

THE EFFECT OF MATERNAL EMPLOYMENT ON ADOLESCENTS'
TRANSITION TO YOUNG ADULTHOOD

BY

HEUIJIN KIM

DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Social Work
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2010

Urbana, Illinois

Doctoral Committee:

Associate Professor Mary Keegan Eamon, Chair
Associate Professor Steven G. Anderson
Professor Reed W. Larson
Associate Professor Min Zhan

ABSTRACT

The purpose of this study was to examine relationships between multiple characteristics of maternal employment, parenting practices, and adolescents' transition outcomes to young adulthood. The research addressed four main research questions. First, are the characteristics of maternal work (i.e., hours worked, multiple jobs held, work schedules, earnings, and occupation) related to adolescents' enrollment in post-secondary education, employment, or involvement in neither of these types of activities as young adults? Second, are the work characteristics related to parental involvement and monitoring, and are the parenting practices related to adolescents' transition outcomes? Third, do parental involvement and monitoring mediate any relationships between the characteristics of maternal employment and adolescents' transition outcomes? Finally, do any associations between characteristics of maternal employment and parenting practices and adolescents' transition outcomes vary by poverty status, race/ethnicity, or gender?

To address these research questions, secondary data analysis was conducted, using data from the National Longitudinal Survey of Youth (NLSY) from 1998 through 2004. The study sample consisted of 849 youths who were 15 through 17 years of age in either 1998 or 2000, and were 19 through 21 years of age when their transition outcomes in young adulthood were measured four years later. Multinomial logistic and ordinary least squares regression models were estimated to answer the research questions.

Study findings indicated that of the maternal work characteristics, mothers' multiple jobs held, occupation, and work schedule were significantly related to the youths' transition outcomes. When mothers held multiple jobs for 1 to 25 weeks per year, and when mothers held jobs involving lower levels of occupational complexity, their

youths were more likely to experience employment rather than post-secondary education. Adolescents whose mothers worked a standard work schedule were less likely to experience other types of transitions than post-secondary education.

With regard to the effects of maternal employment on parenting practices, none of the maternal work variables were related to parental involvement, and only one variable, mothers working less than 40 hours per week, was negatively related to parental monitoring. In addition, when parents were more involved with their youths' education, the youths were less likely to transition into employment and other types of transitions rather than post-secondary education. The parenting practices did not mediate the relation between the significant work variables (holding multiple jobs, work schedule, and occupation) and youths' transition outcomes. Finally, none of the interactions between maternal work characteristics and poverty status, race/ethnicity, and gender met the criteria for determining significance; but in a series of sub-group analyses, some differences according to poverty status and gender were found.

Despite the lack of mediation and moderation, the findings of this study have important implications for social policy and social work intervention. Based on the findings, suggestions are made in these areas to improve working mothers' lives and their adolescents' development and successful transition to adulthood. Finally, directions for future research are discussed.

To Mother and Father

ACKNOWLEDGEMENTS

I would like to thank all the people who supported and encouraged me over the course of my doctoral program and in writing this dissertation. I am very grateful to my outstanding dissertation committee—Dr. Mary Keegan Eamon, Dr. Steve Anderson, Dr. Min Zhan, and Dr. Reed Larson. First, I would like to express my sincere gratitude to my advisor, Dr. Mary Keegan Eamon, for her continuous support as well as excellent mentorship and informed guidance throughout the course of this project and my entire academic life at UIUC. While I was working on my dissertation off campus for the last two years, her heart-warming encouragement and patience helped me make progress. I want to thank Dr. Steve Anderson for lending his expertise on social policy and providing helpful advice. His advice regarding how to balance working on my dissertation with my full-time job was invaluable. I am thankful to Dr. Min Zhan for critical comments and thoughtful support that have helped me throughout the process. I am also grateful to Dr. Reed Larson, my outside committee member, for his insightful advice and suggestions on my dissertation and expertise on youth development.

Special thanks goes to my friends whom I met at the UIUC campus, Ga-young Choi, Hyun-jung Lee, Eun Koh, Sam Choi, Ji-young Kang, and Ji-yeon Kang. They helped and supported in various ways during my school life in Champaign. I would like to thank my sincere friends, Jung-ae Lee, Sun-ok Lee, Malsoon Park, and Sarah In, who continuously convinced me to complete this work, and always prayed for me, along with providing spiritual encouragement. I wish to express my warm appreciation to Harry Jung and Un-shin Park Jibsanim, Hyun-young Jung, and Tae-hyun Lee's family for their

support and encouragement throughout my life in the U.S. I also thank all researchers and staffs at the National Youth Policy Institute where I have been working for several years.

Without the support of my parents, I would never have completed this dissertation. I owe a great debt to my mother, Sam-taek Lim, for the sacrifice that she has made for me. Thanks to her prayers and endless support, I was able to make this academic journey. I am also indebted to my father, Jung-gil Kim, and my sister, Hee-sun Kim, who are continuously supportive and always concerned about my health. Lastly, I would like to thank God, my Heavenly father, for His blessing and faithfulness.

TABLE OF CONTENTS

LIST OF TABLES	viii
CHAPTER 1: INTRODUCTION.....	1
Background of the Study	1
Objectives of the Study.....	6
CHAPTER 2: LITERATURE REVIEW	8
Theories.....	8
Review of Empirical Studies	22
Summary	37
CHAPTER 3: RESEARCH METHOD	39
Research Questions	39
Data.....	40
Sample.....	41
Variables	43
Methods of Analysis.....	53
CHAPTER 4: RESULTS	56
Descriptive Statistics	56
Results of Multivariate Analyses.....	63
CHAPTER 5: DISCUSSION AND IMPLICATIONS	91
Descriptive Statistics Findings.....	91
Multivariate Analysis Findings.....	92
Social Policy and Intervention Implications	104
Limitations of the Study	110
Contributions of the Study.....	113
Directions for Future Research.....	114
REFERENCES.....	117
APPENDIX.....	142

LIST OF TABLES

Table 1. Time Periods and Ages of the Youth Sample	42
Table 2. Results of the Principal Components Analysis of the Parenting Items.....	47
Table 3. Characteristics of Study Sample and Variables by Youths’ Transition Outcomes (Weighted Descriptive Statistics).....	57
Table 4. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Maternal Work Characteristics and Control Variables.....	65
Table 5. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables.....	68
Table 6. OLS Regression Model of Parental Monitoring on Maternal Work Characteristics and Control Variables.....	70
Table 7. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Parenting Practices and Control Variables.....	73
Table 8. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth	78
Table 9. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth	81
Table 10. OLS Regression Model for Parental Monitoring on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth	86
Table 11. OLS Regression Model for Parental Monitoring on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth.....	87
Appendix Table 1. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Maternal Work Characteristics and Control Variables: A Sensitivity Analysis	142
Appendix Table 2. Multinomial Logistic Regression Model of Youths’ Transition Outcomes on Parenting Practices and Control Variables: A Sensitivity Analysis.....	143

Appendix Table 3. Multinomial Logistic Regression Model of Youths' Transition Outcomes: Interaction of Maternal Work Characteristics and Poverty Status.....	144
Appendix Table 4. Multinomial Logistic Regression Model of Youths' Transition Outcomes: Interaction of Maternal Work Characteristics and Race/Ethnicity	146
Appendix Table 5. Multinomial Logistic Regression Model of Youths' Transition Outcomes by Interactions between Maternal Work Characteristics and Gender	148
Appendix Table 6. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Poverty Status	150
Appendix Table 7. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Poverty Status	152
Appendix Table 8. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Race/Ethnicity	154
Appendix Table 9. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Race/Ethnicity	156
Appendix Table 10. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Gender	158
Appendix Table 11. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Gender	160
Appendix Table 12. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth	162
Appendix Table 13. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth	163

CHAPTER 1

INTRODUCTION

Background of the Study

The ways in which adolescents develop in their biological, social, emotional, and cognitive domains and how they undergo important tasks (e.g., school completion, labor market entry) in their transitions to adulthood determine their well-being during their adulthood lives (Shanahan, 2000). However, at least one among every four adolescents in the United States is at serious risk of not moving to “productive adulthood.” Instead, they confront a variety of problems, such as school failure, substance abuse, teen pregnancy, and juvenile delinquency (National Research Council & Institute of Medicine, 2002). In particular, the probability of experiencing a non-productive adulthood appears to be higher for adolescents who have been raised in poor families than for affluent children (Brooks-Gunn, Duncan, & Maritato, 1997). Therefore, for healthy development and successful transitions to adulthood, it is imperative that adolescents avoid negative outcomes, such as the aforementioned problems, and that they focus on preparing well for their future education or occupations (Catalano et al., 1999; Mortimer & Larson, 2002).

Youths face several choices when they graduate from high school, but primarily they choose one of two main pathways: going straight into the labor market or enrolling in college (Nguyen & Taylor, 2003). Research has demonstrated that education beyond the secondary level is a basic tool that helps young people make successful transitions toward adulthood, and also facilitates their well-being during adult lives (Redd, Brooks, & McGarvey, 2002). Long-term benefits of higher education include a more satisfying work environment, higher lifetime earnings, a lower probability of unemployment, as

well as higher levels of physical and socio-emotional well-being (Baum & Payea, 2004; Leslie & Brinkman, 1988; Ross & Wu, 1996). Scholars also indicate that current job markets, including technical advances and occupational changes, demand a highly skilled and educated workforce. This demand has led to higher education among American youths in order to obtain more desirable jobs (Arnett, 2004; Kerchhoff, 2002; Mortimer & Larson, 2002). This trend can be easily seen in statistics showing that the percentage of high school graduates between the ages of 16 and 24 enrolled in college increased from 45.1% to 66.7% between 1960 and 2004 (U.S. Census Bureau, 2006). In addition, the earning difference between college educated and non-college educated workers has risen significantly. In the late 1970s, male college graduates around 30 years old earned approximately 15% more per year compared to non-college educated workers; but recently they have been able to earn 50% more per year. The earning difference between college and non-college educated female workers increased from 20% to nearly 60% during the same period (Ellwood & Kane, 2000).

Instead of college enrollment, many youths graduating from high school directly enter the labor market. Employment is the key to getting out of poverty (Duncan & Brooks-Gunn, 1997), and quality employment can result in the positive outcomes of better mental and physical health, including longer life expectancy (Mirowsky & Ross, 1989). In the past, employment was considered a desirable transition outcome in young adulthood, particularly for male youths (Mare, Winship, & Kubitschek, 1984). However, today's employees with only a high school diploma may not be sufficiently eligible for the current information- and technology-based economy that requires more education and training (Bangser, 2008). Youths without a college education commonly take entry-level

labor market positions, which can be insecure, low-paying, and menial (Furstenberg, 2008; Hill & Yeung, 1999). These non-college educated youths may not earn a sufficient living wage, and experience an increased risk of poverty (William T. Grant Foundation, 1988). Indeed, youths who receive only a high school education encounter a lack of decent jobs for which they are qualified rather than a lack of jobs (Donahoe & Tienda, 2000). They also often change their jobs in a process of finding more appropriate work: American youths hold seven to eight different jobs between the ages of 18 and 20 (U.S. Bureau of the Census, 2000). In addition, although a large proportion of adolescents experience employment (Csikszentmihalyi & Schneider, 2000), their limited job experiences from primarily part-time work hardly guarantee their securing employment and self-sufficiency in their transitions to adulthood. Youths who do not pursue higher education face greater risks of underpaid employment as well as unemployment in adulthood than those who participate in more schooling and training (Fussell, 2002).

In addition to schooling, work, and military service, which have been considered as socially productive transitions from youth to adulthood, other adult roles including marriage and parenthood also have been considered as accepted activities in the passage to adulthood (Hogan & Aston, 1986). However, due to prolonged education, today's youths tend to postpone adult roles (i.e., marriage, childbearing) as well as full-time labor force entry (Arnett, 2004; Furstenberg, 2008; Mortimer & Larson, 2002). In effect, early parenthood in late teens and early twenties is associated with greater marital instability and decreased educational attainment among all women (Moore & Waite, 1981; Hogan & Astone, 1986). Young people who are not in school, unemployed, or not in the military have been considered as being at a high risk of lagging behind their peers; they are more

likely to be poor and to be involved in socially nonproductive outcomes (Mare et al., 1984). Youths who are out-of-school or out-of-the labor force have been unfavorably described as “inactive,” “idle,” “shiftless,” and “disconnected” (Jencks, 1989; Powers, 1996; Tienda & Stier, 1991). Accordingly, youths’ transitions to adulthood should be considered as a critical period in terms of influencing the adult life course, future occupational directions, and social status (Furstenberg, 2008).

Studies indicate that family background (e.g., family income, parents’ education, parents’ jobs), parenting related factors (e.g., parental involvement, parental encouragement), and children’s academic achievement are strongly associated with adolescents’ transition outcomes to adulthood, such as college education (e.g., Cabrera & La Nasa, 2000; Gardner, 2004; Haveman & Wolfe, 1995; Redd et al., 2002). Among these factors, maternal employment and occupations need to receive more attention given the dramatic increase of the rate of maternal employment and its impact on parenting practices and children’s development and well-being.

The rate of participation by women in the labor force has significantly changed in the last 50 years. In particular, the proportion of working mothers has increased, including single mothers. According to the U. S. Bureau of Labor Statistics (2006), from 1975 to 2004 the labor force participation rate of mothers with children under age 18 dramatically rose from 47% to 70%, and unmarried mothers show higher rates of labor force participation than do married mothers. Although there are various factors explaining this trend, including the robust economy of the 1990s and other social policies (e.g., the expansion of the Earned Income Tax Credit), the work requirements of the welfare reform of 1996 were a major factor in increasing maternal employment (Moffitt,

2002). The rate of maternal employment rose from 60% to 72%; and the employment rate of single mothers who were major welfare recipients increased from 47% to 65% between 1994 and 1999, after welfare reform legislation was passed and implemented (Moffitt, 2002; U.S. Council of Economic Advisors, 1999).

The rise of maternal employment has significant implications for children. Since working mothers must invest time and energy in their jobs, and the time, attention, and energy given to their children are reduced accordingly, working mothers may not be sufficiently involved with or able to monitor their children. Thus, the increase in maternal employment has brought about a great deal of concern because of its impact on children's development and well-being, which has resulted in a large body of related research. Infants, preschoolers, and elementary school-aged children have been widely studied regarding the impact of maternal work (e.g., Banducci, 1967; Parcel & Menaghan, 1990, 1994), but adolescents have received less attention. In general, parental attention might seem less important for adolescents, compared to younger children, but research suggests that they still need parental involvement and monitoring for their healthy development and optimal transitions to adulthood (e.g., Baumrind, 1991; Gardner, 2004; McNeal, 1999; Trusty, 1999).

As the literature review in the next chapter indicates, very few studies have examined the relationship between maternal employment and their adolescents' transition outcomes to young adulthood. In contrast, a large body of research has examined the relationship between maternal employment and other measures of well-being, such as school achievement, delinquency, and behavior problems (e.g., Baum, 2004; Berzin et al., 2006; Chase-Lansdale et al., 2003; Kalmijn, 1994; Nguyen & Taylor, 2003; Paulson,

1996), and the results have been inconsistent. The results also have differed by family income, race/ethnicity, and maternal employment characteristics. For example, maternal employment in low-income families was associated with greater delinquency (e.g., marijuana use) for Black and Hispanic youths but not for Whites (Haurin, 1992). Maternal work hours were also positively related only to African American youths' educational attainment (Wolfer & Moen, 1996).

The tendency to focus on young children is also apparent in studies examining the impact of the 1996 welfare reform legislation on children. More importantly, the findings of these studies varied by children's age (Gennetian et al., 2004; Morris, Duncan, & Clark-Kauffman, 2004). While some studies found positive outcomes for preschool and elementary school children (e.g., Hofferth, Smith, McLoyd, & Finkelstein, 2000; Morris, Duncan, & Chase-Lansdale, 2001; Zaslow et al., 2002), other studies found that adolescents of parents facing a work requirement show poorer school performance and increased problem behavior (e.g., Bloom, et al., 2000; Morris & Michalopoulos, 2000). In addition, given that a large share (60%) of low-income persons who are engaged in full-time, year-round work still have low incomes (Acs & Loprest, 2005), adolescents of low-income mothers who primarily have lower level jobs may gain less or little financial benefit from their maternal work, compared with those who live with mothers having better and more secure jobs (e.g., managerial or professional jobs).

