a 66% gain in the chance of school participation for single fathers over fathers in two-parent families.

The probability of school participation increases with parental education. There is about a 36% chance that a single father with a college degree will be involved and about a 46% chance that a single mother with

Figure 4.1

Estimated probability of school participation by gender and single parent status



Note: Single parents are compared with respondents living in two-parent families, regardless of marital status. Estimated probabilities are calculated by years of education using the logistic regression equation in Appendix I and setting home activities, number of children, age of youngest child, family income, tangible support, emotional support, and parent age at their respective mean levels for each of the four groups.



the same educational background will participate. But even with a high degree of education, the probability of fathers in two-parent homes getting involved remains at a relatively low level. The chance of fathers in two-parent homes with two years of graduate work participating in school-related activities is about 27%, the same chance as mothers living in two-parent homes who have only an 8th grade education, and only slightly greater than similarly educated single mothers (25%).

School involvement is also measured by the amount of time parents spend in school-related activities and organizations, and by the frequency of parent participation in school-oriented groups. But since the number of hours spent at school is not a significant predictor of children's school achievement, further analyses of parent school involvement are limited to participation in school-oriented groups. The effects of parent involvement in child-centered home activities, aspects of the family context, and parent characteristics on this measure of school involvement are shown in Table 4.6.

For both mothers and fathers, spending time in home activities is positively associated with the frequency of participation in school-oriented groups. The parents that spend more time with their children at home are also likely to be more engaged in these organizations. Parent education plays a salient role in determining frequency of paternal school involvement. Fathers who are more highly educated are more involved in school-oriented groups. But aspects of the family context have little effect on fathers' participation in school-oriented groups with the one exception being tangible aid. Fathers who receive support in the form of child care or help around the house from a wide network of relatives and friends report greater frequency of participation in school-oriented groups.

Table 4.6

Effect of parent involvement in home activities, family context, and parent characteristics on parent involvement in school-oriented groups, OLS estimates

Independent Variables	Mothers		Fathers	
	b	$\beta$	b	$\beta$
<u>Parent involvement</u>				
Home activities	.163***	.198	.144***	.197
<u>Family Context</u>				
Remarried two-parent home	-.113 <sup>†</sup>	-.038	-.026	-.012
Cohabiting two-parent home	-.062*	-.052	-.234 <sup>†</sup>	-.058
One-parent home	—	—	-.097	-.031
Previously married	-.248***	-.115	—	—
Continuously single	-.259**	-.070	—	—
Part-time employment	.016*	.047	.302	.039
Full-time employment	.015	.007	.077	.025
Number of children	.125***	.135	.054 <sup>†</sup>	.064
Age of youngest child	.009	.044	.023	.129
All boys	.039	.044	.115	.057
Both sexes	.071	.034	.100	.055
Family income	-.000	-.007	.000	.005
Tangible support	.079***	.146	.046*	.084
Emotional support	.044*	.047	.043	.044
<u>Parent Characteristics</u>				
Education	.055***	.139	.046***	.159
Age	.007 <sup>†</sup>	.048	.003	.030
Black	.082	.036	.091	.036
Hispanic	-.051	-.015	.029	.008
Intercept		-0.165		-0.166
R <sup>2</sup>		.1379		.1021
N		2,219		1,080

Note: Analyses are conducted with unweighted data. Step, cohabiting, single parent families for fathers, and previously married or continuously single for mothers are dummy variables with first-married two-parent family as reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. All boys and both sexes are dummy variables with all girls as the reference group. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group.

<sup>†</sup>  $p < .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

There is a tendency for cohabiting fathers to participate less frequently than fathers in traditional homes ( $p < .06$ ) but other family types are not significant predictors of fathers' school involvement although all coefficients are in the negative direction. Fathers are somewhat more likely to be involved when there are more children ( $p < .10$ ) but neither the child gender composition of the family, the age of the youngest child, nor the family income makes a significant difference in fathers' participation.

A somewhat different picture emerges for mothers. Single mothers, regardless of the route taken to family headship, and cohabiting mothers are less frequently involved in school-oriented groups than mothers in traditional two-parent families. There is also a tendency for mothers in stepfamilies to be less involved in these school groups ( $p < .08$ ).

As with weekly school participation, employment status is only related to school involvement for mothers who work less than 30 hours per week. Working part-time is associated with greater maternal participation in school-oriented groups. Family size is a significant predictor of school involvement for mothers. Having more children in the family is associated with more frequent participation. And similar to fathers, when mothers receive tangible help in the form of child care, transportation, or help around the house, they are significantly more likely to be frequent participants in school-oriented groups. But unlike fathers, receiving emotional support from a wide network is a significant predictor of maternal involvement in school organizations.

The effect of maternal characteristics indicates that education is positively associated with participation in school-oriented groups. As with fathers, the more education a mother has, the more frequent her involvement. Age also tends to be associated with participation in school-

oriented groups. Older mothers are more likely to be frequent participants than younger mothers ( $p < .08$ ). But race and ethnic background are not significant predictors of maternal involvement in school groups.

### Parent Involvement in Child-centered Home Activities

The fourth research question focuses on the effect of family context variables and parent characteristics on parent involvement in child-centered activities at home. Because preliminary analyses found significant interaction effects between parent gender and single parenthood, and between gender and employment status, regression models are computed separately for mothers and fathers. Results are shown in Table 4.7.

For both mothers and fathers, living in a stepfamily is associated with less frequent child-centered activities within the home environment. But cohabiting is not a significant predictor of this type of involvement for either mothers or fathers. Single parenting, however, has an effect on home involvement for men only. Single fathers spend significantly more time going on outings with their children, working on projects, or helping with homework than fathers in traditional two-parent homes.

Men's employment status is not related to their involvement in child-centered activities at home, but women who are employed full-time report spending less time with their children than women who are not employed. In contrast to maternal school involvement, working part-time is not a significant predictor of mothers' home involvement.

Family composition affects the amount of time parents spend with their children. Both mothers and fathers tend to be involved more

Table 4.7

Effect of family context and parent characteristics on parent involvement in home activities, OLS estimates

Independent Variables	Mothers		Fathers	
	b	$\beta$	b	$\beta$
<u>Family Context</u>				
Remarried two-parent home	-.198*	-.054	-.215*	-.069
Cohabiting two-parent home	-.153	-.025	.111	.020
One-parent home	—	—	.377**	.089
Previously married	.056	.021	—	—
Continuously single	-.009	-.002	—	—
Part-time employment	-.033	-.008	.460	.044
Full-time employment	-.252***	.056	.133	.032
Number of children	-.112***	-.099	-.068	-.059
Age of youngest child	-.070***	-.294	-.081***	-.334
All boys	.015	.005	.281**	.104
Both sexes	.008	.003	.217*	.087
Family income	.000	.014	.002	.052
Tangible support	.059***	.091	.072**	.095
Emotional support	-.008	-.001	-.001	-.001
<u>Parent Characteristics</u>				
Education	.030**	.063	.039***	.100
Age	-.019***	-.117	-.010 <sup>†</sup>	-.068
Black	-.141*	-.048	-.052	-.015
Hispanic	.057	.014	.275*	.059
Intercept		5.264		4.008
R <sup>2</sup>		.1600		.1864
N		2,219		1,080

Note: Analyses are conducted with unweighted data. Step, cohabiting, single parent families for fathers, and previously married or continuously single for mothers are dummy variables with first-married two-parent family as reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. All boys and both sexes are dummy variables with all girls as the reference group. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group.