Objectives of the Study

Current studies on the relationship between parental work and adolescent well-being contribute to understanding which aspects of maternal employment can affect adolescents' outcomes, such as academic achievement and school performance. However,

as previously discussed, findings from previous studies are inconclusive, and little is known about which aspects of maternal work affect adolescents' transition outcomes to adulthood. Even fewer studies have examined the factors that explain such relationships. In addition, as most studies investigating the effects of maternal employment on adolescents used relatively old data collected in the pre-welfare reform era (e.g., Berzin et al., 2006; Trzcinski, Brandell, Ferro, & Smith, 2005), recent situations that working mothers and their adolescents experience were not represented in this research.

In response to this limited knowledge, the current study aims to begin filling the knowledge gaps by examining the long-term influence of multidimensional aspects of maternal employment on adolescents' transitions to adulthood, using the National Longitudinal Survey of Youth (NLSY) data from 1998 to 2004. Specifically, given the importance of parental influence on adolescents' future destinations, this study explores whether characteristics of maternal employment influence parental involvement and monitoring as well as adolescents' transition outcomes to young adulthood, such as post-secondary education and employment. Furthermore, this study examines whether the parenting practices mediate associations between aspects of maternal work and their adolescents' transition outcomes. Finally, this study investigates whether family poverty, race/ethnicity, and gender influence the association between the characteristics of maternal employment and adolescents' outcomes. The findings from this study can contribute to better understanding the relationships between multidimensional aspects of maternal employment and parental involvement and monitoring and adolescents' transitions to young adulthood, which is important in formulating effective policies and interventions for these families.

CHAPTER 2

LITERATURE REVIEW

Theories

Four theories are discussed that might explain the influence of maternal employment on adolescents' outcomes. These include human capital theory, social capital theory, occupational socialization theory, and ecological systems theory. These theories, developed from diverse disciplines, such as economics, sociology, and developmental psychology, provide useful frameworks for understanding the ways in which characteristics of maternal employment influence adolescents and particular transition outcomes, such as post-secondary education.

Human Capital Theory

Human capital and social capital have been considered necessary resources for child and adolescent development (Becker, 1964, 1993; Coleman, 1988). Most importantly, children's families are the providers of critical resources for their development and growth, and also play an important role in determining their access to other resources beyond the family (Cancio, 2005). Thus, the nature of family resources (e.g., money, time), the amount of family resources, and the timing of their allocation affect children's development and their well-being as adults (Haveman & Wolfe, 1995).

According to Becker (1993), *human capital* is created and accumulated through expenditures on education, skills, and training over the course of a person's life. The investment of resources in human capital is rationally determined by its expected costs and benefits, given personal preferences and expectations. This economic perspective of human capital assumes utility-maximizing parents who are concerned about their children's

economic capabilities and their future standard of living (Becker & Tomes, 1986). In this framework, the parents decide to invest their financial resources (e.g., income, assets) in the accumulation of children's human capital (i.e., schooling, training), considering their returns on the investment, such as their children's future earnings, productivity, and/or labor market outcomes (Becker, 1993). Given the economical feature of families' financial investment in or consumption for children's human capital, low-income parents with limited financial resources inherently have difficulty investing in their children (Becker & Tomes, 1986). In addition, Becker (1993) indicates that the number of children in a family is likely to be negatively associated with the amount of resources spent per child. In addition, the distribution of resources invested in children's human capital may differ between dual-earner families and single-parent families that frequently have low-income earners. Accordingly, human capital theory suggests that parental income significantly determines children's college-going decisions (Kane, 1994; Nguyen & Taylor, 2003).

From the perspective of human capital theory, maternal labor force participation can have contradictory effects on adolescents. On one hand, given that fathers are commonly the primary income providers for the family (Bianchi, 2000), additional income from maternal employment in two-parent families can facilitate more investment in children's human capital, such as in academic achievement and post-secondary education. Specifically, maternal earnings can provide funds for extracurricular activities (e.g., special lessons for their children's preparation for college entry) or assist with children's college tuition. In addition, owing to greater financial resources in the family,

adolescents might not need to work while in school; instead, they can devote more time to school work to promote academic achievement (Powell & Parcel, 1999).

On the other hand, increasing maternal employment also means reducing time available for parenting. However, some scholars assert that the positive effects of increased income from maternal work offset the loss of mothers' time (Hill & O'Neill, 1994). This might be especially the case in low-income families, because increased income from maternal work may buffer the negative effects of maternal employment by reducing financial stress (Berzin et al., 2006; Han, 2006). However, given that a considerable increase in earnings from maternal employment is rarely the reality for low-income families, parents' investment in their children's human capital may be still limited. Moreover, working in unfavorable conditions (e.g., working night or evening shift and holding multiple jobs) and subsequent exhaustion may hinder these mothers from being properly involved in their children's academic achievement, which in turn can decrease their future human capital. On the other hand, by being aware of the importance of human capital, working mothers may strongly encourage their children's higher education, resulting in their children obtaining high-quality jobs in the future.

Based on this theory, some research has focused on associations between the cost of higher education and its returns (e.g., Averett & Burton, 1996; Baum & Payea, 2004; Ellwood & Kane, 2000; Perna, 2000, 2005). Ellwood and Kane (2000) found that higher-income and more educated parents pay the cost of their children's schooling and encourage their children to go to college. After several years, the college graduates earn more than high school graduates. In addition, Perna (2000) found that when costs, future benefits, and financial resources were controlled, Hispanic youths were less likely than

Whites to enroll in college, and African Americans were as likely as Whites to enroll. Scholars also have suggested that individuals of particular races or other “permanent” characteristics who suffer from market discrimination, tend to experience low returns from schooling as well as income disparities (Becker & Tomes, 1986; Smith, 1984).

The theory of human capital contributes to understanding why some parents invest more in their children’s education, while others invest less (Perna, 2005; Stafford, Lundstedt, & Lynn, 1984), and how maternal employment possibly influences adolescents’ futures. However, this theory has been criticized for focusing too much on returns from educational investment primarily based on financial resources, without considering other characteristics of the family, such as family relationships (Kim, 2004, Ku, 2000). Bourdieu (1986) indicates that simple monetary accounting does not reflect how different proportions of resources are allocated to economic investment by different agents. Burt (1992) also argues that “human capital is useless without the social capital of opportunities in which to apply it” (p. 339), focusing on the possible mediating role of social capital.

Social Capital Theory

The original concept of *social capital* was developed by Bourdieu (1986) and Coleman (1988, 1990), and both scholars’ perspectives on social capital are widely applied in education and sociology (McNeal, 1999). Although Bourdieu and Coleman emphasize the importance of social relations as social capital, and the benefits from the relations among individuals in a family and a community (Dika & Singh, 2002; Lin, 2001; Portes, 2000), their foci in conceptualizing social capital differ from each other’s. Bourdieu (1986) considers social capital as a mechanism that the dominant class uses to

reproduce its dominant position through structural barriers and restrictions (e.g., membership) based on racial/ethnic, gender, and other groups. Coleman's theory (1988), the most frequently used in educational research, describes social capital as an individual resource drawn from strong social relations within a family or a community. In this section, Coleman's approach (1988) will be discussed because it focuses on the primary role of parents and parent-child relationships in providing benefits to a child through social capital. His view can assist us in understanding how maternal work affects adolescents' transitions to young adulthood, compared to Bourdieu's perspective, which concentrates on power and misses the role of social capital as a mediator (Kim, 2004).

According to Coleman (1988, 1990), social capital is generated through changes in the relations among actors that facilitate certain actions. As a mediator, social capital plays an important role for individual's access to family and other resources, which ultimately contribute to the creation of human capital. Because social capital is inherent in the structure of social relations among persons, parent-child relations become important social capital. Through the relations, critical information and norms influence children's actions. Specifically, Coleman (1988) suggests that the closure of family structure (i.e., intergenerational closure), which represents relations between parents and children, facilitates specific forms of social capital, such as expectation and values. Social capital eventually contributes to children's educational attainments. Like human capital, social capital is also related to family characteristics, such as family size and the number of children. As Coleman (1988) notes, the number of children represents "a dilution of adult attention to the child" (p. S112). Thus, the ratio of adults to children significantly influences the amount of social capital for the children. For example, growing up in a

single-parent family, versus a two-parent family, can influence the social capital available to children (Coleman, 1998).

In addition, Coleman (1988) argues that the physical absence of parents in a family, such as in single-parent families or in two-parent families in which both parents work outside the home, can be seen as a structural deficiency in family social capital, which may fail to transmit values, norms, and behavior patterns during the day. In his theory, an increase in maternal work (e.g., working over time, holding multiple jobs) may negatively affect mothers' efforts to build social capital through strong bonds with their children, and their deep involvement in children's lives. These working conditions may also hinder mothers' access to social capital that exists in social networks of the children's schools or communities. Thus, these children may not gain from benefits (i.e., useful information or resources) offered by communities. In addition, working mothers are not available to effectively supervise their own children as well as their neighbors' children during out-of-school time. This decreased and disintegrated monitoring of the family and the community may result in increased youths' delinquent behaviors (Bianchi, 2000; Coleman, 1988).

Maternal work characteristics may have an indirect unfavorable influence on building social capital between mothers and their children. For example, when mothers work under stressful conditions, such as night or evening work shifts and working over time, they may not have sufficient time and energy for adequate parenting practices, including being involved in children's education and transmitting their values and expectations. Studies have found that maternal work characteristics such as non-standard work schedules, low wages, and low-skilled employment, result in mothers' physical and

psychological distress, which in turn interferes with their educational involvement and monitoring of their children (e.g., helping children's school work) (Chavkin & Williams, 1989, 1990; Crouter et al., 1999; Crouter & Bumpus, 2001; Heymann, 2000, 2000b; Kurz, 2000; La Valle et al., 2002; London et al., 2004; Menaghan & Parcel, 1995; Raver, 2003; Trzcinski, 2002). However, there is also a possibility that additional social networks created by maternal work environments may motivate adolescents to set their educational or occupational goals, and provide opportunities to achieve these goals (Parcel & Menaghan, 1994).

Researchers in education, psychology, and sociology have used Coleman's theory to guide their examinations of the impact of social capital on children's and adolescents' outcomes (e.g., Gardner, 2004; McNeal, 1999; Moorehours, 1991; Perna & Titus, 2005, Portes, 1998; Powell & Parcel, 1999). These studies investigated parent-child activities, parent-child relationships, parental involvement with children and schools, and parental monitoring as measures of social capital. In particular, with regard to the characteristics of maternal employment, Moorehours (1991) found that when shared activities and interactions between mothers and school-aged children such as talking about future plans and school frequently occur, children whose mothers work full-time showed higher school competence (i.e., school grades, social adjustment) compared with children with unemployed mothers. On the contrary, in the situation of infrequent mother-child activities, children whose mothers worked full-time had lower levels of school performance than those with unemployed mothers. Gardner (2004) found that parental involvement with adolescents and their schools (i.e., school-related discussions between parents and adolescents), had a positive influence on adolescents' educational

expectations and aspirations. In addition, their finding that parental involvement mediated the association between maternal occupational complexity and adolescents' educational expectations, highlights the mediation role of social capital in the relationship between maternal employment and adolescents' education.

In addition, the social capital of high-income parents (i.e., parents' access to the time and financial resources of high-income friends) is more likely to positively affect children's attending college than is the social capital of low-income families, which lacks the same level of resources in their social networks (Hofferth, Boisjoly, & Duncan, 1998). Another study indicates how the effect of social capital on youths' post-secondary education varies by family backgrounds, such as family income and race/ethnicity (Perna & Titus, 2005). The researchers found that because of the lack of social and human capital, African Americans and Hispanics appear to be disadvantaged in the college enrollment process, compared to Whites and Asian Americans. In this study, African Americans received more benefit from parent-school interactions than did other groups related to college enrollment, but less benefit from parent-student discussions about educational matters.

Coleman's theory of social capital partly explains how particular relationships among a family, a school, and a community influence children's achievements and opportunities. Specifically, this theory suggests that social capital between parents and children can play a mediating role in the relationship between maternal employment and youths' transition outcomes to adulthood. However, this theory has often been criticized for the vagueness of the concept that encompasses all forms of interactions between parents, children, and institutions in the community (Dika & Singh, 2002). The theory has

also been criticized because of its circular reasoning that family social capital can be inferred from the assets of parents in the family. For instance, if a student has college tuition due to parents' or relatives' financial support, the student is thought to have social capital, while if the student does not have tuition, he is thought not to have social capital (Portes & Landolt, 1996).

Occupational Socialization Theory

Occupational socialization theory developed by Kohn (1969, 1979) and subsequent research by Kohn and colleagues (1969, 1973, 1986) provide specific explanations for how maternal employment and working conditions affect adolescents. This theory assumes that people's positions and occupational experiences in the system of social stratification have an impact on values, self-conception, and social orientations. In addition, occupational conditions influence people's personalities and psychological functioning (Kohn 1969; Kohn & Schooler, 1969). From the perspective of this theory, occupational experiences and conditions are conducive to the exercise of self-direction in one's work, such that occupational self-direction refers to workers' complex skills, autonomy, and intellectual flexibility, including their freedom in decision-making or allocating their time at work (Kohn, 1969; Kohn & Schooler, 1978). Thus, jobs that facilitate occupational self-direction and complex work positively influence a person's psychological functioning, which in turn decreases distress. On the other hand, oppressive working conditions have a negative influence on psychological functioning, leading to increased distress (Kohn & Schooler, 1969, 1973).

More importantly, this theory indicates that the degree of occupational self-direction and occupational conditions influence parenting values and behaviors, which in

turn affect children's socialization outcomes (Kohn, 1969; Kohn, Slomeczynski & Schoenbach, 1986). Characteristics of lower level occupations (mainly blue-collar jobs), such as being routine, repetitive, and heavily supervised, can negatively affect parents' intellectual flexibility and parenting practices. For example, parents in these occupations tend to value children's conformity and use power-assertive discipline. On the other hand, parents in higher level occupations value children's autonomy and self-direction and the supportive function of parenting (Kohn, 1969, 1979; Kohn & Schooler, 1983; Luster, Rhoades, & Hass, 1989).

According to occupational socialization theory, characteristics of maternal employment, including occupational complexity, not only influence maternal values and parenting, but their adolescents' values regarding schoolwork and future occupations. If a mother has a more complex occupation, she is more likely to encourage autonomy and self-direction in her adolescent; in turn, her adolescent is more likely to pursue self-directed jobs, through the transmission of the mother's work values accompanied by her supportive parenting. In addition, adolescents could learn work values from their parents by observing their behaviors and conversing with their parents about their jobs (Ryu & Mortimer, 1996). On the contrary, the poor working conditions of low-income mothers may negatively influence their parenting, which in turn could negatively affect adolescents' academic achievement. Given that low-income and racial/ethnic minority youths are more likely to live with mothers who work in lower status jobs (Vander Ven & Cullen, 2004), their mothers' lower levels of occupational complexity and working conditions may unfavorably influence their parenting, which in turn negatively influences youths' healthy development and transitions to adulthood.

Research based on this theory has demonstrated that mothers' occupational complexity is related to their parenting and child outcomes. For instance, maternal job autonomy and skill utilization at work were associated with adolescents' academic behavior (Piotrkowski & Katz, 1982). In addition, when parents, both fathers and mothers, value occupational self-direction, adolescents were more likely to be self-directed in their schoolwork (Kohn et al., 1986). Mothers' occupational complexity also was positively associated with their young children's cognitive and social development (Parcel & Menaghan, 1994) and with children's home environments, such as parents' providing cognitive stimulation and emotional support (Menaghan & Parcel, 1991).

Occupational socialization theory explicates how the characteristics of mothers' employment (e.g., occupational complexity) affect their adolescents' work values and education, rather than maternal employment per se. Furthermore, the theory explains how children's socialization, affected by the parents' work conditions, contributes to the reproduction of the family's socioeconomic status in subsequent generations (Greenberger, O'Neal, & Nagel, 1994). Specifically, the theory suggests that parents' occupational status affects children's socialization experiences, which can result in their later pursuing similar types of occupations. The theory, however, does not clarify very well the operating mechanisms of how the occupational self-direction that occurs in the work environment is manifested in the home (Bronfenbrenner, 1995).

Ecological Systems Theory

The ecological systems theory proposed by Bronfenbrenner (1979) provides a theoretical framework for understanding particular developmental processes for adolescents living with working mothers, focusing on reciprocal interactions between

individuals and their environments, such as between adolescents' homes and their mothers' work places.

Initially, Bronfenbrenner (1979) suggested an ecological perspective of human development that describes how individuals interact with their environments as they develop. According to this original concept, human development is nested within various systems and expressed through behaviors in a particular environmental context in which a person develops. Bronfenbrenner (1979, 1986) identified the specific environmental systems as follows: microsystems (e.g., family, school), mesosystems (e.g., interrelations between parent and school), exosystems (e.g., welfare reform policy), and macrosystems (e.g., cultural values, ideologies). Bronfenbrenner later added the chronosystem (e.g., timing) to these four ecological systems.

In his most recent model, Bronfenbrenner (1995) developed a *process-person-context-time model*. According to his proposition, human development takes place “through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and persons, objects, and symbols in its immediate environment” (p. 620). Reciprocal interactions can be effective when they regularly occur over extended periods of time. The interactions in the immediate environment are referred to as *proximal processes*, such as parent-child and child-child interactions across time, group or solitary activities, learning, and sport activities. Bronfenbrenner claims that proximal processes can reduce adverse environmental influences (e.g., poverty) that affect developmental outcomes of children; for example, a high level of mother-child interactions can reduce social class differences in child developmental outcomes.

Bronfenbrenner's concepts of ecological systems and proximal processes provide general explanations for the relationships between maternal employment and adolescents' current and future outcomes. For instance, conditions in a mother's work place can affect interactions within the micro systems of the home and school (Bronfenbrenner & Crouter, 1982). As discussed previously, the unfavorable work situations of a low-income mother may cause her psychological and physical distress, which in turn negatively affect the degree to which the mother can engage in interactions with her adolescent in the home and in her adolescent's school. Specifically, the mother's unfavorable working conditions may impede the mother's involvement in her adolescent's school work, future plans and preparation, and further education. However, if even under difficult situations the mother is actively involved in her child's schooling, the child would benefit from such proximal processes. The concept of proximal process can explain how parents' occupational self-direction is actually manifested in other settings, such as the home and school (Bronfenbrenner, 1995). Such a component is lacking in Kohn's theory.

Chronosystems encompass any life transition and events including divorce, entering the labor force or school entry, or a hectic situation in everyday life (Bronfenbrenner, 1986, 1994). This concept, therefore, can explain how maternal employment affects the critical period of adolescence in terms of preparing for adulthood. If a mother works more hours or a night shift under harsher conditions, and if her child experiences a transition to a high school or to young adulthood at the same time, the overlap of the critical timing for both could have negative impacts on the child's developmental course as well as the mother's life course.

This situation may be worse in the context of low-income minority families. Given that African American and Latino youths are more likely to live in poverty and to live in poor inner-city neighborhoods, than are their white counterparts (Brooks Gunn, Duncan, & Maritato, 1997; McLoyd, 1998), they may be less likely to have positive developmental outcomes and healthy transitions to adulthood. In addition, because mothers who have to work more or inflexible hours are likely to provide less supervision, adolescents might more frequently interact within the microsystems of peer groups. If the adolescents live in poor neighborhoods, they can be exposed to negative peer interactions (e.g., gang activities) and developmental outcomes (e.g., unemployment, idleness). These factors may account for the research findings that African-American and Latino adolescents show higher rates of unemployment, idleness, and other transition challenges, compared to whites (Brown & Emig, 1999; Powers, 1996).

Based on this theory, studies have examined how maternal employment and parental involvement can influence adolescents' outcomes (e.g., Berzin et al., 2006; Bogenschneider, 1997; Paulsen, 1996; Weiss et al., 2003). For instance, Weiss and colleague's study indicated that working mothers acquired educational related information and resources from their work places. Bogenschneider found that when parents were more involved in their adolescents' schooling (i.e., a higher degree of proximal process), their children performed better in school.

Bronfenbrenner's ecological perspective of human development is very useful in comprehending how maternal work characteristics and adolescents interact with various environmental systems, and also in determining what disadvantages these families face. In addition, five specific environmental systems and proximal processes can inform the

design of appropriate policies and interventions for these families. However, because this theory is so expansive, explaining interactions between every ecological environment and human development is difficult.

Review of Empirical Studies

This section begins by reviewing the limited number of studies that have examined the relationship between maternal employment and adolescents' transition outcomes to adulthood. This subsection is followed by a review of research examining the impact of maternal work characteristics on adolescents' achievement, given that adolescent achievement is among the strongest factors determining adolescents' transitions to young adulthood (e.g., college entry) (Cabrera & La Nasa, 2000; Perna; 2000). Next, studies investigating the impact of characteristics of maternal employment on parenting practices, which in turn influence adolescents' outcomes, are reviewed. A particular emphasis is placed on research focusing on parental involvement and monitoring. Finally, a summary of the past studies and the contributions of this study are presented.

Maternal Employment and Adolescents' Transitions to Young Adulthood

As discussed in the introduction, the majority of the research examining the relations between maternal employment and child outcomes has not encompassed young adulthood (Berzin et al., 2006). Therefore, the influence of multiple aspects of maternal employment on adolescents' transition outcomes to adulthood has rarely been examined. The few studies that have examined these relationships provide findings only on the associations between one or two aspects of maternal employment and youths' transition outcomes, such as between maternal occupation and their children's college entry.

One study investigating factors associated with adolescents' college education (Kalmijn, 1994) used national cross-sectional data from the National Survey of Families and Households (NSFH) in 1987 and 1989. The study found that mothers' high-status occupation was positively associated with their children's high school completion and college entry. This effect was independent of fathers' occupation, and was about as strong as the influence of fathers' occupation. Using data from the 1980 High School and Beyond Survey (HSBS), Ordovensky's (1995) also found that, independent of paternal characteristics, maternal occupation influenced the college enrollment decision of youths. These findings were supported by Averett and Burton's (1996) research, which used data drawn from the NLSY in 1981, when the respondents were aged 16 to 23 years. That is, youths whose parents held professional or managerial positions had an increased probability of attending college.

Another study investigated whether parents' occupation influences more than one transitional outcome for their youths. Using data from the National Education Longitudinal Study (NELS) from 1988 through 1994, Nguyen and Taylor (2003) examined whether parental occupation affects adolescents' post-high school choices, such as a two-year or four-year college, employment, and unemployment. They found that both paternal and maternal occupation (a professional or managerial position) influenced the probability that the post-high school destination was a four-year college education.

However, a couple of studies indicate a lack of relationship between maternal employment and youths' transition outcomes. D'Amico, Haurin, and Mott's research (1983) investigated whether maternal employment when children were ages 14-17 was

related to the adolescents' educational attainments after 10 years (e.g., college attendance and completion), using the National Longitudinal Survey of Work Experience of Young Men. The researchers found no significant relationship between maternal work hours and adolescents' schooling. In addition, Berzin et al. (2006) analyzed NSFH data from 1987 through 1994, and found that a heavily work-oriented home environment or a heavily welfare-reliant home environment resulted in little difference in the adolescents' transition outcomes, such as high school graduation, college attendance, use of public assistance, and idleness. Instead, this study found that poverty in childhood was associated with high rates of high school dropout, youth idleness, and decreased college attendance. Finally, in the context of low-income families, maternal labor force participation might have different impacts on youths' transitional decisions. One study found that, in a sample of 251 low-income, African American families, having an employed mother at age 16-17 was significantly associated with college attendance. However, it was unrelated to adolescents' employment in their transitions to adulthood (Leventhal et al., 2001).

In summary, the limited available studies provide evidence that maternal occupational status is significantly associated with youths' transition outcomes, particularly college education. However, as these studies primarily focused on the relationship between maternal occupational status and children's college education, little is known about the other aspects of maternal employment and its impacts on various types of youths' transition outcomes. A need for research including various aspects of maternal employment and youths' transition outcomes is recognized.

Impact of Maternal Employment on Adolescents' Achievement

Given that few studies on the relationship between maternal work and adolescents' transitions to adulthood exist, studies on the influence of maternal work characteristics on adolescent achievement could provide significant information. Research indicates that adolescents who do well in school are more likely to complete high school and to attend college, and such academic performance and educational attainment also are strong predictors of adult well-being (e.g., Ellwood & Kane, 2000; Entswisle, 1990; Kane & Rouse, 1995; Murdock, Anderman, & Hodge, 2000; Nguyen & Taylor, 2003).

Research findings on the relationship between maternal employment and adolescents' academic achievement show a mixed picture, and appear to vary according to family income, race, gender, and parents' employment characteristics. More specifically, many studies have measured maternal labor force participation, working hours, and/or work patterns (full-time vs. part-time) as independent variables (e.g., Bogenschneider & Steinberg, 1994; Datcher-Loury, 1988; Gennetian, Lopoo, & London, 2007; Heyns, 1982; Montemayor & Clayton, 1983). Using the nationally representative sample of NLSY in the late 1990s, Baum (2004) found that mothers' working hours and work patterns during the adolescent years, but not the early childhood and the preadolescent years, significantly decreased their children's high school grades (Baum 2004). Bogenschneider and Steinberg (1994) discovered that when mothers were working full-time, adolescents showed diminished school achievement, especially White, middle-class boys from two-parent families. Interestingly, one study found that maternal work hours positively affected the educational attainment of African American female adolescents, but had no effect on Whites (Wolfer & Moen, 1996). In a study with single-

working mothers and their adolescents within the context of the 1996 welfare reform, Gennetian and colleagues (2008) reported that increased maternal work hours were unfavorably associated with school participation and performance. In other studies, however, maternal work hours were unrelated to adolescents' education. For example, in a study using the Panel Study of Income Dynamics (PSID) data, Datcher-Loury' (1988) found that mothers' work hours did not significantly affect children's years of schooling. In another study with a sample of 240 ninth grade students, Paulson (1996) found little relationship between maternal employment, measured by the number of hours per week, and adolescents' school grades.

In addition, a series of studies have paid attention to the relationships between specific characteristics of maternal employment and adolescent achievement. Given the concerns with adolescents' unsupervised time as a result of mothers working non-standard schedules (e.g., night shift, rotating shifts, irregular shifts, working on weekends), studies have investigated the associations between maternal work schedules and adolescents' educational and behavioral outcomes. For instance, Han's study (2006), using the 1999 National Survey of American Families (NSAF), found that mothers' nonstandard work schedules were negatively associated with the school engagement of adolescents between the ages of 12 and 17, if their families had poverty incomes or if their mothers worked full-time. Another study on a sample of young adolescents from the NLSY, found that single mothers' working rotating shifts was significantly related to adolescents' behavioral problems, such as school-related troubles (i.e., skipping a school), criminal behaviors, and disobedient behaviors (Han & Waldfogel, 2007). However, in two-parent families, mothers' nonstandard work schedules were not significantly related

to adolescents' behavioral outcomes. In a study using NSAF data, Phillips (2002) found no significant effects of parental nonstandard work schedules on the school and behavioral outcomes of children between 0 and 17 years old.

Previous research indicates that parental income has significant effects on children's educational attainment (e.g., Ellwood & Kane, 2000; Jencks et al., 1983; McLanahan, 1985; Sewell & Hauser, 1975). However, because most studies did not separate maternal income from parental income or total family income, less is known about the effects of maternal earnings from labor force participation on their adolescents' outcomes. However, a handful of studies revealed that maternal earnings were related to adolescents' achievement. Using PSID data, Hill and Duncan (1987) found that maternal earnings were related to daughter's educational attainment, but not to son's. The findings of Randolph et al.'s study (2004) indicate that mothers' higher income was positively associated with keeping children in high school, even in low-income families. Another study reported that the negative effect of maternal employment on high school grades was partially attenuated by increased family income via maternal earnings (Baum, 2004).

While fathers' occupation has been highlighted in the area of stratification research, the role of mothers' occupational status has received little attention in relation to children's outcomes (Kalmijn, 1994). Existing studies that primarily have focused on whether maternal characteristics are related to young children's development, indicate significant relationships between maternal occupational complexity and children's cognitive and social development and behavioral problems (e.g., Cooksey, Menaghan, & Jekielek, 1997; Menaghan & Parcel, 1990; Parcel & Menaghan, 1993, 1994). Fewer studies have examined the effects of maternal occupations on adolescents' educational

attainment. One such study with young adolescents and their mothers from the Replication and Extension of the Pennsylvania Early Adolescent Transition Study, found that mothers' occupational prestige positively predicted adolescents' academic achievement, scholastic competence, and career aspirations (Castellino et al., 1998). In addition, Piotrkowski and Katz (1982) found that maternal occupational characteristics measured by job autonomy and skill utilization were significantly associated with academic behaviors (i.e., school grades) of adolescents from 10 through 17 years of age.

Low-income mothers frequently hold multiple jobs to meet their financial necessities, and the demands involved with juggling multiple jobs and family responsibilities including parenting can result in high levels of stress (Beaujot & Andersen, 2004; Edin & Lein, 1996; Gringeri, 2001; Kimmel & Conway, 2001; Scott, & Hurst, & London, 2003; Rangarajan & Schochet, 2004). Research indicates that multiple jobholders are poorer, work longer total hours, and receive lower wages than the average worker (Kimmel & Conway, 2001; Rangarajan & Schochet, 2004), and also have more stress and health problems (Beaujot & Andersen, 2004). In addition, holding multiple jobs might make other family related issues, such as caring for children, more difficult (Scott, & Hurst, & London, 2003). Despite the stress involved in holding multiple jobs, very little research is available to determine whether mothers' working multiple jobs affects children's outcomes, and research even on young children is limited (e.g., Lindsay, 2000; Brady-Smith, 2002). One ethnographic study (Gringeri, 2001), however, described how single mothers holding multiple jobs can influence adolescents. The study suggests that when mothers work multiple jobs to meet their family's needs, and their adolescents take on responsibilities, such as doing household chores and caring for younger siblings,

many of these children have lower academic achievement due to the lack of time and energy for focusing on their studies.

Even though only limited research has investigated the effects of maternal work characteristics on adolescents' achievement, the findings suggest that multiple aspects of maternal employment may be related to youths' transition outcomes to adulthood as well as to adolescents' achievement. In addition, these findings highlight the need for additional research to investigate how maternal work characteristics influence working mothers in particular families, such as low-income and single-mother families.

Maternal Employment and its Impact on Parenting Practices

Society traditionally has assumed that mothers take primary responsibility for rearing children and being involved in their education (Becker, 1981; Lamb, 1997; Parke, 1995). Mothers also appear to engage more in school activities with their children than do fathers, and the extent of the communication between mothers and their children determine family influence on children's cognitive development and school performance (Kalmijin, 1994). In general, during adolescence, youths individuate themselves from their parents and formulate their own views (Steinberg et al., 1992). Some degree of independence or separation from parents is one of the characteristics of adolescent development (Montemayor & Clayton, 1983). However, most youths need their parents' assistance in making important decisions, such as college entry (Nurmi, 1991). Thus, examining the relations between characteristics of mothers' employment and their involvement in adolescents' transitions to adulthood, and whether maternal involvement mediates relations between characteristics of maternal employment and adolescent transitions, is critical.

Previous studies suggest that maternal work, particularly certain aspects thereof, may reduce mothers' time and energy to interact with their adolescents, and also lead to less attention to the adolescents' school work and preparation for their future. Other research has investigated whether maternal work characteristics are related to adolescent achievement (e.g., Heymann & Earle, 2000; Hughes & Galinsky, 1989; Linver & Silverberg, 1997; Muller, 1995; Voydanoff, 1988). In particular, the relationship between mothers' work hours and their parenting practices has received much attention. For instance, in a study using data on young adolescents and their parents from the National Educational Longitudinal Study of 1988 (NELS: 88), Muller (1995) found that maternal work hours was associated with parental involvement and the amount of supervised time after school. The study also found that compared to part-time working mothers or unemployed mothers, full-time working mothers were less involved with their adolescents' school activities (e.g., volunteering), provided fewer television restrictions, and checked children's homework less. In families whose mothers are employed part-time, parents were more likely to talk with their children about school experiences, high school program planning, and taking extracurricular classes. The children of these mothers also demonstrated better school performance than those of full-time employed mothers.

Using a national sample of parents and their adolescents (ages 10 through 17 years), Voydanoff and Donnelly (1998) examined how parents' risk and protective factors affect parental well-being and parental behaviors. They found that one of the risk factors, mothers' working more than 40 hours per week, negatively influenced mothers' well-being, which was positively associated with parent-adolescent activities and parental

involvement. Joshi's study (2000) with NLSY data, also reported that mothers' part-time employment was positively related to parental monitoring of young adolescents and parent-child activities. However, other studies have found that mother's work hours were not associated with maternal monitoring (measured by mothers' knowledge of information on their children's daily activities, whereabouts, companions, etc.) (Crouter, et al., 1999; Crouter & McHale, 1993).