<sup>†</sup>  $p < .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

frequently when there is a young child in the family. For mothers only, the number of children in the family is negatively associated with frequency of participation. The more children in the family, the less likely the mother is to spend time in leisure activities, or working with children on projects or homework. The gender composition of the family makes a difference for men only. When there is at least one boy, fathers spend more time with their children than when there are only girls in the family.

Social support in the form of tangible aid is positively related to home involvement with children for both women and men. Receiving help with child care or help with household tasks from a wide network of relatives and friends is associated with greater involvement in child-centered activities, including going on excursions, having private talks with children, and helping with homework. But receiving support in the form of advice or moral support is not a significant predictor of frequency of these child-centered activities for either mothers or fathers.

The effects of parent characteristics on home involvement vary by gender. For both mothers and fathers, education is related to home involvement with more highly educated parents participating with greater frequency in these activities. Age is also a significant predictor of both women and men's home involvement with older parents more likely to be involved than younger ones. Race and ethnic background have mixed effects. African-American women report significantly less frequent involvement in home activities with their children than either Hispanic or non-Hispanic white mothers. But being black is not a significant predictor of home involvement for fathers. For women, having an Hispanic background is not a significant predictor of home involvement. On the

other hand, men who have an Hispanic background report significantly higher home involvement with their children than non-Hispanic whites. The involvement of Hispanic fathers is consistent with cultural traditions that place the highest priorities on family life.

### Variations in Parent Involvement

The fifth and final research question asks whether parent involvement either at school or at home varies as a function of family structure or parent employment status. To answer this question, means for these variables were first estimated by family type and parent gender, using the SAS general linear model least-squares means procedure and holding all other variables in the parent involvement models (shown in Tables 4.6 and 4.7) at their respective mean values. Table 4.8, presented below, shows the results of this analysis. To insure an overall protection level, only probabilities associated with pre-planned comparisons are reported. These comparisons contrast first-married parents to other family types.

Family structure has more effect on school involvement than on home involvement for mothers. The frequency of involvement in school-oriented groups is lower for mothers in stepfamilies, cohabiting mothers, and mothers in one-parent homes than for mothers living in first-married two-parent homes. But while mothers in stepfamilies are significantly less involved in home activities than first-married mothers, neither previously married single mothers, continuously single mothers, nor cohabiting mothers spend differential amounts of time interacting with their children from mothers in traditional two-parent homes.

Table 4.8

Estimated means for parent school and home involvement by family structure

	Mothers		Fathers	
	School groups	Home activities	School groups	Home activities
<u>Family structure</u>				
First-married two-parent home	2.05 (891)	4.06 (891)	1.74 (705)	3.87 (705)
Remarried two-parent home	1.94 <sup>†</sup> (302)	3.87** (302)	1.72 (214)	3.61** (214)
Cohabiting two-parent home	1.79** (96)	3.91 (96)	1.51 <sup>†</sup> (57)	3.93 (57)
One-parent home	—	—	1.70 (104)	4.20** (104)
Previously married	1.80*** (744)	4.12 (744)	—	—
Continuously single	1.79** (186)	4.06 (186)	—	—

Note: Analyses are conducted with unweighted data. Numbers in parentheses are the sample size on which each mean is based. Estimated means are computed by holding all other variables in the parent involvement models shown in Tables 4.6 and 4.7 at their respective mean values. Significance levels are based on t-ratios where the estimated mean for each family type is compared to the mean of first-marrieds for that particular kind of parent involvement.

<sup>†</sup>  $p < .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$



The pattern differs for fathers. Family structure has a more significant effect on home involvement than on school involvement. Cohabiting fathers spend less time in school-oriented groups than fathers in first-married two-parent homes, but the frequency of participation in school groups among fathers living in other family types does not differ significantly from those in traditional two-parent homes. Indeed, the estimated mean level of their school participation is remarkably similar. But the estimated mean time spent in home activities varies considerably. Fathers in remarried two-parent families spend significantly less time interacting with their children in contrast to first-married fathers, while single fathers spend significantly more time in child-centered activities.

The effects of the mothers' employment status on patterns of school and home involvement were also examined. Estimated means for the number of hours spent in school-related activities, participation in school-oriented group, and involvement in child-centered home activities by family structure and work status are shown in Table 4.9. Here, comparisons contrast first-married parents to other family types within an employment category, and contrast mothers who are employed with those who are not employed within a family type.

Work status has a limited effect on the school involvement means. Among first-married mothers, those who work part-time are more likely to be involved in school-oriented groups than mothers who are at home full-time. But for mothers living in other family situations, working outside the home does not significantly affect participation in school-oriented groups.

Family structure does make a difference in school involvement within some work categories, however. Among mothers who are not

Table 4.9

Estimated means for maternal time in school-oriented groups and home activities by family structure and employment status

	School groups			Home activities		
	Maternal employment			Maternal employment		
	0-4 hrs	5-29 hrs	30+ hrs	0-4 hrs	5-29 hrs	30+ hrs
<u>Family structure</u>						
First-married two-parent home	1.98 (324)	2.19 <sup>c</sup> (138)	2.07 (429)	4.19 (324)	4.17 (138)	3.95 <sup>b</sup> (429)
Remarried two-parent home	1.87 (100)	2.13 (32)	1.94 (170)	3.88 <sup>a</sup> (100)	4.16 (32)	3.79 (172)
Cohabiting two-parent home	1.87 (40)	2.12 (2)	1.69 <sup>a</sup> (54)	4.08 (40)	5.32 (2)	3.72 (54)
Previously married one-parent home	1.84 (240)	1.84 <sup>a</sup> (45)	1.77 <sup>a</sup> (459)	4.28 (240)	4.17 (45)	3.99 <sup>b</sup> (459)
Continuously single one-parent home	1.75 <sup>a</sup> (104)	1.89 (7)	1.81 <sup>a</sup> (75)	4.26 (104)	3.13 <sup>a c</sup> (7)	3.95 (75)

Note: Analyses are conducted with unweighted data. Numbers in parentheses are the sample size on which each mean is based. Estimated means are computed by holding all other variables in the parent involvement models in Tables 4.6 and 4.7 at their respective mean values. Significance levels are based on *t*-ratios. Letters are used to show which comparison are significant at the .05 level. An "a" indicates that the family type is different from first marrieds at that particular employment status. A "b" indicates that full-time employment is different from no employment for a particular family type. A "c" indicates that part-time employment is different from no employment for a particular family type.

employed, continuously single mothers are less involved in school groups than first-married mothers. Among mothers who are employed part-time, single mothers who have been previously married are less involved in school groups than first-married mothers. And among mothers who are employed full-time, cohabiting mothers, previously married single mothers, and continuously single mothers are all less involved in school groups than their first-married counterparts.