In addition, a set of studies investigated how mothers' non-standard work schedules influence their parenting practices (e.g., Han & Waldfogel, 2007; Heymann & Earle, 2000; Joshi, 2001; La Valle et al., 2002; Presser, 1999). Using data from the NLSY, Heymann and Earle investigated low-income working parents' nonfinancial barriers to parental involvement, compared with higher income working parents. They found that inflexible work schedules and limited work leave constrained opportunities for these poor mothers to assist their children academically. Other related studies have focused on non-standard work schedules, including shift work (e.g., evening, night, split or rotating shifts, on call, weekends), which frequently occurs in restaurants, manufacturing assembly lines, and hospitals (Beers, 2000), and can result in health issues (e.g., irregular sleep patterns, lack of sleep) as well as engagement in family activities (Akerstedt et al, 2002; Presser 2000). Using data from dual-earner Canadian families, Strazdins and colleagues (2006) found that compared to parents working standard weekday schedules, parents' (primarily mothers) with nonstandard work schedules had lower levels of family functioning (i.e., the quality of family relationships), more depressive symptoms, and less effective parenting (i.e., ineffective parent-child interactions, punishment). Children whose parents worked non-standard work schedules also exhibited social and emotional difficulties. It is

notable that this study found that family relationships, parent well-being, and ineffective parenting partially mediated the relationship between parents' non-standard work schedules and children's difficulties. Joshi's study (2000) also found that mothers' shift work (i.e., late hours or irregular schedules) was unfavorably related to parent-child relationships (parental time scale, parental activities, and cognitive home environment). However, Han and Waldfogel (2007) found no relationship between mothers' nonstandard work schedules and parental monitoring of young adolescents. Nonetheless, the findings suggest that mothers who primarily work nights and rotating shifts exhibit deteriorated adolescent-parent closeness.

A limited number of studies have focused on examining the effects of maternal occupational status on parenting practices. Luster and colleagues (1989) found that maternal occupational complexity was associated with parental values (e.g., conformity, self-direction) and parental behaviors (e.g., parental support, involvement). In addition, mothers' occupational prestige was negatively associated with conformity, and mothers who value conformity tended to use frequent physical punishment. These results are supported by Greenberger et al.'s study (1994), which indicates that fathers and mothers with high-occupational complexity are more likely to engage in high quality parenting practices (e.g., exhibit more warmth and responsiveness). In addition, using NLSY data, Gardner's (2004) study suggests that mothers' working in jobs with higher occupational complexity are more involved with their children (i.e., have more discussions with adolescents concerning school), which mediates the relationship between maternal occupational complexity and adolescents' aspirations and expectations of completing higher levels of education.

In the context of low-income families, previous studies also indicate that maternal low-wage and other stressful work conditions may pose challenges for mothers' effective parenting practices. When mothers earn low wages and undergo stressful experiences due to insufficient material resources, their work unfavorably affects their ability to provide supportive home environments for their children and appropriate parenting practices (Menaghan & Parcel, 1995; Raver, 2003). In addition, receiving low wages can affect parents' psychological well-being, such as depressive symptoms and feelings of distress, which may negatively affect parenting practices and parent-child relationships (Conger et al., 1992; McLoyd et al., 1994; Siegal, 1984). However, despite the adverse consequences of low-wage employment (i.e., the lack of material resources and psychological distress) (Parcel & Menaghan, 1997), most previous studies have not investigated the effects of maternal earnings apart from total family income or paternal income. The few studies that have examined the effect of maternal earnings on young children have produced mixed findings. For instance, while one study found that mothers' higher income was related to a lower level of coercive parenting style (Raver, 2003), another study found that maternal income was not directly related to parental involvement and support (measured by the HOME scores), despite the significant relationship between maternal earnings and mothers' depressive symptoms (Jackson et al., 2000).

Previous literature on employment patterns has paid attention to females who hold multiple jobs, because the rate of holding multiple jobs among females has continuously increased and is higher than male workers (e.g., Averett, 2001; Norwood, 1992; Stinson, 1986). Working multiple jobs is commonly associated with low-wages, working long hours, and increased stress and health problems (Beaujot & Andersen, 2004; Kimmel &

Conway, 2001; Schochet & Rangarajan, 2004). Mothers may have multiple part-time jobs because of family responsibilities, such as child care (Kimmel & Conway, 2001), but these part-time jobs may not guarantee sufficient wages or any benefits (e.g., health insurance). Indeed, many low-wage workers experience multiple low-wage jobs, and frequently exit and reenter the low-wage job market (Schochet & Rangarajan, 2004). Despite the negative effects of mothers holding multiple jobs, this aspect of maternal employment has not been investigated in relation to parenting practices or child outcomes. Research examining the impacts of mothers' working multiple jobs on their parenting and children's future outcomes therefore would be beneficial.

In summary, although previous studies have provided mixed findings, they indicate that multiple aspects of mothers' employment may relate to their parenting practices, such as educational involvement and monitoring. In particular, studies on low-wage employment suggest that maternal employment under stressful work conditions, including non-standard work schedules (e.g., shift work) and holding more than one job, may negatively affect parenting,

Parenting Practices, Adolescents' Outcomes, and Youths' Transitions to Adulthood

Because obtaining desirable and better-paying occupations is currently very competitive, and thus many young people extend their education and training, parents' roles become critical in supporting children's preparedness for achievement as well as providing financial resources (Furstenberg, 2008; Swartz, 2008). In this respect, a number of studies have indicated that parenting practices, particularly parental educational involvement, are significantly related to children's academic achievement (Baumrind, 1991; Fan & Chen, 2001; Fehrmann, Keith, & Reimers, 1987; Grolnick & Slowiaczek,

1994; Gutman & Eccles, 1999; Lee, 1993; Otto & Atkinson, 1997), lower likelihood of high school dropout and truancy (McNeal, 1999), engaging in fewer deviant behaviors (Jacobson & Crockett, 2000; Gottfredson & Hirschi, 1990), and a greater likelihood of aspiring to attend college and actual enrollment (Cabrera & La Nasa, 2000; Gardner, 2004; Perna, 2000; Trusty, 1999). For instance, one study suggests that parental involvement at home and in children's schools through eighth grade strongly predicts students' educational expectations six years later in their transitions to young adulthood (Trusty, 1999). In addition, parental encouragement in the early high school years plays an important role in adolescents' college enrollment (Conklin & Cailey, 1981).

Previous studies also have reported that children with less parental monitoring had lower levels of academic achievement and school performance (Baumrind, 1991; Hetherington & Clingempeel, 1992; Jacobson & Crockett, 2000; Paulson, 1994), and adolescents' involvement in deviant behaviors might be thwarted by extending parental control over adolescent activities (Gottfredson & Hirschi, 1990; Jessor, et al., 1995). Specifically, a considerable number of studies have found that less parental monitoring and supervision were significantly related to adolescents' anti-social or delinquent behaviors including sexual behaviors and substance use (e.g., Barnes & Farrell, 1992; Cernkovich & Giordano, 1987; Crockett & Bingham, 1994; Dishion & Loeber, 1985; Jacobson & Crockett, 2000; Patterson & Stouthamer-Loeber, 1984). In this regard, given that even trivial behavioral issues can progress to serious and dangerous delinquent behaviors (Patterson et al, 1992), the research findings suggest that the lack of parental monitoring during adolescence can unfavorably affect youths' transitions to adulthood (e.g., unemployment, idleness, welfare receipt, single parenthood, imprisonment).

With regard to the effects of parenting practices on youths' transitions to adulthood, previous studies have primarily concentrated on parents' educational involvement and its impact on children's post-secondary education. Those studies indicate that greater parental involvement and monitoring are associated with a greater likelihood of college enrollment (Cabrera & La Nasa, 2000; Choy, Horn, Nuñez, & Chen, 2000; Perna, 2000; Perna & Titus, 2005). As an example, using data from the NELS from 1988 to 1994, Choy et al. (2000), found that youths who frequently discussed school-related matters with their parents over the high school years had greater odds of enrolling in college than did those who had little or no discussion with their parents. Similarly, parental encouragement (e.g., general support for the adolescents' post-secondary education, discussions about college attendance) throughout high school was also positively associated with actual college enrollment (Conklin & Cailey, 1981).

Interestingly, a study investigating the effect of delayed college enrollment on socioeconomic status using the NELS data, Rowan-Kenyon (2007) found that greater parental involvement with children's education (e.g., discussing school courses and college entry with children) increased the likelihood of enrolling in college immediately after high school rather than delaying college enrollment. Prior research indicates that young people with lower income and low socioeconomic status tend to delay college enrollment (i.e., not enrolling in college within 1 or 2 years of high school graduation) (Cabrera & La Nasa, 2001; Perna, 2000; Plank & Jordan, 2001)

The findings of the previously reviewed studies suggest that parenting practices are related to adolescents' achievement and their behavioral outcomes, which in turn can affect their transition outcomes to adulthood. In addition, given that a significant effect of

parental involvement on adolescents' post-secondary education has been found, this suggests possible relationships between parenting practices and youths' transition outcomes including post-secondary education.

Summary

The findings of previous studies contribute to understanding the relationships between maternal employment, parenting practices, and adolescents' educational outcomes. However, because few studies have investigated the relationship between maternal employment and adolescents' transitions to young adulthood, and researchers have not even attempted to evaluate links between maternal employment, parenting practices, and youths' transition outcomes, little is known about the relationships between these variables. Therefore, the current study attempts to begin to fill this knowledge gap by investigating the impact of maternal employment on parenting practices and adolescents' transitions to adulthood in a number of ways.

The available research on the relationships between maternal employment, adolescents' achievement, and youths' transition outcomes suggests possible associations between multiple characteristics of maternal employment and adolescents' transitions to young adulthood. However, researchers have investigated only one or two aspects of maternal employment (e.g., work hours, occupation status) and have not considered how various aspects of maternal work might influence adolescents. In addition, past studies have focused on only one transition outcome, post-secondary education, and have not examined other outcomes. Therefore, the current study investigated whether various characteristics of maternal employment are related to three types of adolescents' transition outcomes (i.e., college enrollment, employment, and others). The results are

expected to determine the specific effects of various maternal work characteristics on adolescents' transitions to adulthood that have been rarely examined.

The previously reviewed theories and research suggest that different characteristics of maternal employment may also affect parenting practices, but related research is scarce as well. This study, therefore, also explored whether multiple aspects of maternal employment are related to parental involvement and monitoring of adolescents.

Perhaps the biggest gap in the research literature that this study addressed is related to explaining the mechanisms through which characteristics of maternal work are related to adolescents' transitions to young adulthood. Informed by current research, this study examined whether parenting practices mediate the relationships between characteristics of maternal employment and adolescents' transition outcomes to adulthood.

Given that characteristics of maternal work might differentially affect transition outcomes for adolescents of different gender, race/ethnicity, or family economic status, this study also examined whether the relationship between maternal work characteristics and adolescents' transitional outcomes vary by gender, race/ethnicity, and years living in poverty. Exploring these issues allows a fuller understanding of the relationships between maternal work characteristics and adolescents' transitional outcomes.

Finally, in addition to filling gaps in current knowledge, this study contributes to informing social policies and social work interventions that can enhance the ability of working mothers to assist their adolescents in making an optimal transition to young adulthood. These social policies and interventions are discussed in the final chapter.

CHAPTER 3

RESEARCH METHOD

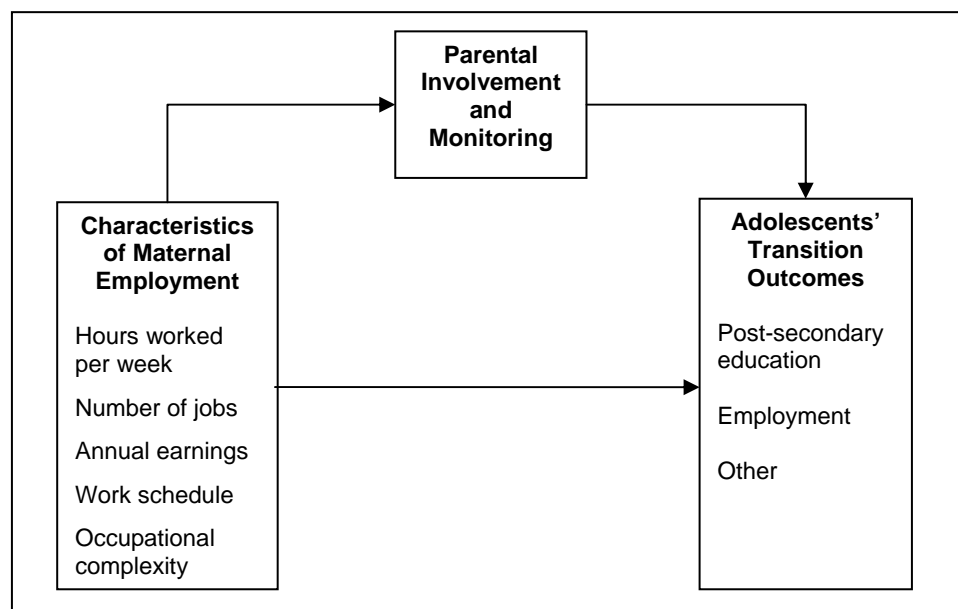
Research Questions

The current study investigated relationships between multidimensional aspects of maternal employment and adolescents' transition outcomes in young adulthood. Specifically, the research examined whether the characteristics of maternal employment affect adolescents' enrollment in post-secondary education, employment, or involvement in neither of these types of activities as young adults. Next, the study examined whether the work characteristics are related to parental involvement and monitoring, and whether the parenting practices are related to adolescents' transition outcomes as young adults. In addition, this study explored whether parental involvement and monitoring mediate any relationships between the characteristics of maternal employment and adolescents' transition outcomes. Finally, this study investigated whether family poverty, race/ethnicity, or gender influences the association between the characteristics of maternal employment and adolescents' transition outcomes. For achieving these goals, the following research questions were addressed:

- 1) Are the characteristics of maternal employment related to adolescents' transition outcomes as young adults, controlling for individual and family characteristics?
- 2) Do the characteristics of maternal employment influence parental involvement and parental monitoring, controlling for individual and family characteristics?
- 3) Are parenting practices related to adolescents' transition outcomes as young adults, controlling for individual and family characteristics?

- 4) Do parental involvement and monitoring mediate any relationship found between the characteristics of maternal employment and adolescents' transition outcomes, controlling for individual and family characteristics?
- 5) Do relationships between maternal employment characteristics and adolescents' transition outcomes and parenting practices vary by poverty status, race/ethnicity, or gender?

The conceptual framework of this study is represented by the following figure.



Data

To investigate the five research questions, I conducted secondary data analyses, using data from the National Longitudinal Survey of Youth (NLSY) from 1998 through 2004. Both the NLSY79 main file and the NLSY young adult datasets were used. The NLSY79 includes a nationally representative sample of 12,686 youths between the ages of 14 to 21 in 1979. The main goals of the surveys were to explore young people's life-course experiences with education, training, labor markets, military service, and their own families (Center for Human Resource Research, 2006). The participants were

interviewed annually from 1979 through 1994, and then biennially after 1994. Hispanic, Blacks, and economically disadvantaged Whites were substantially oversampled. Since 1990, the oversample of economically disadvantaged Whites was discontinued.

Starting in 1986, the children of the NLSY79 female respondents have been interviewed biennially. During these interviews, a variety of instruments were administered to provide information on the children and their families, including cognitive, motor, and social development; the quality of the home environment; schooling; parenting practices; and parent-child relationships. Beginning in 1994, the 15- through 20-year-old adolescents (referred to by the NLSY as “young adults”) of the female respondents were assessed with a different type of survey, which includes questions related to labor market experiences, education, physical and mental health, relationships, and fertility.

By collecting detailed data regarding work and education from both mothers and their children, NLSY datasets allow researchers to investigate the intergenerational processes of work and family (Gardner, 2004). Because the goals of this study were to examine whether the characteristics of maternal employment influence parental involvement and monitoring of their adolescents, as well as the adolescents’ transitions to adulthood, this study used both the NLSY79 and the NLSY young adult datasets.

Sample

The sample for this study included youths 15 through 17 years of age at the date of interview in either 1998 or 2000. Data from both years were used to ensure a sufficient sample size for statistical analysis, and the 1998 and 2000 years are referred to as Time 1 in the remainder of this dissertation. To be included in the sample, youths had to be living

with mothers who worked at least one week during the 52 weeks prior to the week of the youths' interview date, and have data on the parental involvement and monitoring variables (also measured in either 1998 or 2000, depending on the year in which the youth entered the sample), as well as the transition outcome measures. If youths lived with other family members or had independent living arrangements, their experiences with respect to parental involvement and monitoring likely differed from those of youths who lived with their mothers. In general, adolescents between these ages decide whether they will go to college or into the labor market, and begin making practical arrangements for preparing for their transitions to young adulthood (Cabrera & La Nasa, 2000; Choy et al., 2000).

In order to investigate the adolescents' transition outcomes in young adulthood, such as college entry or labor market participation, I used data from the young adults' interviews in either 2002 or 2004, when they reached the age of 19 through 21 (referred to as Time 2). In general, high school graduation occurs almost exclusively at age 18 or 19; college entry occurs for most youths by age 19 or 20, immediately after high school completion (Cameron & Heckman, 2001). I therefore included the transition outcomes of the respondents who were 19 through 21 years of age, at which age the vast majority of the youths would have decided whether to attend college or to participate in the labor market. The time period and ages of the youths are summarized in Table 1.

Table 1. Time Periods and Ages of the Youth Sample

Time period	Year	Youth sample
Time 1	1998	15 through 17 years old
	2000	
Time 2	2002	19 through 21 years old
	2004	

For assessing the effects of the characteristics of maternal employment on parental involvement and monitoring and adolescents' transition outcomes, I used the mothers' job information and work history data collected in the main file for the 52 weeks prior to Time 1.

In cases in which there was more than one adolescent in a family who met the selection criteria, one adolescent was selected randomly to ensure statistical independence. Cases with missing data on the other maternal and family characteristics described in the next section, with the exception of the mothers' annual earnings, were omitted by listwise deletion, the most common and the simplest approach to dealing with missing data (Allison, 1999). Data imputation was conducted for mothers' annual earnings variable, which is explained in the measurement section. The final sample included 849 cases.

Variables

Dependent Variable

Adolescents' transition outcomes during young adulthood were measured when adolescents turned 19 or 21 years of age by the date of the interview at Time 2. The dependent variable indicates whether the youths were (1) currently enrolled in some type of post-secondary education, (2) currently working or in the military, and (3) not enrolled in a post-secondary education program, not working, and not enrolled in the military.

Those who fall into the latter category were categorized as "other."

Post-secondary education. Post-secondary education was assessed with a question asking at the time of the interview whether youths were enrolled in any post-secondary education, including a two-year college, a four-year college, or a technical and vocational

college. The variable was coded as 1 for enrollment¹ in any post-secondary institution, and 0 for non-enrollment, regardless of whether the youth was employed or not. This variable was regarded as the reference group. There is a possibility that some youths may have graduated from a two-year college by the time they turned 19 through 21 years of age, and they were coded as either employed or “other.” To test whether classifying these youths in the post-secondary education category affected the results, a sensitivity analysis was conducted. The models also were estimated with these youths being coded as 1 for the post-secondary education variable, and the results of this analysis are presented in the next chapter.

Employment. This variable was measured by whether the youths were employed at the time of the interview, and not enrolled in post-secondary education. Those who were active in the military also were regarded as employed, since they are regularly paid. Many youths who had just graduated from high school likely would start their careers at a part-time job rather than a full-time job, due to a lack of necessary skills for full-time employment or because they were exploring a job suitable to their interest or abilities. For this reason, youths working at least 20 hours per week were categorized as employed, even though they were not full-time workers who usually work for 40 hours per week. Therefore, youths who reported at least one employer and worked at least 20 hours per week, or who were on active duty in the military at the time of the interview, were coded as 1, and those for whom these conditions did not apply were coded as 0.

¹ NLSY consultant clarified that if during the summer respondents were not currently attending classes but were enrolled for the fall, they were considered to be attending the relevant year. For example, if they were interviewed in the summer between their first and second year of college, they were assumed to be attending the second year of college.

Other. Youths who were not enrolled in post-secondary education, working at least 20 hours per week, or in the military were coded as 1, while others who were enrolled in post-secondary education, working at least 20 hours per week, or in the military, were coded as 0.

Dependent and Mediator Variables

Parental involvement and monitoring. In order to answer the second and fourth research questions, whether maternal work variables are related to parenting practices, and whether any relationships found between the maternal work variables and adolescents' transition outcomes are mediated by parenting practices, two groups of dependent/mediator variables² were used: parental involvement with the adolescents' education and parental educational monitoring. Starting in 1996, the young adults were asked a variety of questions related to these two aspects of their parents' involvement and monitoring. Their responses on twelve questions from Time 1 were used in this analysis.

The NLSY questions that were used for this analysis asked the youths to report on their parental involvement and monitoring; therefore, parental behaviors of mothers and fathers cannot be separated. As discussed in the literature review section, however, mothers usually assume much of the responsibility for rearing children and being involved in their education (Becker, 1981; Lamb, 1997; Parke, 1995). Although some studies have found that fathers are similarly involved academically in the home as mothers (Larson & Richards, 1994), most studies indicate that mothers are more likely to

² At first, three groups of the dependent/mediator variables were proposed in this study: parental involvement with adolescents' education, parental involvement with adolescents' schools, and parental monitoring of their youths. However, due to the large number of missing responses in 2000, parental involvement with adolescents' schools could not be addressed in this study.

be more involved in their adolescents' schooling than fathers (e.g., Baker & Stevenson, 1986; Eccles & Harold, 1996; Epstein & Lee; 1995). Therefore, parental involvement approximated involvement by mothers in this study.

In the NLSY survey, youths were asked five questions related to whether parents discuss a variety of school and education related issues with them and seven items related to how often parents monitor their educational progress. The responses of the questions ranged from 0 = "never" to 3 = "often." As all of the two main types of parenting variables include multiple items, a principal components analysis (PCA) was conducted to determine whether the items measure the two parenting practices (components). Table 2 provides the results of the PCA, indicating the items that measure each type of parenting practices, their factor loadings, and Chronbach's Alpha. In the statistical analyses, the items for each component were added to create the two parenting variables.

Table 2. Results of the Principal Components Analysis of the Parenting Items

Factor		Factor loadings	Chronbach's Alpha
Parental involvement	Discussing selecting courses or programs	.690	.65
	Discussing going to college	.641	
	Discussing school activities/events	.620	
	Discussing community, national, or world events	.603	
	Discussing things that are troubling ³	.532	
Parental monitoring	Limiting privileges because of poor grades	.764	.69
	Giving special privileges because of good grades	.619	
	Checking on homework	.616	
	Helping with homework	.588	
	Discussing grades or report card	.475	
	Limiting the amount of time with friends on school nights	.467	
	Limiting the amount of time they can spend watching TV or playing video games	.418	

Independent Variables

Work variables. To investigate the effects of the characteristics of maternal employment on parental involvement with and monitoring of their adolescents' education and on the youths' destinations in early adulthood, multiple work variables were selected. The work variables were extracted from the NLSY79 job information and work history data in Time 1. In this study, two work variables--average hours worked and multiple jobs--were assessed with a weekly array, and they were measured during the 52 weeks prior to the week of the youth's interview date in Time 1. It is likely that characteristics of maternal employment are more influential when they are accumulated during a long-

³ Although discussing things that are troubling might not be directly related to parental involvement with adolescents' education, the PCA determined that this item measured this concept. The item likely also measures parents discussing issues that are troubling for the youths related to their school and education.

term period. Given the structure of the data, mothers' annual earnings were measured for the calendar year before Time 1, and mothers' work schedule and occupation complexity were measured for the most recent week before the mothers' interview at Time 1.

(1) *Average hours worked.* The questions that asked respondents to report on their usual weekly hours worked for five possible jobs were used to measure the amount of maternal work. The average weekly hours worked was calculated by adding the number of hours per week at all jobs for the 52 weeks prior to the week of the youth's interview date at Time 1, then dividing by 52. Because 40 hours are generally considered as full-time employment⁴, this variable was dichotomized with mothers working less than 40 hours per week coded as 1, and mothers working 40 or more hours were coded as 0.

(2) *Annual earnings.* The mothers' annual earnings variable was measured by maternal wages, salaries, or tips from all their jobs before any deductions in the calendar year prior to Time 1. Because 8.6% of the cases had missing values on the annual earnings variable, earnings for such cases were imputed with the mean of available earnings from the relevant year. In addition, to account for inflation that occurred between 1998 and 2000, which were the interview years for maternal work variables, the maternal earnings variable for 1998 was adjusted using the Consumer Price Index.

Finally, by using the quantile values of the annual earnings resulting from a univariate

⁴ Given that working 35-40 hours per week is commonly classified as full-time employment, working 41 or more hours per week is considered as overtime work (e.g., Baum, 2004; Gardner, 2004; Muller, 1995; Parcel & Menaghan, 1990, 1994; Vander Ven & Cullen, 2004). Accordingly, dichotomizing mothers' work hours based on 40 hours per week allows for comparing the effect of maternal work hours on youths' transition outcomes and parenting practices according to the intensity of maternal employment and mothers' workloads. Following the same reasoning, another work variable, holding multiple jobs, was categorized into three dummy variables, determined by whether the mothers held more than one job per year, and how many weeks the mothers worked more than one job per year.

analysis, this variable was coded into three categories⁵: less than \$19,381 (0% - 50%), between \$19,381 and \$26,918 (> 50% - 75%), and more than \$26,918 (> 75%). The mothers' annual earnings category of more than \$26,918 is the reference group. To control for possible bias caused by the imputation, a dummy variable was created and entered into the models (coded as 1 for imputation, and 0 otherwise). This imputed earnings variable was not statistically significant in the models. I also ran models eliminating cases with the imputed earnings to conduct another test of whether the imputation affected the results. The results did not change in any meaningful way.

(3) *Multiple jobs*. Holding multiple jobs was measured by the number of weeks the mothers reported working more than one job during the 52 weeks prior to the week of the youth's interview date at Time 1. Depending on how many weeks the mothers held more than one job during the 52 weeks, two variables were created: 1 to 25 weeks per year and more than 25 weeks per year. If mothers did not hold more than one job over a year, their responses were coded as 0, the reference category.

(4) *Work schedule*. Mothers' work schedule was assessed with the following question: "Which of the following categories best describes the hours you work at this job?" Respondents then chose one of the following seven categories: "regular day shift," "regular evening shift," "regular night shift," "rotating shift," "split shift," "irregular schedule or hours," and "other." Mothers who did not select "regular day shift" for any of their jobs in the week before their interview at Time 1 was defined as working a "non-

⁵ Instead of treating mothers' annual earnings as a continuous variable, it was also categorized into three variables. This was done in order to compare the effects of different levels of maternal earnings (e.g., low wage vs. high wage) on youths' transition outcomes and parenting practices.

standard work schedule.” Their responses were coded as 0, and the responses of mothers with “regular day shift” were coded as 1.

(5) *Occupation complexity*. The NLSY79 asks the respondents to report on the kind of work that they do, and then codes the work using the 1980 Census code for occupations (occupational classification system). This three-digit code represents the complexity of the respondents’ occupation, and ranges from 3 (managerial and professional specialties) to 889 (helpers or laborers), with lower scores indicating higher occupational complexity. In this study, mothers’ occupational codes were categorized into three groups: the first group includes managerial and professional occupations (the reference category); the second group consists of technical, sales, clerical, and service related occupations; and the final group primarily includes manual laborers, such as farmer, fisher, repairer, assembler, helper, laborer, and so on.

The occupational complexity of the most recent main job that the mother reported holding at her interview in Time 1 was used for this study. Education strongly influences the standing of the first occupation, and in turn, the first occupation has a powerful effect on the standing of the second occupation (Warren, Sheridan, & Hauser, 2002). Because mothers with adolescents would be relatively older and most of them likely have completed their education, the occupation of the mothers reported during this interview likely reflects their normal occupation.

In addition to these maternal work variables, the aforementioned parenting variables--parental involvement and parental monitoring--were used as independent variables in order to answer the third and fourth research questions. That is, they were measured to determine whether the parenting practices are related to youths’ transition

outcomes, and whether any relationships found between the maternal work characteristics and adolescents' transition outcomes are mediated by parenting practices. Also, the following control variables were used as independent variables in the models.

Control Variables

Previous research indicates that various individual and family related characteristics (i.e., poverty status, number of children, marital status, race/ethnicity, gender, mothers' intellectual ability⁶, and education level) may affect maternal employment, parenting practices, and adolescents' transition outcomes to young adulthood (Cameron & Heckman, 2001; Conger, Conger, & Elder, 1997; Freeman, 1997; Guo, 1998; Hurtado, Inkelas, Briggs, & Rhee, 1997; Perna, 2000; Powell & Parcel, 1999; Zaff, Moore, Papillo, & Williams, 2001). Based on the findings of these studies, the following variables that might covary with the characteristics of maternal employment and also predict the parenting practices and adolescents' transition outcomes were controlled in the analyses.

Adolescents' characteristics included gender (1 = male; 0 = female) and race/ethnicity, which was determined by the mothers' self-reported identification (Black = 1; Hispanic = 1; and non-Hispanic, White as the reference category).

A variety of maternal and family characteristics, including mothers' educational level, marital status, number of children in the family, and family poverty status were controlled. Mothers' educational level, measured as the highest grade completed, was

⁶ I originally intended to use mothers' percentile scores on the Armed Force Qualifying Exams (AFQT) taken in 1980 to measure mothers' intellectual ability. However, this variable was eliminated because it was highly correlated with mothers' education, was not statistically significantly related to any of the outcomes, and had 29 cases with missing data.

measured at Time 1 with a set of dummy variables (less than high school = 1; high school = 1; college education or more was the reference group).

Marital status and the number of children in the home were measured at Time 1. Initially if the mothers were married and their spouses were present, they were regarded as the reference group, and the two variables “never married” and “other” (e.g., never married, separated, divorced, widowed, spouse absent) were coded as 1. However, multicollinearity diagnostics determined a low tolerance for the “never married” and the “other” variables. Therefore, these two categories were combined as “other,” which was coded as 0. Mothers who were “married and spouse present” were coded as 1.

Since the number of children in a family can determine the amount of familial resources that each child can receive from the family (Becker, 1993; Coleman, 1988), the number of children in the respondents’ families was also included as a control variable. Considering the skewed distribution of the number of children, if a family had more than two children, the variable was coded as 1. If the family had one or two children, it was coded as 0.

Poverty status was measured as the percentage of years the youths’ family was poor four interview years prior to and including Time 1 (1994, 1996, 1998, and 2000, and 1992, 1994, 1996, and 1998, for those youths entering the sample in 2000 and 1998, respectively), using the years that information on the NLSY79 constructed poverty variable was available. The poverty variable is based on family income received in the previous calendar year, and is converted to a poverty status variable based on the federal government’s official definition. Previous studies indicate that persistent poverty is related to greater cognitive problems for children than short-term poverty (Duncan,

Brooks-Gunn, & Klebanov, 1994), and long-term measures of poverty are more likely to affect children's achievement than are one-year measures (Hao, 1995; Korenman, Miller, & Sjaastad, 1995). Given these findings, this study used multiple years for measuring poverty status, taking advantage of the longitudinal dataset.

Methods of Analysis

The analysis of the data was conducted through the use of multinomial logistic regression and ordinary least squares (OLS) regression. First, in order to examine the direct relationship between the characteristics of maternal employment and adolescents' transition outcomes, the transition outcomes were regressed on the maternal work and control variables. Because the transition outcomes were categorized into three groups--post-secondary education, employment, and other--multinomial logistic regression was used in this analysis. This type of categorical data analysis is the preferred method for comparing one type of outcome with other types (Allison, 1999). The regression equation for this multinomial logistic regression analysis is:

$$\text{Log}(p(\text{category}_i) / p(\text{category}_j)) = \beta_{i0} + \beta_{i1}X_1 + \beta_{i2}X_2 \dots \beta_{ip}X_p$$

Category_i is the "employment" and "other" categories of the dependent variable included in this regression model, and category_j is the reference category; in this analysis, post-secondary education is the reference group. Where β_{i0} is the intercept, β_{i1} to β_{ip} are the regression coefficients, and X_1 to X_p are the independent variables, which are the set of maternal work and control variables. The logistic regression allows for examining the effect that each work variable contributes to the probability of experiencing employment and other types of transition versus post-secondary education (the reference category), controlling for the effects of the other independent variables. This multinomial logistic

regression analysis was also conducted to examine the relationship between the parenting practices (i.e., parental involvement and parental monitoring) and the likelihood of experiencing employment and other types of transition rather than post-secondary education. As the parenting practices are continuous variables, an OLS multiple regression analysis was used to investigate the relationship between the characteristics of maternal employment and the parenting practices, controlling for the maternal and family characteristics.

According to Baron and Kenny (1986) three conditions must be met to establish that the parenting variables mediate the relationships between the maternal work variables and youths' transition outcomes. First, after establishing a relationship between the maternal work variables and adolescents' transition outcomes, the work variables must be related to the parenting practices. Second, the parenting practices must predict the youths' transition outcomes. Finally, when the parenting variables are added to the multinomial model, the effects of any work variables on adolescents' transition outcomes must be eliminated or reduced significantly.