Work status has an effect on maternal involvement in home activities. The pattern is for mothers who work full-time to report less involvement with their children at home, although only the means for mothers in first-married two parent homes and previously married single mothers are significantly different at the .05 level from mothers in the same type of home who have no paid employment. This pattern is consistent with other findings that suggest fully employed mothers spend less time overall in child-centered home activities than their non-employed counterparts (Nock & Kingston, 1988). Similar effects are not seen for mothers who work part-time. Except for cohabitators and mothers who have been continuously single, mothers who work less than 30 hours per week and mothers who are not employed report similar levels of home involvement.

Family structure makes little difference on maternal involvement in home activities within the separate employment categories with two exceptions. Among mothers who have no paid employment, those in stepfamilies spend less time in child-centered home activities than first-married mothers. Otherwise, non-employed mothers report similar levels of home involvement. Among those who work part-time, continuously single mothers are significantly less involved in home activities than first-

married mothers but all others report similar levels of involvement with their children. There are no significant differences by family type for those who work full-time. These patterns suggest that work status plays a more important role in determining mothers' home involvement than family type.

## CHAPTER 5

### DISCUSSION

As schools seek to develop partnerships with families in support of children's educational progress, research describing the linkages between school outcomes and children's lives within their families is especially important. Within a person-process-context model of human development (Bronfenbrenner & Crouter, 1983), this study has examined the extent to which individual, family context, and parenting process variables affect children's academic achievement.

Past research on school outcomes has found family structure to make small but significant differences in favor of children being raised in two-parent homes (Hetherington, Featherman, & Camara, 1983; Milne, 1989; Salzman, 1987). The data from this study are no exception, but show the negative effects on children's achievement to be centered within single-parent families who have experienced disruption. Living in a one-parent household with a parent who was previously married in contrast to living in a traditional family with two first-married parents is associated with parent reports of poorer performance for elementary school children and lower grades for adolescents. The direct effects are small but remain even after accounting for variations in socioeconomic background, the educational level of the parent, and the child's gender.

While all children living with single parents experience similar levels of poverty, only those living with previously married parents have additionally experienced the trauma of family disruption. Ample evidence indicates that children have painful emotional reactions and behavior

problems as they gradually adjust to different living circumstances when parents separate (Hetherington, Stanley-Hagan, & Anderson, 1989).

Experiencing the breakup of a family has been associated with reduced social competency, school truancy, and lowered academic achievement (Guidubaldi & Perry, 1984; Kaye, 1989; Kinard & Reinherz, 1986). It may be that effects on achievement are strongest during the first year after the family breakup, but this question was not evaluated in the current study. Thus, the results reported here suggest that the negative effects on children's academic progress are not necessarily a function of living with a single parent or the economic insecurity that situation typically brings, but rather by the breakup of a family.

Children's academic achievement is positively affected through its relationship to parent involvement. Previous research has shown that children of all ages do better in school when parents are involved in their schooling (Henderson, 1987; Reynolds, 1989, 1992). Evidence from this study reveals a similar pattern. For younger children, parent involvement in school-oriented groups is related to improved school performance and for older children, both regular parent participation in school activities and frequent involvement in school groups are associated with higher grades. Involvement at school and with parent-teacher organizations may provide the parent with key information about the school and opportunities to develop working relationships with school personnel that benefit youngsters (Stevenson & Baker, 1987).

Findings from this study are consistent with previous research that indicates parental school involvement is clearly a gendered activity (Lareau, 1987, 1989; LeBlanc, 1992). Mothers are more likely than fathers to be regular participants in school activities and organizations. But this

gendered relationship is diminished in the face of single parenthood. When fathers are raising children alone, they are more likely to participate in school-related activities than fathers in traditional two-parent homes. And since weekly school participation is positively associated with older children's grades, the school accomplishments of children in father-only homes are enhanced through this indirect route.

Single fathers' participation in school-oriented groups does not differ from that of married fathers, however. It may be that single fathers may see less direct advantage to their children in their participation in parent-teacher organizations than in their regular involvement in school-related activities. Faced with making necessary choices, fathers may choose to spend precious time where children are present, attending school functions, sporting events, or perhaps volunteering in the classroom.

Children also do better in school when parents spend regular amounts of time with their children in such home-related activities as working on projects, helping with homework, going on excursions, and having private talks. This is consistent with a long line of research findings showing that parents who spend time reading, playing, and interacting with their children help them to develop social competencies and cognitive skills that prepare them for school success (Becher, 1984; Henderson, 1987; Stevens, Hough, & Nurss, 1993). Findings from this study indicate that school-age children's performance is more likely to be above average and adolescents are likely to have higher grades when parents are spend time with their children. Involvement in these type of activities falls mainly to mothers. But as with school participation, single parenthood has a positive effect on father involvement in these child-

centered home activities. Fathers raising children alone spend more time in these pursuits than fathers in first-married traditional homes. Thus, living in a father-only home has a positive indirect effect on school achievement since parent home involvement is associated both with better school performance for younger children and higher grades for older students.

Taken together, these findings are supportive of Risman and Schwartz's (1989) conceptualization of gendered activities being tied more to microstructural conditions than to the societal gender roles prescribed for men and women. The presence of both male and female parents in the home tends to support the development of gendered parenting roles (Thomson, McLanahan, & Curtin, 1992). Because the normative expectation is for mothers to supervise children's schooling, they do so. But when a single father has no spouse or female partner to assume child-rearing responsibilities, he will be more likely to engage in the "gendered" behavior dictated by necessity.

What about mother-only households? Regardless of the route taken to single headship, mothers raising children alone are less likely to be involved in school-related activities and are less frequent participants in school-oriented groups than mothers in first-married two-parent homes. Therefore, in mother-only homes, indirect effects are in the opposite direction and children's school achievement suffers from mothers' less frequent involvement in these parent-school activities. Interestingly, there are no significant differences in the frequency of participation in child-centered activities at home between single mothers and mothers in first-married two-parent homes and, consequently, no negative indirect effects on children's achievement. Faced with the responsibilities of meeting the



needs of their children, housekeeping, and in many cases, working outside the home, single mothers must make decisions about how to allocate precious time resources. This research suggests that, instead of school involvement, single mothers spend time directly involved with their children at home.

Contrary to expectations, school outcomes for children living in stepfamilies are not significantly different from the outcomes for children in traditional two-parent families. While spending time in a stepfamily has been found to have negative consequences for long-range educational attainment, with adolescents completing fewer years of schooling (Sandefur, McLanahan, & Wojtkiewicz, 1992), no significant effects were found on the more short-term measures of school accomplishment used in this study.

Although living in a stepfamily does not directly affect parent perceptions of children's school achievement, there are negative indirect effects on both performance and grades for children living in stepfamilies, resulting from lower levels of parent involvement. In stepfamilies, mothers are less involved in school activities and groups. Family home life is also less centered on children. Both mothers and fathers report lower levels of involvement than their counterparts in first-married families. Because both school and home involvement are associated with higher levels of school achievement, children's educational achievement is likely to be lessened through this relationship. These results are consistent with the idea that stepparents may have a weaker emotional investment in parenting stepchildren and hence, spend less time both in school-related and in leisure activities.