In order to determine whether the effects of maternal employment on the parenting practices and youths' transitions vary by poverty status, interaction terms were constructed between each work variable and poverty status, and entered into the final regression models. In addition, interaction terms between each work variable, race/ethnicity and gender were constructed, and these blocks of interaction terms were separately entered into the regression models. To determine the significance of the interaction coefficients for the OLS models, an incremental F ratio was calculated. This tests whether the inclusion of each block of interaction variables into the main model

results in a significant increase in the R^2 for the main model (Jaccard, Turrisi, & Wan, 1990). Also, to test the interaction effects for the multinomial models, I subtracted the -2 log likelihood ratio (-2LL) for the main models (without the interaction terms) from the -2LL for the models with the interaction terms. Whether there was a significant difference in the -2LL between the two models was determined with the difference in the degrees of freedom between the two models using a chi-square table. A significant decrease in the -2LL indicates a better fitting model.

Additionally, a series of sub-group analyses were conducted to investigate whether the effects of maternal employment on parenting practices and youths' transition outcomes vary depending on two sub-groups of the sample: poor youth (defined as at least one year poor) and non-poor youth and male and female youth. A sub-group analysis by race/ethnicity was not conducted because of the small sample size of each racial/ethnic group.

CHAPTER 4

RESULTS

This chapter first presents descriptive statistics for the variables used in the analyses, and the results of a series of OLS regression models and multinomial logistic regression models then are reported. This chapter also includes the results of an examination of interactions between the characteristics of maternal employment and poverty status, race/ethnicity, and gender in the models predicting youths' transitions and parenting practices. Finally, the results from the sub-group analyses comparing any differences in the effects of maternal employment on youths' transitions by poverty status and gender are reported.

Descriptive Statistics

Weighted means and standard deviations or percentages for the variables included in the analyses are presented in Table 3. The means and the frequencies of the variables presented in the column "All sample" show the characteristics of the entire sample of this study. To allow comparisons to be made based on youths' transition outcomes--post-secondary education, employment, and other types of transitions--the descriptive information also is presented for these sample subsets.

As indicated in Table 3 for the entire youth sample, the largest percentage of youths (45.71%) were enrolled in post-secondary education, while 36.09% made a transition into employment (at least 20 hours worked per week). About 18% of youths were not enrolled in post-secondary education, employed, or in the military, and instead experienced other types of transitions.

Table 3. Characteristics of Study Sample and Variables by Youths' Transition Outcomes (Weighted Descriptive Statistics)

Characteristics	Weighted mean or percentage			
	All sample (N=849)	Post-secondary education (N=358)	Employment (N=315)	Other (N=176)
Dependent Variable				
<i>Transition outcomes</i>		45.71%	36.09%	18.20%
Dependent/Mediator Variables				
<i>Parenting practices</i>				
Parental involvement (0-15)	9.49 (3.13)	10.21 (2.76)	8.86 (3.20)	8.91 (3.34)
Parental monitoring (0-21)	12.12 (4.32)	12.17 (3.98)	12.01 (4.75)	12.23 (4.16)
Independent Variables				
<i>Maternal work characteristics</i>				
Average hours worked per week				
1 = Less than 40 hrs worked	46.42%	44.75%	35.40%	19.85%
0 = 40+ hrs worked	53.58%	45.06%	36.32%	18.63%
Annual earnings				
1 = Less than \$19,381	52.24%	42.50%	37.66%	19.84%
1 = \$19,381 - \$26,918	24.20%	37.76%	42.71%	19.53%
0 = More than \$26,918	23.56%	57.62%	24.97%	17.41%
Weeks held more than one job per year				
1 = 1 to 25 weeks	10.11%	34.99%	42.14%	22.87%
1 = More than 25 weeks	9.33%	54.72%	25.56%	19.72%
0 = none	80.56%	45.02%	36.30%	18.67%
Work schedule				
1 = Standard work schedule	75.87%	47.48%	35.79%	16.73%
0 = Non-standard work schedule	24.13%	36.86%	36.22%	26.93%
Occupation complexity				
1 = Manual laborers	13.59%	32.57%	50.58%	16.85%
1 = Sales, clerical, & service	59.83%	41.32%	37.43%	21.26%
0 = Managerial and professional	26.58%	59.33%	24.93%	15.74%
Control Variables				
<i>Youth gender</i>				
1 = Male	49.53%	42.96%	39.92%	17.12%
0 = Female	50.47%	48.40%	32.34%	19.26%

(continued)

Table 3. (Continued)

Characteristics	Weighted mean or percentage			
	All sample (N= 849)	Post-secondary education (N=358)	Employment (N=315)	Other (N=176)
<i>Youth race/ethnicity</i>				
1 = Hispanic	7.70%	42.27%	36.58%	21.15%
1 = Black	18.37%	39.65%	40.07%	20.28%
0 = White	73.93%	47.57%	35.06%	17.37%
<i>Mothers' education</i>				
1 = Less than high school	18.14%	22.77%	47.40%	29.82%
1 = High school	43.81%	42.35%	39.53%	18.12%
0 = More than high school	38.04%	58.43%	26.21%	15.36%
<i>Mothers' marital status</i>				
1 = Married and spouse present	65.50%	49.93%	32.97%	17.10%
0 = Other	34.50%	35.39%	41.44%	23.17%
<i>Number of children</i>				
1 = More than two children	61.11%	42.51%	38.31%	19.17%
0 = One or two children	38.89%	48.69%	32.09%	19.23%
<i>Percentage of years poor (0 - 1)</i>				
	0.167 (0.342)	0.100 (0.283)	0.192 (0.340)	0.276 (0.413)

Note: Standard deviations are in parenthesis. Other types of marital status include never married, separated, divorced, widowed, and spouse absent.

As for parenting practices, the mean of parental involvement was 9.49 (range 0-15), and the mean for parental monitoring was 12.12 (range 0-21). Results for the characteristics of maternal employment demonstrate that more than half of the mothers (53.58%) worked 40 or more hours per week. Slightly over half of the mothers (52.24%) received annual earnings of less than \$19,381, while about 24% earned between \$19,381 and \$26,918 per year.

The vast majority of the mothers (80.56%) held only one job over a year, and approximately 10% held more than one job for 1 to 25 weeks per year. In addition,

approximately 76% of the mothers worked a standard work schedule. As for the mothers' occupations, nearly 60% had sales, clerical, and service related jobs and about 27% were in managerial and professional occupations.

As control variables, the sample youths' gender was almost equally divided between males and females (49.53% and 50.47%, respectively). As expected, the majority of the youths were non-Hispanic, Whites (73.93%), followed by Black youths (18.37%). In regard to the mothers' education, approximately 18% of the mothers received less than a high school education, while close to 44% of the mothers completed only high school. Nearly 66% of the mothers were married or had a spouse present, and 61.11% of the families had more than two children. For poverty status, the families experienced poverty for about 17% of the interview years in which income data were available (Mean = .167, SD = .342).

Table 3 also shows the sample characteristics and other variables by youths' transition types. Although no tests were conducted to determine statistically significant differences in these sample variables by transition type, some interesting findings did emerge. With regard to parenting practices, youths who enrolled in post-secondary education reported having parents who were more involved in their education (Mean = 10.21, SD = 2.76), compared with youths transitioning into employment (Mean = 8.86, SD = 3.20) and "other" activity (Mean = 8.91, SD = 3.34). Very little difference was found in the degree to which parents monitored their adolescents for youths who were enrolled in post-secondary education (Mean = 12.17, SD = 3.98), who were employed (Mean 12.01, SD = 4.75), and who made other types of transitions (Mean = 12.23, SD = 4.16).

Among youths whose mothers worked less than 40 hours per week, nearly 45% of the youths enrolled in post-secondary education, while 35.4% entered employment, and 19.85% made other types of transitions. These percentages were similar for adolescents whose mothers worked 40 or more hours a week. As for mothers' annual earnings, a higher percentage of youths with mothers who earned less than \$19,381 or more than \$26,978 were likely to enroll in post-secondary education rather than experiencing employment or other types of transitions. More specifically, among youths whose mothers earned less than \$19,381, the percentage of youths enrolling in post-secondary education (42.50%) was slightly greater than for those entering employment (37.66%), and about two times greater than for those making other types of transitions (19.84%). However, as expected, a higher percentage of youths whose mothers earned more than \$26,918 enrolled in post-secondary education (57.62%), which was two times greater than for those entering employment (24.97%) and three times greater than for youths experiencing other types of transitions (17.41%). Among youths whose mothers earned between \$19,381 and \$26,918, more youths made a transition into employment (42.71%) than to post-secondary education (37.76%) and other types of transitions (19.53%).

Youths' transition outcomes also varied according to whether their mothers held multiple jobs. In families whose mothers held only one job per year or held multiple jobs more than 25 weeks per year, a higher percentage of youths enrolled in post-secondary education (45.02% and 54.72%, respectively) rather than transitioning into employment or other types of transitions. However, among youths whose mothers held more than one job for 1 to 25 weeks per year, more youths (42.14%) entered employment, compared with approximately 35% who enrolled in post-secondary education, and nearly 23% who

made other types of transitions.

Youths whose mothers worked a standard work schedule were more likely to transition into post-secondary education (47.48%) rather than entering employment (37.79%) or making other types of transitions (16.73%). However, among youths whose mothers worked a non-standard work schedule, almost the same percentages of the youths transitioned into either post-secondary education (36.86%) or employment (36.22%), while approximately 27% of the youths experienced other types of transitions.

With regard to maternal occupation, about half of the youths whose mothers worked manual labor jobs entered employment, followed by nearly 33% of the youths who enrolled in post-secondary education. In comparison, higher percentages of youths with mothers working either sales, clerical and service related jobs or managerial and professional jobs transitioned into post-secondary education (41.32% and 59.33%, respectively) rather than employment and other types of transitions. As might be expected, in families whose mothers worked managerial and professional jobs, the percentage of youths' enrolling in post-secondary education (59.33%) was about 2.5 times greater than for youths entering employment (24.93%), and nearly 3.8 times greater than for youths making other types of transitions (15.74%).

The characteristics of the youth, mother, and family also varied by youths' transition outcomes (see Table 3). Among male youths, approximately 43% enrolled in post-secondary education; about 40% entered employment; and only 17% made other types of transitions. The female youths demonstrate a similar pattern, but compared to males, the percentages were higher for transition into post-secondary education (48.40%) and "other" (19.26%), and lower for transition into employment (32.34%).

The highest percentage (42.27%) of Hispanic youths transitioned into post-secondary education, followed by employment (36.58%) and other types of transitions (21.15%). Similarly, nearly 48% of non-Hispanic, Whites enrolled in post-secondary education, compared to 35.06% who entered employment and 17.37% who made other types of transitions. However, the percentages of Black youths transitioning into post-secondary education and employment were almost identical (39.65% and 40.07%, respectively); about 20% made other types of transitions.

As for mothers' educational level, for youths whose mothers received less than a high school education, the largest percentage entered employment (47.40%), and about 30% of the youths experienced other types of transitions. The remaining 23% enrolled in post-secondary education. However, youths whose mothers received a high school education and more than a high school education showed a different pattern. The youths were more likely to enroll in post-secondary education (42.35% and 58.43%, respectively), rather than transitioning into employment or other types of transitions. In particular, 58.43% of youths whose mothers were educated more than high school enrolled in post-secondary education, which is 2.2 times greater than for those entering employment (26.21%), and 3.8 times greater than for youths experiencing other types of transitions (15.36%).

In families whose mothers were married or had a spouse present, approximately half of the youths transitioned into post-secondary education, followed by employment (32.97%) and other types of transitions (17.10%). However, youths whose mothers had other types of marital status (e.g., never married, separated, divorced, widowed) experienced higher rates of employment (41.44%) rather than post-secondary education

(35.39%). Similar to youths in married-couple families, the lowest percentage of youths made other types of transitions (23.17%).

Regardless of the number of children in families, the percentages (approximately 19%) of the youths making other types of transitions were almost identical. However, in smaller families (one or two children), nearly half of the youths (48.69%) enrolled in post-secondary education, and approximately 32% entered employment. In larger families (more than two children) a lower percentage of youths transitioned into post-secondary education (42.51%) and a relatively higher percentage transitioned into employment (38.31%).

For poverty status, the families of youths who made a transition into post-secondary education experienced poverty for the smallest percent of the four years the data were available (Mean = .100, SD = .283), compared with youths transitioning into employment (Mean = .192, SD = .34) and other types of transitions (Mean = .276, SD = .413). Finally, the mothers' average age in this study was 38.5, ranging from 33 to 43 years. This variable is not shown in Table 3 because it was not entered into the models as a control.

Results of Multivariate Analyses

Relationship between Maternal Employment Characteristics and Adolescents' Transitions

A multinomial logistic regression model was estimated to address the first research question: Are the characteristics of maternal employment related to adolescents' transition outcomes as young adults, controlling for individual and family characteristics? Specifically, this logistic regression allows for examining the effect that each work characteristic contributes to the probability of experiencing employment and other types

of transitions versus post-secondary education (the reference category), controlling for the effects of the other independent variables.

Table 4 presents the findings from the multinomial logistic analysis. Among the maternal work characteristics, several variables, “weeks held more than one job,” “standard work schedule,” “manual laborers,” and “sales, clerical, & service” were significantly associated with youths’ transition outcomes, controlling for individual and family characteristics. Specifically, the odds that youths of mothers who worked more than one job at least one week per year enter employment rather than post-secondary education were about two times greater (OR = 1.77) compared with youths whose mothers worked only one job. Also, youths of mothers working a standard work schedule were less likely to experience other types of transitions (OR = 0.63) rather than post-secondary education compared with their counterparts whose mothers worked non-standard work schedules. Youths of mothers with manual labor jobs (e.g., farming, fishing, repairing) had 2 times greater odds of entering employment rather than post-secondary education, compared to youths whose mothers held managerial or professional jobs. Finally, the odds of youths of mothers engaged in sales, clerical, and service related jobs entering employment rather than post-secondary education were approximately 1.6 times the odds of youths whose mothers held managerial or professional jobs.

Table 4. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Maternal Work Characteristics and Control Variables

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Maternal work characteristics						
Less than 40 hrs worked (40+ hrs worked per week)	-0.186	0.183	0.830	0.072	0.219	1.074
Annual earnings (more than \$26,918)						
\$19,381 - \$26,918	0.112	0.258	1.119	-0.009	0.315	0.991
Less than \$19,381	0.129	0.232	1.137	-0.199	0.286	0.820
Imputed earnings	0.473	0.432	1.605	0.603	0.475	1.828
Weeks held more than one job per year (none)						
1 to 25 weeks	0.571*	0.278	1.769	0.392	0.332	1.479
More than 25 weeks	-0.238	0.289	0.789	-0.139	0.338	0.870
Standard work schedule (non-standard)	0.005	0.196	1.005	-0.470*	0.220	0.625
Occupation (managerial and professional)						
Manual laborers	0.734**	0.278	2.083	-0.118	0.356	0.888
Sales, clerical, & service	0.459*	0.205	1.582	0.302	0.241	1.353
Youth variables						
Gender (female)						
Male	0.449**	0.164	1.566	0.260	0.195	1.297
Race/Ethnicity (white)						
Hispanic	0.218	0.222	1.243	0.410	0.260	1.506
Black	-0.094	0.201	0.911	0.040	0.241	1.041
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.852***	0.252	2.345	0.892**	0.284	2.440
High school	0.613**	0.189	1.845	0.218	0.232	1.244
Married and spouse present (other)	-0.293	0.189	0.746	0.018	0.227	1.018
More than two children (1-2 children)	-0.140	0.172	0.869	-0.074	0.204	0.929
Percentage of years poor	0.535	0.328	1.708	1.280***	0.369	3.597
Intercept	-1.109**	0.339		-1.274**	0.395	
-2 log likelihood	1681.215					
χ^2 (df=34)	115.604***					

Note: Reference categories are in parenthesis.
† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

For the youth and maternal and family characteristics, results also indicate that youths' gender, mothers' education, and family poverty status were related to youths' transition outcomes. Male youths were about 1.6 times more likely to transition into employment rather than post-secondary education, compared with females.

Youths of mothers with educations less than high school had 2.3 times greater odds of entering employment rather than post-secondary education, compared to youths whose mothers received educations more than high school. Similarly, these youths were more likely to experience other types of transitions (OR = 2.44) rather than post-secondary education than youths whose mothers had educations more than high school. In addition, when mothers completed high school, their youths' transitioned to employment rather than post-secondary education at 1.8 times the odds, compared with youths whose mothers were educated more than high school. Finally, youths whose families lived a higher percent of four years in poverty increased their odds (OR = 3.6) of transitioning into other types of transitions rather than post-secondary education.

In summary, the results from the multinomial logistic model reveal that controlling for individual and family characteristics, some of the mothers' work variables were related to the probabilities of youths' experiencing employment and other types of transitions rather than post-secondary education. Mothers holding multiple jobs for at least one week and their occupations of manual, sales, clerical, and services jobs were significantly associated with youths transitioning to employment rather than post-secondary education. In particular, youths with mothers working manual labor jobs were 2 times as likely to transition into employment rather than post-secondary education, compared with mothers in managerial or professional occupations. Mothers' non-

standard work schedules also were related to other types of transitions rather than post-secondary education. As control variables, male youths and youths whose mothers were not educated more than high school were more likely to enter employment rather than post-secondary education, compared to female youths and youths whose mothers were educated more than high school. It is important to note that when youths experienced longer term poverty, they were at increased risk of experiencing other types of transitions rather than postsecondary education.

Relationships between Maternal Employment Characteristics and Parenting Practices

OLS multivariate regression models were estimated to address the second research question: Do the characteristics of maternal employment influence parental involvement and parental monitoring, controlling for maternal, child, and family characteristics? Table 5 presents these OLS regression results. None of the maternal work variables were associated with parental involvement at the $p < .05$ level. Only mothers' sales, clerical, and service related jobs showed marginal significance. In families in which the mothers worked in these types of jobs, parents were less likely to be involved with their adolescents ($b = -.482, p < .10$), compared with families in which mothers had managerial and professional jobs.

For the mother and family characteristics, one of the mothers' education variables and the marital status variable were associated with parental involvement. Compared with parents in families in which mothers attained an education more than high school, parents in families in which the mothers received less than a high school education were less likely to be involved with their adolescents ($b = -1.012, p < .01$).

Table 5. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables

Variables	Parental involvement	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-0.038	0.241
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.291	0.525
Less than \$19,381	0.219	0.344
Imputed earnings	-0.000	0.308
Weeks held more than one job per year (none)		
1 to 25 weeks	-0.488	0.360
More than 25 weeks	-0.539	0.378
Standard work schedule (non-standard)	0.107	0.252
Occupation (managerial and professional)		
Manual laborers	-0.458	0.369
Sales, clerical, & service	-0.482†	0.268
Youth variables		
Gender (female)		
Male	-0.248	0.215
Race/Ethnicity (white)		
Hispanic	-0.006	0.291
Black	0.434	0.265
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-1.012**	0.322
High school	-0.359	0.253
Married and spouse present (other)	0.492*	0.248
More than two children (1-2 children)	-0.013	0.226
Percentage of years poor	-0.429	0.408
R^2	0.047	
Adj R^2	0.027	
F	2.40 **	

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

In families in which the mothers were married with spouses present, parents were more likely to be involved with their youths ($b = .492, p < .05$), compared with parents in families in which mothers had other types of marital status.

Results presented in Table 6, which demonstrate whether maternal work and control variables were related to parental monitoring, indicate that only one maternal work variable was associated with parental monitoring at the $p < .05$ level, controlling for individual and family characteristics. In families in which the mothers worked less than 40 hours, compared with families in which mothers worked at least 40 hours, parents provided less monitoring for their youths ($b = -.821, p < .05$). This result contrasts with the general expectation that when mothers work less, they are able to provide more monitoring of their children. Another variable showed marginal significance. In families in which mothers held more than one job for more than 25 weeks in the previous year, parents provided less monitoring for their youths ($b = -.905, p < .10$), in comparison with families with mothers working one job.

Among the youth and mother characteristics, youth's race/ethnicity and marital status were positively related to parental monitoring. Compared to parents of white youths, parents of Hispanic youth ($b = .836, p < .05$) and parents of Black youth ($b = 1.437, p < .001$) provided more monitoring. As was the case for parental involvement, in families with married mothers and their spouses present ($b = .733, p < .05$), parents monitored their youths more than parents in families in which mothers had other types of marital status.

Table 6. OLS Regression Model of Parental Monitoring on Maternal Work Characteristics and Control Variables

Variables	Parental monitoring	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-0.821*	0.332
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.059	0.475
Less than \$19,381	0.455	0.425
Imputed earnings	0.628	0.725
Weeks held more than one job per year (none)		
1 to 25 weeks	-0.369	0.497
More than 25 weeks	-0.905†	0.522
Standard work schedule (non-standard)	0.183	0.348
Occupation (managerial and professional)		
Manual laborers	0.147	0.510
Sales, clerical, & service	-0.143	0.370
Youth variables		
Gender (female)		
Male	0.444	0.298
Race/Ethnicity (white)		
Hispanic	0.836*	0.401
Black	1.437***	0.366
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.397	0.445
High school	-0.122	0.349
Married and spouse present (other)	0.733*	0.343
More than two children (1-2 children)	0.229	0.312
Percentage of years poor	-0.016	0.564
R^2	0.041	
Adj R^2	0.022	
F	2.11 **	

Note: Reference categories are in parenthesis.
† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

As shown in Tables 5 and 6, the adjusted R^2 for parental involvement and parental monitoring (.027 and .022, respectively) were very low, which indicate that the mothers work characteristics and other control variables accounted for only a small portion of the variance in the parenting practices variables.

In summary, the results of both OLS regression models testing whether the maternal work characteristics were related to parenting practices revealed only one maternal work variable was associated with parenting practices⁷. None of the maternal work characteristics were related to parental involvement. Only one work variable (mothers' working less than 40 hours per week) was related to parenting monitoring, and the relationship was negative. As control variables, mothers with less than a high school education had lower parental involvement, and parents of Black and Hispanic youth were more likely to monitor their youths. Mothers' who were married and had a spouse present had higher levels of parental monitoring as well as parental involvement.

Relationship between Parenting Practices and Adolescents' Transitions

Another multinomial logistic regression model was estimated to answer the third research question: Are the parenting practices related to adolescents' transition outcomes as young adults, controlling for individual and family characteristics? Table 7 indicates that parental involvement and parental monitoring were significantly related to youths' transition outcomes, controlling for individual and family characteristics. Youths with parents who were more involved with their education were less likely to transition into

⁷ The diagnostic statistics that were conducted before estimating the OLS regression models and the multinomial logistic regression models reported no problem resulting from outliers, multicollinearity, etc. Although the diagnostic statistics identified several cases that might be influential outliers, when the cases were removed from the models, the results remained substantively the same.

employment (OR = .86) and other types of transitions (OR = .83) rather than post-secondary education.

However, in regard to parental monitoring, when parents provided more educational monitoring, their youths had increased odds of experiencing other types of transitions (OR = 1.07) rather than post-secondary education. Although youths whose parents provided more educational monitoring also had increased odds of entering employment (OR = 1.04) rather than post-secondary education, this relation showed marginal significance. These odds ratios, however, indicate no practical significance, because they were both close to 1.

As was the case for the results from the models examining the relationship between maternal work variables and youths' transition outcomes, the same control variables--youth's gender, mothers' education, and poverty status--were statistically significant in this model. The odds ratios for these variables were also very similar. Compared to female youths, male youths were more likely to enter employment rather than post-secondary education (OR = 1.51).

In comparison to youths whose mothers received educations more than high school, youths whose mothers had less than a high school education were more likely to enter employment (OR = 2.45) and make other types of transitions (OR = 2.27) rather than post-secondary education. Youths whose mothers completed only high school had almost twice the odds of experiencing employment rather than post-secondary education. Finally, youths whose families lived a higher percent of four years in poverty had higher odds (OR = 3.4) of transitioning into other types of transition outcomes rather than post-secondary education.

Table 7. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Parenting Practices and Control Variables

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Parenting practices						
Parental involvement	-0.155***	0.031	0.856	-0.189***	0.036	0.828
Parental monitoring	0.037†	0.021	1.038	0.066*	0.026	1.068
Youth variables						
Gender (female)						
Male	0.409*	0.164	1.506	0.228	0.196	1.256
Race/Ethnicity (white)						
Hispanic	0.213	0.223	1.237	0.304	0.262	1.355
Black	-0.027	0.201	0.974	0.064	0.240	1.066
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.894***	0.243	2.446	0.821**	0.274	2.273
High school	0.685***	0.184	1.983	0.226	0.226	1.253
Married and spouse present (other)	-0.241	0.189	0.786	0.024	0.227	1.024
More than two children (1-2 children)	-0.141	0.172	0.869	-0.063	0.205	0.939
Percentage of years poor	0.587†	0.304	1.799	1.220***	0.340	3.387
Intercept	0.301	0.366		-0.453	0.430	
-2 log likelihood	1673.380					
χ^2 (df=20)	123.440***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Parenting Practices as Mediators of Relationships between Maternal Employment Characteristics and Youths' Transition Outcomes

The fourth research questions is: Do parental involvement and monitoring mediate any relationships found between the characteristics of maternal employment and adolescents' transition outcomes, controlling for individual and family characteristics? As

described in the research methods section, to establish that the parenting practices mediate the relationship between the maternal work variables and youths' transition outcomes, a relationship between the maternal work variables and youths' transition outcomes must first be established. Then the work variables must be associated with the parenting practices, and the parenting practices must predict the youths' transition outcomes.

The first multinomial logistic regression model revealed that three maternal work variables—mothers' multiple jobs held, occupation, and work schedule—were related to youths' transition outcomes. However, in the OLS regression models predicting parenting practices, none of these work variables were statistically significantly related to either parental involvement or parental monitoring at the $p < .05$ level. Instead, only mothers' working hours was associated with parental monitoring. These findings indicate that the necessary conditions for establishing that parenting practices mediate any relationship between maternal employment and youths' transitions were not satisfied. Therefore, a further analysis for mediation was not conducted. Consequently, there was no indication that parenting practices mediate relationships found between mothers' multiple jobs, occupation, and work schedule and adolescents' transition outcomes.

Results of Sensitivity Analysis

As discussed in the research method section, a sensitivity analysis was conducted to test whether the classification of the youths into the three transition outcomes may have affected the results. It was determined that some youths who graduated from a two-year college before the Time 2 interview were coded as either employed or "other." Therefore, youths with a degree were reclassified as transitioning into post-secondary

education. This reclassification slightly changed the size of the three transition outcomes as follows: from 358 to 373 for post-secondary education, from 315 to 304 for employment, and from 176 to 172 for other types of transitions.

As presented in Table 1 and Table 2 in the Appendix, the results of the models after reclassification were not significantly different from those of the original models. In other words, even though young people who graduated from a two-year college were categorized as employed or other, the classification did not affect the results.

Variations by Poverty, Race/Ethnicity and Gender in Relations between Maternal Employment and Parenting and Youths' Transitions

The final research questions explored whether the relationships between maternal employment characteristics and parenting practices and adolescents' transition outcomes varied by poverty status, race/ethnicity, and gender. To address these questions, blocks of interaction terms between each maternal work variable and poverty status (the percent of years in poverty), youths' race/ethnicity, and gender were created, and entered separately into the OLS regression and multinomial logistic regression models. To further test whether the maternal variables affected parenting practices and youths' transitions differently by gender and poverty status⁸, separate models also were estimated by gender and poverty status (youths were classified as poor if they were poor in at least one year).

When the interaction terms between maternal work variables and the three factors (i.e., poverty, race/ethnicity, and gender) were entered into the multinomial logistic models estimated for youths' transition outcomes, none of the interactions with the poverty variable were significant (see Appendix Table 3), but some of the interactions with race/ethnicity and gender were significant. These include Hispanic \times less than 40

⁸ A sub-analysis by race/ethnicity was not conducted because of the small sample size for the racial/ethnic groups.

hours worked per week (other vs. post-secondary education, OR = 3.66, $p < .05$), Hispanic \times \$19,381 - \$26,918 (employment vs. post-secondary education, OR = .17, $p < .01$), Black \times \$19,381 - \$26,918 (employment vs. post-secondary education, OR = .11, $p < .001$), and Black \times less than \$19,381 (employment vs. post-secondary education, OR = .34, $p < .05$). However, the difference of the -2 log likelihood ratio (-2LL) between the models with these interactions (-2LL = 1639.21) and the models without them (-2LL = 1681.22) was only marginally significant (χ^2 [32, 849] = 42.01, $p < .10$). These results are presented in Appendix Table 4.

In addition, as shown in Appendix Table 5, two interaction terms between maternal work variables and gender were statistically significant in the multinomial logistic model estimating youths' transition outcomes. These include male \times less than 40 hours worked (other vs. post-secondary education, OR = .65, $p < .05$) and male \times \$19,381 - \$26,918 (employment vs. post-secondary education, OR = .74, $p < .01$). However, the difference between the -2LL of the models with the interactions (1665.39) and the -2LL of the models without them (1681.22) was not statistically significant (χ^2 [16, 849] = 15.83, $p > .25$).

Consequently, no interactions satisfied the criteria to determine significance when included in these multinomial logistic models estimated for youths' transition outcomes. As another alternative to examining differences in the effects of the maternal work variables on youths' transition outcomes, depending on poverty status and gender, a series of sub-group analyses were conducted.

Results indicate that some of the variables were statistically significantly related to youths' transitions in the non-poor youth sample, and also varied by gender. First, for the

non-poor group, maternal work variables, including “1 to 25 weeks held more than one job,” “manual laborers,” and “sales, clerical, and service jobs,” were statistically significant, and the sizes of the odds ratios were similar (see Table 8). Youths whose mothers were manual laborers (e.g., farmer, fisher, repairers) and youths whose mothers worked in sales, clerical, and service jobs had approximately 2 times greater odds of transitioning into employment rather than post-secondary education than non-poor youths whose mothers held managerial or professional jobs. In addition, non-poor youths with mothers working at least one week with more than one job had a 2 times greater odds of experiencing employment rather than post-secondary education than non-poor youths with mothers working only one job.

In contrast to the non-poor youths’ model showing that some of the maternal work variables were significantly associated with youths’ transition outcomes, in the models estimated for the poor youth, none of work variables were statistically significant at the $p < .05$ level. Only “standard work schedule,” showed a marginal significance. These results, however, might be due to the small sample size of the poor youth group ($N = 309$ vs. 540 for the non-poor group), which would make it less likely that an effect would be detected if it were present.

Table 8. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth

Variables	Non-poor youth (N=540)						Poor youth (N=309)					
	Employment vs. Post-secondary education			Other vs. Post-secondary education			Employment vs. Post-secondary education			Other vs. Post-secondary education		
	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio
Maternal work characteristics												
Less than 40 hrs worked (40+ hrs worked per week)	-0.425†	0.242	0.654	-0.158	0.292	0.854	0.108	0.296	1.144	0.572	0.360	1.771
Annual earnings (more than \$26,918)												
\$19,381 - \$26,918	0.281	0.291	1.325	0.259	0.345	1.296	-1.320	0.827	0.267	-0.877	1.125	0.416
Less than \$19,381	0.208	0.275	1.231	-0.102	0.336	0.903	-1.026	0.739	0.358	-0.305	1.001	0.737
Imputed earnings	0.129	0.589	1.138	0.876	0.575	2.402	1.181	0.731	3.259	1.219	0.860	3.384
Weeks held more than one job per year (none)												
1 to 25 weeks	0.769*	0.344	2.158	0.653	0.398	1.921	0.492	0.506	1.635	-0.055	0.634	0.946
More than 25 weeks	-0.218	0.351	0.804	-0.093	0.419	0.911	-0.517	0.576	0.596	0.267	0.616	1.306
Standard work schedule (non-standard)	-0.197	0.254	0.821	-0.235	0.304	0.790	0.122	0.331	1.130	-0.665†	0.354	0.514
Occupation (managerial and professional)												
Manual laborers	0.813*	0.367	2.255	0.423	0.444	1.527	0.574	0.481	1.775	-0.333	0.645	0.717
Sales, clerical, & service	0.626*	0.250	1.871	0.284	0.287	1.328	0.170	0.406	1.185	0.645	0.512	1.906
Youth variables												
Gender (female)												
Male	0.640**	0.209	1.896	0.112	0.251	1.118	0.456	0.292	1.578	0.702*	0.339	2.019

(continued)

Table 8. (Continued)

Variables	Non-poor youth (N=540)						Poor youth (N=309)					
	Employment vs. Post-secondary education			Other vs. Post-secondary education			Employment vs. Post-secondary education			Other vs. Post-secondary education		
	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio
Race/Ethnicity (white)												
Hispanic	0.499†	0.268	1.647	0.558 [†]	0.324	1.746	-0.314	0.427	0.730	0.087	0.479	1.091
Black	-0.105	0.267	0.900	0.300	0.308	1.349	-0.367	0.344	0.693	-0.422	0.410	0.656
Mother and family variables												
Mothers' education (more than high school)												
Less than high school	0.961**	0.339	2.615	0.742 [†]	0.391	2.100	0.846*	0.389	2.331	1.602***	0.455	4.962
High school	0.612**	0.236	1.844	0.064	0.283	1.066	0.555	0.343	1.741	0.686	0.438	1.986
Married and spouse present (other)	-0.171	0.245	0.843	0.066	0.298	1.068	-0.503	0.324	0.605	-0.424	0.377	0.655
More than two children (1-2 children)	-0.098	0.219	0.907	-0.095	0.261	0.909	0.016	0.292	1.016	0.281	0.346	1.324
Intercept	-1.495***	0.425		-1.562*	0.499		0.577	0.878		-1.216	1.171	
-2 log likelihood	1028.744						598.870					
χ^2 (df=32)	66.200***						66.352***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 9 shows the results of the multinomial model estimated separately for male and female youths. Although there were no significant interactions between the maternal work variables and gender in the model estimated for youths' transition outcomes, these results indicate gender differences in the effects of some of the maternal work variables on youths' transition outcomes. In the model estimated for the male youths, mothers' standard work schedule and manual and sales, clerical, and services occupations were statistically significant. Mothers' multiple jobs held and "1 to 25 weeks held more than one job" were significant in the model estimated for the female youths.