The picture is somewhat different for children living with a cohabiting parent. This family type is associated with lower grades for adolescents but elementary school children's class standing doesn't differ significantly from that of similar aged children in traditional homes. In this sample, almost three-quarters of the cohabiting parents with adolescents had been previously married while only about two-thirds of those with younger children fell into this category. Thus, the experience of family breakup may be a factor in this finding. There are also negative indirect effects on school outcomes for children living with a cohabiting parent. Both men and women cohabitators report less involvement in school activities and groups although there is no difference in their involvement at home. One explanation for these effects may lie in the fact that parents who cohabit are typically in a transitory and unstable arrangement. Rather than a lifelong alternative to marriage, cohabitation tends to be a way station, either preceding marriage or following a marital dissolution, as partners evaluate their compatibility (Cherlin, 1993). In some respects, cohabiting does not differ substantially from single parenthood. Although a second adult is in the home, the commitment to parenting by that partner may be low. On the other hand, remarried parents may have made a stronger commitment to family life, creating a more stable atmosphere for the children.

Employment status is not directly related to either younger children's school performance or older students' grades. This is consistent with a wide body of research that shows virtually no differences in the achievement levels between children whose mothers are employed and children whose mothers are fulltime homemakers (Hoffman, 1989).

Maternal employment per se is not a significant predictor of parent perceptions of children's school accomplishments.

The findings in this study, however, indicate a significant interaction effect on younger children's class standing between maternal employment status and single parenthood. Elementary school children living with a previously married single mother who is employed do better in school on the average than their counterparts whose mother is not employed. There is no similar difference between the performance of younger children living with continuously single mothers who are either employed or non-employed.

Unlike children living with continuously single mothers, those living with previously married mothers have experienced family disruption. In the immediate period after parents separate or divorce, family life tends to be chaotic. Mealtimes are irregular, bedtime is erratic, children are often late to school, and family rules are frequently broken. However, Hetherington, Stanley-Hagan, and Anderson (1989) point out that most children and parents make an adjustment to living in a single-parent household within two to three years "if their new situation is not compounded by continual or additional adversity" (p. 303). Reduced economic resources means that families headed by previously married single mothers who are not employed may be dependent on welfare, live in substandard housing, and have limited access to adequate child care. It may be that the better school performance of children who have experienced family dissolution lies in their mothers' capability to improve the family living situation by working for pay.

Maternal employment is associated with differential levels of school and home involvement and hence, is linked to children's school

achievement indirectly. This finding is consistent with research indicating maternal employment affects children's achievement primarily through indirect mechanisms (Barber & Eccles, 1992). Mothers who are part-time workers are more likely to be regular participants in school-related activities than either mothers who are not employed or mothers who work fulltime. Since weekly school participation is related to higher grades for older students, school achievement is improved through this route. Additionally, mothers in traditional two-parent homes who are employed part-time are more frequent participants in school-oriented groups than their counterparts who are not employed. It is possible that mothers who put a priority on their children's education may prefer to work part-time. Decisions about working part-time versus full-time are often not within an individual's options, but in this sample, mothers who were employed only part-time had significantly more financial resources than mothers in either of the two other groups. Thus, these women may have been able to choose part-time work in order to be involved in their children's school activities.

Part-time employment does not affect levels of maternal involvement in home activities but working more than 30 hours per week does. Mothers who are fully employed participate in child-centered activities less frequently than mothers who are not employed. Regardless of family structure, mothers who are not employed spend more time in such activities as supervising homework, going on excursions with children, and helping with projects than mothers who work full-time. This finding is consistent with the idea that employment limits the amount of time available for parents to spend with their children, but it is somewhat puzzling since previous research has found few differences in parent-child

involvement when single-earner and dual-earner families are compared (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990; Nock & Kingston, 1988).

Inconsistencies may be accounted for by the way in which the different studies measured parent involvement. Nock and Kingston (1988), in their examination of parents' time diaries, found mothers in single-earner families spent more time with children in "fun" activities such as going on outings during the week-day period than mothers in dual-earner homes. But there were no differences in amount of time these mothers spent on educational activities such as helping with homework during the same period. Similarly, Crouter, MacDermid, McHale, and Perry-Jenkins (1990) found no differences by maternal work status when they focused on parent monitoring of children's homework and daily activities. The measure in the current study of parent involvement in child-centered activities at home combined these elements into a single scale with estimates based on the parents' self-reports of the relative frequency with which they engaged in the activities.

Another important finding with regard to the family context is that neither the number of children in the family nor the family income are significant predictors of the measures of school achievement used in this study. Although other research has shown that the number of children in the family is related to high school drop-out rate, with youngsters from larger families being more likely to drop out (Rumberger et al., 1990), the evidence from this study does not point to a significant relationship between family size and varying levels of academic achievement as reported by parents. The indirect effects through parent involvement are mixed. While mothers are more involved in school-oriented groups when

the family size is larger, they also tend to be less involved with their children at home than mothers with smaller families. It is possible that the net indirect effect is negative since the individual attention and encouragement provided by home involvement may be more important for children's academic progress.

McLanahan, Astone, and Marks (1991) have argued that income may be the most important factor accounting for differences in educational attainment between children from mother-only families and children from two-parent families. McLanahan and her colleagues reason that low income tends to limit the educational opportunities available to students since poor families live in neighborhoods with lower quality schools. Educational attainment, either in terms of completed years of education or drop-out rate, was not measured in this study. But the evidence reported here suggests that the effects of family income on the measures of how well a youngster is doing in school are nonsignificant in comparison to the more salient predictors in the model, including parent educational background and parent involvement variables. Even if economic resources are scarce and the quality of the neighborhood schools are low, it appears that the involvement of educated parents who hold high aspirations for their children can make a substantial difference in academic achievement.

Several aspects of the family context were posited to influence school achievement only indirectly through their effects on parent involvement. As predicted, the age of the youngest child was significantly related to both parent school and home involvement. Consistent with previous research, parents reported higher levels of involvement when there were younger children in the family (Epstein & Dauber, 1991; Stevenson & Baker, 1987).

As children move into adolescence and gain greater independence, peer relationships become pivotal and youngsters may view parent involvement as intrusive. Yet this study finds that student achievement is enhanced when parents continue to be involved in school activities and organizations and are involved with their adolescents at home. For parents, the challenge is to be involved in ways that support the adolescent's growing maturity, giving the youngster ample opportunities for independent actions and decisions.

Previous research has shown that the gender composition of the family makes a difference on the degree of involvement fathers have with their children (Katzew, Warner, & Acock, in press; Marsiglio, 1991). Findings from the present study indicate higher degrees of paternal involvement in home activities when there is at least one boy in the family but the gender composition of the family appears to have no significant effects on paternal involvement at school. It appears that fathers may depend on mothers to shoulder the major responsibilities of supervising children's educational progress, regardless of whether children are boys or girls. Still, boys' academic achievement is enhanced indirectly through increased paternal involvement in home activities. LaRossa (1988) has distinguished between the "culture of fatherhood" as shared norms, values, and beliefs about men's parenting and the "conduct of fatherhood" as how men actually enact the role of parenting. It would seem that the actual conduct of fathers has yet to catch up with the cultural emphasis on greater father involvement in all aspects of child-rearing and egalitarian parenting of girls and boys.

As expected, receiving instrumental support from a network of relatives and friends was associated with higher levels of parent

involvement for both mothers and fathers. Previous research has indicated that having a large social network to provide assistance with child care, emotional support, and informational help with parenting problems relates positively to the quality of interactions between mothers and their young children (Cochran, 1988, 1993). While the measures of parent involvement used in this study preclude making conclusions about the quality of parenting relationships, the evidence does point to the availability of instrumental support being a key ingredient in the frequency of parent involvement both at school and at home. When parents can count on such tangible aid as assistance with child care, transportation, and help around the house, they have more time resources to spend on child-related activities. And in this way, the instrumental support they receive is related indirectly to higher levels of academic achievement for their children. This finding is consistent with Clark's (1983) description of African-American parents with low-achieving children who could not count on any reliable help or support from other adults. Interestingly, though, emotional support does not have the same effects. Receiving emotional support from a wide social network is only associated with increased maternal involvement in school-related activities. However, because the data are correlational, it is impossible to tell whether this is a causal relationship or whether mothers are receiving additional emotional support from individuals they know through their participation in school-oriented groups.

Various individual characteristics of parents and children were also examined. In keeping with a wide body of research showing a positive association between children's school achievement and parent educational background (Alexander & Entwisle, 1988; Baker & Stevenson, 1986;



Lareau, 1987, 1989), findings from the current study indicate that the more years of schooling a parent has achieved, the more likely a school-age child is to have better than average classroom standing and the more likely adolescents are to have higher grades. While a majority of parents value education for their children, educated parents tend to have more information about school than less educated parents and are more likely to have the skills to aid children as they progress through school (Stevenson & Baker, 1987). The positive effects of parent education also accrue indirectly through parent involvement since educated parents are more involved with their children both at school and at home than less educated parents.

Past research has found race and ethnic background to be a stronger predictor of academic achievement and educational attainment than family type (Krein & Beller, 1988; Steinberg, Dornbusch, & Brown, 1992; Watts & Watts, 1992) with school outcomes for children from minority families being less favorable. Other research suggests that race and ethnic differences become nonsignificant when socioeconomic levels are controlled (Milne, Myers, Rosenthal, & Ginsburg, 1986). Results from the current study suggest effects are mixed and of relatively small magnitude. Net of contextual and individual characteristics, parental reports of the academic performance of school-age African-American children are not significantly different from parent reports for Anglo-American children. Parents with an Hispanic background, however, report slightly lower levels of performance for their school-age children than Anglo-American parents. One explanation for this decreased performance may lie in the the relative lack of academic preparation Hispanic children experience at home prior to entering school (Delgado-Gaitan, 1992). Some children with

an Hispanic background enter school with English as a second language. While bilingualism is neither an educational nor a cognitive liability in the long run, being less familiar with the English language and the demands of the American school system during the primary years can detract from academic progress (Garcia, 1993; Stevenson, Chen, & Uttal, 1990).

The effects of race and ethnic background on academic achievement changes for older students. Here, parents of Anglos and Hispanic adolescents report similar grades for their adolescents net of the contextual and individual variables, but parents of African-Americans tend to report higher grades for their students. Other research has shown that minority mothers tend to be very positive about education and evaluate their children's academic abilities highly (Stevenson, Chen, & Uttal, 1990). It may be that the perceptions of African-American parents are affected by the hopes they have for their children and they are overreporting their teenager's grades. However, this explanation leaves open the question of why a similar positive effect is not seen on younger children's school performance.

Although some investigations have found that minority parents are less likely to be involved in school activities and organizations (Klimes-Dougan et al., 1992; LeBlanc, 1992), the present study did not find significant effects on parent school involvement by race or ethnic background. There was a tendency for African-American mothers to spend more time in school-related activities and organizations than Anglo-American mothers. But otherwise, race and ethnic background made no difference in participation in school-oriented groups. Differences were found for home involvement, however. While Hispanic mothers were not distinct, African-American mothers report less participation in child-

related activities at home than Anglo-American mothers. This reduced involvement at home indirectly affects children's achievement since spending time with children is positively associated with younger children's classroom standing and with adolescents' grades.

The evidence reveals a different pattern for fathers. Here, African-American fathers are not distinct, but Hispanic fathers report more participation in child-related activities at home than Anglo-American fathers. First generation Hispanic families, in comparison to Anglo-American families, have been shown to have a strong degree of attachment and commitment to the family, with parents encouraging family-centered orientations in their children (Garcia, 1993). The increased involvement of Hispanic fathers is consistent with this familial closeness and has positive indirect effects on children's academic achievement.

As predicted, parents reported better school performance and higher grades for girls than for boys. Although previous research has found different school outcomes for boys and girls living in nontraditional family types (Zimiles & Lee, 1991), the evidence reported here did not reveal a significant interaction by gender. The age of the youngster did make a difference in both the classroom standing of younger children and adolescents' grades. For both age groups, parents reported younger children as doing better than older children. This finding may relate to the way schools evaluate children's progress as they move through school. Younger children tend to be graded on the basis of effort and work habits whereas older children begin to receive grades based on comparative assessments of achievement (Gullickson, 1985). Parents gradually acquire increasingly specific information about their youngster's achievement as

they receive report cards and attend parent conferences. Using this knowledge base, parents may make finer distinctions about older children's school progress. The third child characteristic examined in the model, the relationship of the focal child to the parent, was not a significant predictor of school success. Parents were as likely to report strong achievement for stepchildren as for their biological children.

### Limitations of Study

A few words of caution about the findings in this study are in order. The data in the NSFH were not collected to evaluate children's school achievement, and information is limited to parent perceptions of how well their child is doing in school. Parent evaluations may be based, in part, on information received from school reports and parent conferences but are not a direct assessment of academic achievement such as might be gained from standardized tests. As a result, there remains the possibility that the information parents have received about their children's school progress has been affected by teachers' stereotypes about children from single-parent families. Parent perceptions of their child's progress may also be affected by their own expectations and concerns. In addition, younger children's school performance is reported as the parents' awareness of the relative standing the youngster has in the class. The robustness of this question to distinguish children's achievement is doubtful since elementary school report cards and parent conferences are often structured to chart developmental progress, effort, and work habits and may do no more than indicate to a parent that a child's work is satisfactory.

Secondly, the data provide only limited information on parent-school involvement and do not allow for any discrimination between the kinds of activities parents may be engaged in at school. For example, parents may be spending time at school because their child is in trouble and they are attending conferences about problem behavior, or they may be volunteering in the classroom, attending school events, or serving on committees. These various activities might be linked to different academic outcomes, but it is difficult to evaluate this possibility without more specific information. It should be noted, however, that research on parent involvement in children's schooling often depends on teacher reports of parent activities (Epstein & Dauber, 1991; Stevenson & Baker, 1987). The current study, however, has the advantage of using direct reports from parents about their own activities. Information from fathers on their own involvement provides data from a frequently under-represented group.

Because the data comes from a representative sample of households in the United States, with an oversampling of nontraditional and minority families, the findings have external validity. But because the data is cross-sectional, conclusions about causal ordering of the findings must necessarily be cautious. While the assumption is that parent involvement leads to school success, it is possible that parents become more involved when children are doing well (Stevenson & Baker, 1987).

### Implications for Educators

This research holds several implications for educators as they seek to develop linkages between home and school in support of children's school success. Single parents are too often characterized as providing

less stable homes and being less able to meet their child's educational needs. But the effects of single parenting on academic performance appear to be negative only for those children who have experienced the breakup of their family, whether through the death of a parent, or separation and divorce. The trauma of family dissolution creates fertile ground for behavior problems to arise that can interfere with school performance. While children's behavior was not included in the current study, other research points to misbehavior playing more of a role in reducing educational performance than either family structure or economic factors (Mulkey, Crain, & Harrington, 1992).

Although single mothers are less involved in school activities and organizations than mothers in traditional two-parent homes, there are no differences in their involvement with children at home. These findings suggest that the stereotypes teachers hold regarding single parents' engagement in school-family partnerships may be influenced more by the parent's presence at school than by parent involvement at home. Based on this information, teachers may make false assumptions about the level of commitment single parents have to children's education. But this research points to a strong relationship between parent involvement in child-centered activities and school outcomes. For both fathers and mothers, spending time with children at home was linked with increased participation in school-related activities and greater school achievement. On one level, these measures of parent-child involvement provide an indication of the way parents allocate their time when faced with a host of other demands. On another level, they may offer an index of parental commitment to their role as educators of their children and suggest an avenue by which educators can develop school-family partnerships.

Educational practices that focus on developing communication links between teachers and parents before problems arise and offer ways to support parent efforts at home such as suggesting activities or assigning homework that children and parents do together can strengthen home-school connections and will result in positive effects on children's academic progress.

Parents are more involved, both at home and at school, when they have assistance with child care and receive other forms of tangible aid. This is a particularly intriguing finding that has relevance for educators. The formation of strong school-family partnerships may depend to a certain extent on the supportive linkages schools are able to promote among the families they serve and the establishment of caring relationships throughout the school community (NASBE, 1991).

Finally, one of the strongest findings in this research is the relationship between parent perceptions of children's academic achievement and parents' own educational level. Not only are there positive direct relationships between levels of parental education and children's school outcomes, but higher levels of education are also associated with greater school and home involvement, creating additional indirect effects. This relationship suggests that public policies emphasizing education for parents who have low levels of attainment may have substantial long-term value in promoting positive outcomes for children.

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## **Appendices**

## Appendix A

**Table A.1 Logistic regression coefficients and odds ratios showing the effect of number of marriages, education, and race/ethnicity on missing cases**

Independent Variables	Focal child aged 5 - 11			Focal child aged 12 - 18		
	b	SE	Odds ratio	b	SE	Odds ratio
Number of marriages	.0094	.0914	1.01	-.1208	.0884	.86
Education	-.0563*	.0232	.95	-.0833***	.0210	.92
Black	.6470***	.1421	1.91	.2479	.1448	1.28
Hispanic	.5128***	.1846	1.67	.5980**	.2016	1.82
Constant	-.9035			-.2919		
Model $\chi^2$ /df	38.146 / 4 df ***			46.747 / 4 df ***		
N	1,865			1,876		

Note: Analyses are conducted with unweighted data. Black and Hispanic are dummies with non-Hispanic whites as the reference group.

†  $p \leq .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

## Appendix B

**Table B.1 Effect of missing cases, parent school involvement, parent involvement in home activities, family context, and parent-child characteristics on school performance of focal child, aged 5 - 11 years, OLS estimates**

Independent Variables	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Missing cases	-.619	4.747	-.591	4.745	-.452	4.738
<u>Parent involvement</u>						
Weekly school participation	.016	.054	—	—	—	—
Weekly school hours	—	—	-.011	.010	—	—
School-oriented groups	—	—	—	—	.061*	.026
Home activities	.078**	.025	.082***	.023	.069***	.023
<u>Family Context</u>						
Remarried two-parent home	-.061	.097	-.059	.094	-.059	.094
Cohabiting two-parent home	-.169	.121	-.172	.121	-.165	.120
One-parent home	-.142*	.066	-.143*	.066	-.133*	.065
Part-time employment	.090	.099	.093	.099	.080	.010
Full-time employment	.077	.063	.077	.063	.075	.063
Number of children	.022	.026	.023	.025	.017	.025
Family income	.001	.001	.001	.001	.001	.001
<u>Parent Characteristics</u>						
Gender	.072	.066	.085	.065	.052	.065
Education	.017	.268	.019	.268	.022	.268
Age	.002	.005	.002	.005	.001	.004
Black	.320	3.056	.304	3.054	.215	3.050
Hispanic	.121	2.427	.106	2.426	.036	2.422
<u>Focal Child Characteristics</u>						
Gender	.282***	.050	.281***	.049	.283***	.050
Age	-.027*	.014	-.027*	.014	-.028*	.014
Stepchild	-.071	.123	-.071	.123	-.060	.123
Intercept	2.051		1.473		2.239	
R <sup>2</sup>	.0877		.0885		.0912	
N	1,379		1,379		1,379	

Note: Analyses are conducted with unweighted data. Model 1 measures school involvement by weekly participation. Model 2 measures school involvement by hours spent per week. Model 3 measures school involvement by participation in school-oriented groups. Missing cases are estimated as equal to  $-.9035 + .0094 \times \text{number of marriages} - .0563 \times \text{education} + .6470 \times \text{black} + .5128 \times \text{Hispanic}$ . Weekly school participation is coded 1 if some weekly participation and 0 if no participation. Step, cohabiting, and single-parent families are dummy variables with first-married two-parent families as reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. Gender is coded 1 if female and 0 if male. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group. Stepchild refers to the relationship of the focal child to the reporting parent and is coded 1 if partner's child or a stepchild and 0 if a biological or adopted child.

†  $p \leq .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

## Appendix C

Table C.1 Effect of missing cases, parent school involvement, parent involvement in home activities, family context, and parent-child characteristics on school grades of focal child, aged 12 - 18 years, OLS estimates

Independent Variables	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Missing cases	-.914	.595	.983	.595	.979	.594
<u>Parent involvement</u>						
Weekly school participation	.019*	.099	—	—	—	—
Weekly school hours	—	—	.005	.019	—	—
School-oriented groups	—	—	—	—	.086 <sup>†</sup>	.046
Home activities	.125***	.035	.138***	.035	.123***	.036
<u>Family Context</u>						
Remarried two-parent home	-.126	.169	-.126	.170	-.119	.169
Cohabiting two-parent home	-.707**	.258	-.735**	.258	-.698**	.259
One-parent home	-.467***	.109	-.474***	.109	-.454***	.109
Part-time employment	-.042	.198	-.028	.198	-.035	.198
Full-time employment	.027	.110	.029	.110	.024	.110
Number of children	-.006	.043	-.003	.043	-.008	.043
Family income	.001	.001	.001	.001	.001	.001
<u>Parent Characteristics</u>						
Gender	.035	.107	.060	.107	.045	.107
Education	.157**	.051	.167***	.051	.163***	.051
Age	.024***	.007	.024***	.007	.025***	.007
Black	-.008	.203	-.025	.204	-.028	.203
Hispanic	-.362	.403	-.403	.403	-.386	.402
<u>Focal Child Characteristics</u>						
Gender	.584***	.085	.592***	.085	.594***	.085
Age	-.069**	.024	-.073**	.024	-.071**	.024
Stepchild	-.048	.202	-.038	.202	.041	.202
Intercept	4.855		4.851		4.757	
R <sup>2</sup>	.1084		.1058		.1080	
N	1,411		1,411		1,411	

Note: Analyses are conducted with unweighted data. Model 1 measures school involvement by weekly participation. Model 2 measures school involvement by hours spent per week. Model 3 measures school involvement by participation in school-oriented groups. Missing cases are estimated as equal to  $-.9035 + .0094 \times \text{number of marriages} - .0563 \times \text{education} + .6470 \times \text{black} + .5128 \times \text{Hispanic}$ . Weekly school participation is coded 1 if some weekly participation and 0 if no participation. Step, cohabiting, and single-parent families are dummy variables with first-married two-parent families as reference group. Part-time and full-time employment are dummy variables with no employment as the reference group. Gender is coded 1 if female and 0 if male. Black and Hispanic are dummy variables with non-Hispanic whites as the reference group. Stepchild refers to the relationship of the focal child to the reporting parent and is coded 1 if partner's child or a stepchild and 0 if a biological or adopted child.

<sup>†</sup>  $p \leq .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

## Appendix D

Table D.1 Frequency distribution of responses to hours spent at school in an average week

Number of Hours	<u>Mothers</u>		<u>Fathers</u>	
	N	Cumulative percent	N	Cumulative percent
0	1,370	61.3	858	79.1
1	436	80.8	147	92.6
2	147	87.3	31	95.5
3	79	90.9	13	96.7
4	60	93.6	11	97.7
5	33	95.0	7	98.3
6	30	96.4	10	99.3
7	8	96.7		
8	10	97.2	2	99.4
9	1	97.2		
10	20	98.1	3	99.7
12	13	98.7		
15	4	98.9		
16	1	98.9		
20	10	99.4	1	99.8
21	1	99.4		
24	3	99.6		
25	1	99.6		
30	4	99.8		
40	3	99.9	1	99.9
50	1	99.9	1	100.0
60	1	100.0		

## Appendix E

Table E.1 Income by family type and gender

	Females <u>n</u> = 2,239		Males <u>n</u> = 1,085	
	<u>M</u>	Median	<u>M</u>	Median
<u>Family structure</u>				
First-married two-parent home	44.76	34.80	43.95	35.60
Remarried two-parent home	43.14	34.62	43.46	36.74
Cohabiting two-parent home	27.77	22.18	33.92	26.89
One-parent home				
Previously married	15.62	12.45	29.52	25.83
Continuously single	9.12	7.12	21.97	15.08

Note: Family income has been divided by 1,000.

## Appendix F

**Table F.1 Zero-order correlations between school performance, parent involvement, family context, and parent-child characteristics for focal child aged 5 - 11 years**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. School performance	1.0																				
<u>Parent involvement</u>																					
2. Weekly school participation	.05*	1.0																			
3. Weekly school hours	-.02	.54	1.0																		
4. School groups	.12***	.42***	.29***	1.0																	
5. Home activities	.10***	.20***	.14***	.18***	1.0																
<u>Family context</u>																					
6. Remarried	-.01	-.08**	-.03	-.04	-.06*	1.0															
7. Cohabiting	-.05	-.06*	-.02	-.07*	-.02	-.10***	1.0														
8. Previously married	-.05**	.09***	.07	.02	.08**	-.22***	-.13***	1.0													
9. Continuously single	-.06*	.02	-.02	-.05*	.02	-.12***	-.07***	-.16***	1.0												
10. Part-time employment	.04	.14***	.05	.11***	.05*	-.01	-.05	-.04	-.03	1.0											
11. Full-time employment	.04	-.11***	-.09***	-.06*	-.09***	.01	.02	.01	-.13***	-.39***	1.0										
12. Number children	.00	.06*	.02	.08*	-.02	.01	-.02	-.10***	-.02	.01	-.17***	1.0									
13. Family income	.11***	-.03	.03	.07*	.03	.07*	-.03	-.22***	-.17***	.03	.08**	.03	1.0								
<u>Parent characteristics</u>																					
14. Gender	-.01	.22***	.17***	.15***	.11***	-.08**	-.06*	.24***	.20***	.17***	-.40***	-.03	-.10***	1.0							
15. Education	.20***	.12***	-.03	.20***	.04	-.03	-.07**	-.08**	-.11***	.04	.23***	-.12***	.32***	-.13***	1.0						
16. Age	.03	.03	-.00	.11***	-.12***	-.06*	-.16***	-.00	-.20***	.04	.07**	.00	.17***	-.20***	.16***	1.0					
17. Black	-.04	.02	.04	-.03	-.02	-.07**	.03	-.01	.33***	-.09***	.03	-.02	-.12***	.10***	-.03	-.07*	1.0				
18. Hispanic	-.10***	-.04	.00	-.04	.01	-.05	-.01	-.01	.06*	-.03	-.08*	.16***	-.09***	.03	-.30***	-.06*	-.17***	1.0			
<u>Child characteristics</u>																					
19. Gender	.14***	-.02	-.02	-.02	-.01	.05	-.00	-.01	-.02	-.02	-.00	.02	-.04	.02	-.03	-.02	.01	.00	1.0		
20. Age	-.08**	-.04	.02	.02	-.14***	.07**	.01	.09***	-.03	-.01	.02	-.00	-.02	.04	-.05	.26***	-.04	.01	-.02	1.0	
21. Stepchild	-.05	-.11***	-.08**	-.13***	-.13***	.47***	.21***	-.14***	-.08**	-.07**	.09**	-.08**	.01	-.28***	-.03	-.06	-.04	-.04	.04	.06*	1.0

(N = 1,379) \* p < .05 \*\* p < .01 \*\*\* p < .001



## Appendix G

**Table G.1 Zero-order correlations between school grades, parent involvement, family context, and parent-child characteristics for focal child aged 12 - 18 years**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. School grades	1.0																				
<b>Parent involvement</b>																					
2. Weekly school participation	.11***	1.0																			
3. Weekly school hours	.03	.53	1.0																		
4. School groups	.11***	-.40***	.31***	1.0																	
5. Home activities	.10***	.23***	.13***	.26***	1.0																
<b>Family context</b>																					
6. Remarried	-.01	-.05*	-.05	-.01	-.07**	1.0															
7. Cohabiting	-.05	-.04	-.03	-.05	.00	-.08**	1.0														
8. Previously married	-.13***	.01	.00	-.07**	.04	-.31***	-.12***	1.0													
9. Continuously single	.00	.01	.03	-.03	.01	-.08**	-.03	-.12***	1.0												
10. Part-time employment	.01	.06	.02	.03	.03	-.00	-.01	-.03	-.05	1.0											
11. Full-time employment	.02	-.04	-.03	.01	-.04	.03	.02	-.03	-.07	-.39***	1.0										
12. Number children	.00	.06*	.06*	.10***	.13***	.06*	.04	-.08**	-.00	-.04	-.09***	1.0									
13. Family income	.11***	.07	-.02	.07**	-.01	.09***	.02	-.30***	-.12***	.04	.12***	-.03	1.0								
<b>Parent characteristics</b>																					
14. Gender	-.05	.13***	.09***	.06*	.08**	-.08**	.01	.27***	.12***	.14***	-.29***	-.01	-.15***	1.0							
15. Education	.17***	.13***	.05*	.15***	.04	.04	.00	-.07**	-.08**	.00	.23***	-.09***	.31***	-.13***	1.0						
16. Age	.06*	-.06*	-.08**	-.10***	-.20***	-.17***	-.11***	-.01	-.13***	.06*	-.06*	-.29***	.07**	-.16***	.05	1.0					
17. Black	.00	.00	.04	-.01	-.02	-.08**	.02	.11***	.25***	-.06*	-.04	.06*	-.16***	.10*	-.13***	-.05*	1.0				
18. Hispanic	-.01	.01	.05	-.04	.06*	-.07**	-.02	.02	.01	.01	-.10***	.09***	-.09***	.06*	-.22***	.01	-.13***	1.0			
<b>Child characteristics</b>																					
19. Gender	.18***	.05	.02	-.01	-.01	.00	.03	-.03	.03	.01	-.02	.01	.01	.03	.01	-.01	-.00	-.02	1.0		
20. Age	-.07**	-.11***	-.02	-.11***	-.15***	-.08**	-.08**	.06*	-.02	-.00	.05	-.23***	.01	.01	.00	.37***	-.02	-.02	-.03	1.0	
21. Stepchild	-.02	-.09**	-.03	-.05	-.11***	.58***	.07*	-.20***	-.03	-.05*	.11***	-.02	.06*	-.24***	.06*	-.09***	-.07**	-.05	-.02	-.03	1.0

(N = 1,411) \* p < .05 \*\* p < .01 \*\*\* p < .001

## Appendix H

Table H.1 Zero-order correlations between parent involvement, family context, and parent characteristics

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Weekly school participation 1.0																						
2. Weekly school hours	.54***	1.0																				
3. School groups	.42***	.30***	1.0																			
4. Home activities	.22***	.15***	.22***	1.0																		
<u>Family context</u>																						
5. Stepfamily	-.07***	-.04*	-.03	-.07***	1.0																	
6. Cohabiting family	-.05**	-.02	-.05**	.01	-.09***	1.0																
7. Previously married	.04*	.02	-.02*	.02**	-.25***	-.13***	1.0															
8. Continuously single	.02	.00	-.02	.05**	-.11***	-.05***	-.14***	1.0														
9. Part-time employment	.10***	.03	.09***	.05**	-.01	-.04*	-.03*	-.03	1.0													
10. Full-time employment	-.09***	-.08***	-.05**	-.11***	.03	.01	-.01	-.13***	-.39***	1.0												
11. Number children	.07***	.05**	.09***	.10***	.02	.03	-.10***	.01	-.01	-.16***	1.0											
12. Age of youngest child	-.11***	-.06***	-.06***	-.34***	-.03	-.06***	.16***	-.10***	-.01	.15***	-.52***	1.0										
13. All boys	-.04*	-.01	-.02	-.03	-.01	-.02	.04*	-.01	-.00	.06**	-.32***	.22***	1.0									
14. Both sexes	.05**	.03	.07***	.09***	-.00	.03	-.07***	.01	.00	-.07***	.55***	-.36***	-.55***	1.0								
15. Family income	.03	-.01	.07***	-.01	.09***	-.02	-.25***	-.15***	.04*	.10***	-.02	.07***	-.00	.01	1.0							
16. Tangible help	.16***	.09***	.19***	.19***	-.07***	-.01	.12***	.03*	.03	.03	.04	-.21***	-.03	.04*	-.03	1.0						
17. Emotional help	.17***	.06***	.17***	.08***	-.04*	-.02	.13***	-.04*	.08***	-.01	-.04*	.02	.00	-.02	.05**	.46***	1.0					
<u>Parent characteristics</u>																						
18. Gender	.18***	.14***	.11***	.09***	-.08***	-.02	.26***	.17***	.16***	-.36***	.01	.01	-.01	-.00	-.12***	.10***	.22***	1.0				
19. Education	.14***	.03	.18*	.05*	.01	-.07***	-.07***	-.09***	.03	.21***	-.12***	.05**	.04*	-.06***	.31***	.11***	.22***	-.12***	1.0			
20. Age	-.05**	-.06***	-.02	-.28***	-.07***	-.14***	-.06***	-.19***	.01	.07***	-.21***	.60***	.11***	-.17***	.14***	-.21***	-.05**	-.15***	.09***	1.0		
21. Black	.02	.04*	-.00	-.02	-.07***	.03	.05**	.31***	-.08***	-.01	.04*	-.05**	-.04*	.05**	-.13***	-.02	-.11	.09***	-.07***	-.06***	1.0	
22. Hispanic	.02	.02	-.05**	.05**	-.07***	.02	.00	.03	-.01	-.08***	.13***	-.10***	-.04*	.09***	-.10***	-.03	-.09***	.03	-.29***	-.05**	-.16***	1.0

(N = 3,299) \* p < .05 \*\* p < .01 \*\*\* p < .001

## Appendix I

**Table I.1 Logistic regression coefficients and odds ratios showing interaction effects between parent gender and single-parent status on parent participation in school activities**

Independent Variables	b	SE	Odds ratio	Probability
<u>Parent involvement</u>				
Home activities	.354***	.036	1.425	.588
<u>Gender by single parent status</u>				
One parent family	.686**	.241	1.985	.665
Gender	1.056***	.108	2.875	.742
One parent x gender	-.799**	.257	.45	.310
<u>Family context</u>				
Number of children	.135**	.043	1.144	.536
Age of youngest child	-.031**	.012	.970	.492
Family income	.000	.001	1.000	.500
Tangible help	.083***	.025	1.09	.522
Emotional help	.1312**	.042	1.141	.533
<u>Parent Characteristics</u>				
Education	.116***	.016	1.123	.529
Age	.026***	.007	1.026	.506
Constant	-5.665			
Model $\chi^2$ /df	422.75 / 11 df ***			
N	3,299			

Note: Analyses are conducted with unweighted data. One parent family is a dummy variable with single parents coded 1 and all two-parent families, regardless of marital status, as the reference group. Gender is a dummy variable with females coded 1 and males as the reference group.

†  $p \leq .10$  \*  $p \leq .05$  \*\*  $p \leq .01$  \*\*\*  $p \leq .001$

## Appendix J

Table J.1 Approximate probabilities by single parent status and education

Years of education	Mothers		Fathers	
	Single parent	Other parents	Single parent	Other parents
8	.253	.275	.182	.105
9	.275	.299	.199	.117
10	.299	.323	.219	.129
11	.324	.349	.240	.143
12	.349	.376	.261	.158
13	.377	.404	.284	.173
14	.404	.432	.308	.191
15	.432	.460	.334	.209
16	.461	.489	.360	.229
17	.489	.518	.387	.250
18	.519	.547	.415	.273

Note: Estimated probabilities are calculated using the logistic regression equation in Appendix I, setting home activities, number of children, age of youngest child, family income, tangible help, emotional support, and age at their mean level for each of the four groups. Single parents are compared with all those respondents in two-parent families.