Specifically, compared to male youths with mothers on a non-standard work schedule, male youths of mothers working a standard work schedule were less likely to experience other types of transitions than post-secondary education (OR = .433). Also, male youths whose mothers were manual laborers or sales, clerical, and services related workers were more likely to experience employment rather than post-secondary education than youths whose mothers held managerial and professional jobs (OR = 3.23 and 1.80, respectively).

On the other hand, only one work variable, mothers holding more than one job for 1 to 25 weeks was statistically significant in the model estimated for female youths. Female youths whose mothers held more than one job for 1 to 25 weeks had 2.5 times greater odds of experiencing employment rather than post-secondary education than female youths whose mothers held only one job.

Table 9. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth

Variables	Male youth (N=398)						Female youth (N=451)					
	Employment vs. Post-secondary education			Other vs. Post-secondary education			Employment vs. Post-secondary education			Other vs. Post-secondary education		
	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio
Maternal work characteristics												
Less than 40 hrs worked (40+ hrs worked per week)	-0.161	0.264	0.851	-0.273	0.334	0.761	-0.335	0.272	0.715	0.356	0.312	1.427
Annual earnings (more than \$26,918)												
\$19,381 - \$26,918	-0.161	0.374	0.851	-0.081	0.463	0.922	0.355	0.372	1.426	-0.051	0.454	0.951
Less than \$19,381	0.088	0.329	1.092	-0.382	0.430	0.682	0.174	0.351	1.190	-0.070	0.412	0.932
Imputed earnings	1.905*	0.851	6.719	2.344**	0.895	10.421	-0.220	0.573	0.803	-0.393	0.696	0.675
Weeks held more than one job per year (none)												
1 to 25 weeks	0.411	0.386	1.508	0.439	0.485	1.552	0.951*	0.418	2.589	0.716	0.492	2.046
More than 25 weeks	0.095	0.405	1.099	0.313	0.481	1.368	-0.818†	0.478	0.441	-0.231	0.504	0.794
Standard work schedule (non-standard)	-0.354	0.281	0.702	-0.838*	0.336	0.433	0.225	0.298	1.253	-0.411	0.311	0.663
Occupation (managerial and professional)												
Manual laborers	1.172**	0.400	3.227	-0.455	0.562	0.635	0.397	0.413	1.487	0.215	0.493	1.240
Sales, clerical, & service	0.590*	0.300	1.804	0.182	0.357	1.200	0.430	0.299	1.537	0.481	0.355	1.617
Youth variables												
Race/Ethnicity (white)												
Hispanic	0.431	0.320	1.539	1.013*	0.398	2.753	0.177	0.322	1.194	0.086	0.367	1.090
Black	0.300	0.304	1.345	0.680†	0.382	1.974	-0.438	0.287	0.645	-0.454	0.331	0.635

(continued)

Table 9. (Continued)

Variables	Male youth (N=398)						Female youth (N=451)					
	Employment vs. Post-secondary education			Other vs. Post-secondary education			Employment vs. Post-secondary education			Other vs. Post-secondary education		
	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio	Coeff.	S.E	Odds Ratio
Mother and family variables												
Mothers' education (more than high school)												
Less than high school	0.671†	0.372	1.955	0.473	0.451	1.605	1.113**	0.360	3.043	1.485***	0.389	4.417
High school	0.455	0.280	1.577	-0.007	0.357	0.993	0.723**	0.269	2.061	0.410	0.322	1.503
Married and spouse present (other)	-0.108	0.273	0.898	0.063	0.340	1.065	-0.489†	0.276	0.613	-0.155	0.322	0.856
More than two children (1-2 children)	-0.205	0.254	0.815	-0.172	0.318	0.842	0.022	0.244	1.022	0.096	0.280	1.101
Percentage of years poor	0.527	0.511	1.693	2.041***	0.574	7.701	0.743	0.466	2.103	0.553	0.521	1.738
Intercept	-0.709	0.455		-0.931†	0.551		-1.300**	0.503		-1.457**	0.559	
-2 log likelihood	755.171						856.416					
χ^2 (df=32)	87.162***						75.589***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Unlike the results of testing interaction terms between maternal work variables and poverty status and gender in the multinomial logistic models estimated for youths' transition outcomes, these sub-group analyses show that the effects of the maternal work variables on youths' transition outcomes differed somewhat according to these factors. Three work variables, namely, "1 to 25 weeks holding more than one job," "manual laborers," and "sales, clerical, and service related jobs" were significant in the model estimated for the non-poor youths, but none of the maternal work variables were significant in the models estimated for the poor youths. In addition, "more than 25 weeks held more than one job," "manual laborers," and "sales, clerical, and service" were significant in the model estimated for the male youth, and only "1 to 25 weeks held more than one job" was significant in the model for female youth.

In order to investigate whether the relationships between maternal employment and parenting practices vary by poverty status, race/ethnicity, and gender, blocks of interaction terms between maternal work variables and these factors were separately entered into the OLS regression models estimated for parenting practices. Some of the interaction terms with poverty status and the race/ethnicity variables were significant, but no interaction terms with the gender variable were significant. The results in Appendix Table 6 show that one interaction between mothers' manual occupation and poverty status was statistically significant ($b = 2.631, p < .05$) in the OLS regression model estimated for parental involvement, and entering the interactions into the model resulted in an increase in R^2 of .012 (.047 - .059). However, the F-value for the increase did not reach the $p < .05$ level ($F[25, 849] = 0.42, p > .10$). In addition, Appendix Table 7 indicates that no interaction terms between work variables and poverty status were

significant in the OLS regression model estimated for parental monitoring.

For race/ethnicity, the following interaction terms showed statistical significance in the models estimated for parental involvement (see Table 8 in the Appendix): Hispanic \times less than \$19,381 ($b = -1.926, p < .05$), Hispanic \times 1 to 25 weeks ($b = -2.289, p < .05$), Hispanic \times more than 25 weeks ($b = -3.808, p < .001$), and Black \times 1 to 25 weeks ($b = -1.82, p < .05$). In addition, as shown in Table 9 in the Appendix, two interactions were statistically significant in the models estimated for parental monitoring: Hispanic \times 1 to 25 weeks ($b = -3.966, p < .01$) and Hispanic \times more than 25 weeks ($b = -3.142, p < .05$). Adding these interactions into both OLS regression models resulted in an increase in R^2 of .04 (.041 - .087) and an R^2 of .024 (.047 - .065), respectively, but the F-values for the increases were not statistically significant at the $p < .05$ level ($F[33, 849] = 1.10, p > .10$ and $F[25, 849] = 0.42, p > .10$, respectively). None of interaction terms between the work variables and gender were significant in the OLS regression models estimated for parental involvement and parental monitoring. These results are presented in Table 10 and Table 11 in the Appendix.

A series of sub-group analyses also were conducted to determine any differences in the relationship between the maternal work variables and parenting practices by poverty status and gender. With regard to the difference of the effects of the maternal work variables on parental involvement by poverty status, the results in Appendix Table 12 indicate no statistically significant work variables at the $p < .05$ level in the models estimated for either the non-poor or the poor youth groups. These results support the results of the previous interaction model indicating that maternal work variables did not affect adolescents' transitions differently depending on poverty status. Three work

variables showed only marginal significance: “1 to 25 weeks” in the model estimated for the poor youth, “manual laborers,” and “sales, clerical, and services” in the model estimated for the non-poor youth. As presented in Appendix Table 13, the models estimated separately for male youths and female youths also support the interaction model. The results indicate that none of the work variables were significantly associated with parental involvement for either males or females.

There were some differences by poverty status for the effects of some work variables on parenting monitoring (see Table 10), in contrast to the findings that the interaction terms between maternal work variables and poverty status were not significant. In non-poor youths’ families with mothers holding more than one job at least 25 weeks in the previous year, parents provided less monitoring for their youths ($b = -1.361, p < .05$), compared with parents in families with mothers holding only one job. However, in poor youths’ families with mothers holding more than one job for at least a week in the previous year, parents were less likely to monitor their youths ($b = -1.787, p < .05$), compared to parents in families with mothers holding only one job. Also, in poor youths’ families with mothers working less than 40 hours, parents provided less monitoring for their youths ($b = -1.326, p < .05$), compared with parents in families with mothers working more than 40 hours.

Table 10. OLS Regression Model for Parental Monitoring on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth

Variables	Parental monitoring			
	Non-poor youth (N=540)		Poor youth (N=309)	
	Coeff.	S.E.	Coeff.	S.E.
Maternal work characteristics				
Less than 40 hrs worked (40+ hrs worked per week)	-0.550	0.426	-1.326 *	0.535
Annual earnings (more than \$26,918)				
\$19,381 - \$26,918	-0.151	0.517	1.041	1.437
Less than \$19,381	0.513	0.485	1.040	1.246
Imputed earnings	-0.397	0.964	0.816	1.187
Weeks held more than one job per year (none)				
1 to 25 weeks	0.378	0.610	-1.787 *	0.871
More than 25 weeks	-1.361 *	0.614	0.358	0.986
Standard work schedule (non-standard)	0.212	0.453	0.213	0.557
Occupation (managerial and professional)				
Manual laborers	0.446	0.655	-0.071	0.888
Sales, clerical, & service	-0.178	0.426	0.002	0.753
Youth variables				
Gender (female)				
Male	0.036	0.368	1.221 *	0.511
Race/Ethnicity (white)				
Hispanic	0.627	0.480	1.289 †	0.736
Black	1.124 *	0.464	1.736 **	0.611
Mother and family variables				
Mothers' education (more than high school)				
Less than high school	-1.218 *	0.598	0.489	0.678
High school	-0.135	0.415	0.127	0.647
Married and spouse present (other)	0.765 †	0.437	0.714	0.575
More than two children (1-2 children)	0.483	0.386	-0.361	0.522
R^2	0.049		0.100	
Adj R^2	0.020		0.051	
F	1.67 *		2.02 *	

Note: Reference categories are in parenthesis.
† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 11. OLS Regression Model for Parental Monitoring on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth

Variables	Parental monitoring			
	Male youth (N=398)		Female youth (N=451)	
	Coeff.	S.E.	Coeff.	S.E.
Maternal work characteristics				
Less than 40 hrs worked (40+ hrs worked per week)	-0.161	0.480	-1.444**	0.475
Annual earnings (more than \$26,918)				
\$19,381 - \$26,918	0.159	0.697	-0.361	0.657
Less than \$19,381	0.312	0.613	0.554	0.601
Imputed earnings	0.568	1.069	0.534	1.010
Weeks held more than one job per year (none)				
1 to 25 weeks	-0.640	0.694	-0.045	0.738
More than 25 weeks	-0.475	0.745	-1.256†	0.752
Standard work schedule (non-standard)	-0.245	0.496	0.529	0.501
Occupation (managerial and professional)				
Manual laborers	0.551	0.725	-0.287	0.726
Sales, clerical, & service	-0.156	0.546	-0.053	0.511
Youth variables				
Race/Ethnicity (white)				
Hispanic	0.927	0.587	0.733	0.564
Black	1.597**	0.553	1.275*	0.494
Mother and family variables				
Mothers' education (more than high school)				
Less than high school	-0.096	0.665	-0.669	0.611
High school	0.221	0.525	-0.312	0.473
Married and spouse present (other)	0.879†	0.496	0.603	0.485
More than two children (1-2 children)	0.180	0.466	0.332	0.425
Percentage of years poor	0.479	0.814	-0.297	0.805
R^2	0.043		0.063	
Adj R^2	0.002		0.029	
F	1.06		1.84*	

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

In the models separately estimated by gender, only one work variable was significant as shown in Table 11. In the female youths' families, mothers' working less than 40 hours per week was negatively associated with parental monitoring ($b = -1.44, p < .01$), while in the male youths' families, none of the maternal work variables were related to parental monitoring.

In summary, the results of the models with interaction terms demonstrate that the relationships between the maternal work variables and the parenting practices did not vary by poverty status, gender, and youths' race/ethnicity. However, in these sub-group analyses, the effects of the maternal work variables on youths' transition outcomes and parenting practices slightly differed according to poverty and gender.

Summary of the Results

With regard to the first research question examining the association between maternal work characteristics and youths' transitions, the results indicate that mothers' multiple jobs held, occupation, and work schedule were significantly related to the probabilities of youths' transition outcomes. Compared to mothers who held only one job, when mothers held multiple jobs at least one week per year, their youths were more likely to transition to employment rather than post-secondary education. Also, compared to youths whose mothers were in managerial and professional jobs, youths whose mothers held jobs involving lower levels of occupational complexity (e.g., manual labors, sales, service related jobs) were more likely to experience employment rather than post-secondary education. When mothers worked a standard work schedule, their youths were less likely to experience other types of transitions than post-secondary education, compared with youths whose mothers worked non-standard work schedules. As control

variables, youths' gender, mothers' education, and poverty status were significantly related to youths' transition outcomes.

For the second research question investigating the effect of maternal employment on parenting practices, some of the findings were unexpected. None of the maternal work variables were related to parental involvement, and only one variable, mothers working less than 40 hours per week, was negatively related to parental monitoring. As control variables, mothers' education was significantly related to parental involvement, and youths' gender was associated with parental monitoring. Mothers' marital status was related to both parenting practices variables. In families with married mothers and their spouse present, parents were more involved with and monitored their youths more, compared with families in which mothers had other types of marital status.

For the third research question, the relationship between the parenting practices and youths' transition outcomes was investigated. The results show that when parents were more involved with their youths' education, the youths were less likely to transition into employment and other types of transitions rather than post-secondary education. Surprisingly, youths whose parents provided more educational monitoring had increased odds of making other types of transitions, but the odds ratio was not practically meaningful because it was very close to 1.

The fourth research question investigated whether parenting practices mediate the relationships found between the maternal work characteristics and youths' transition outcomes. However, since mothers who worked less than 40 hours per week (which significantly predicted parental monitoring) was not significantly related to youths' transition outcomes, further analysis for mediation was not conducted.

Finally, this study explored whether relationships between maternal work variables and youths' transition outcomes and parenting practices varied by poverty status, race/ethnicity, and gender. None of the models with the interaction terms met the criteria for determining significance in the interactions, and these results indicate little evidence for variation according to these factors. In a series of sub-group analyses, a few differences according to poverty status and gender were found. Specifically, the results indicate that non-poor youths whose mothers worked manual labors or sales, clerical, and service jobs, and those youths whose mothers held multiple jobs for at least one week, were more likely to transition into employment rather than post-secondary education. However, none of the maternal work variables affected poor youths' transitions. Male youths of mothers working a standard work schedule were less likely to experience other types of transitions than post-secondary education; male youths whose mothers were manual laborers or sales, clerical, and services related workers were more likely to experience employment rather than post-secondary education. Mothers holding multiple jobs was related to female youths' transition into employment rather than post-secondary education.

Additionally, mothers holding multiple jobs more than 25 weeks per year was negatively related to parental monitoring of their non-poor youth. In the poor youths' families, mothers working less than 40 hours per week and mothers holding multiple jobs for 1 to 25 weeks per year were also negatively associated with parental monitoring.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

This chapter includes discussions of the findings of the study and implications for social policy and social work intervention. Limitations and contributions of the study and directions for future research are presented as well.

Descriptive Statistics Findings

In this study, close to half of the youths (approximately 46%) transitioned into post-secondary education, such as a two-year college, a four-year college, or a technical and vocational college. Approximately 36% of the youths entered employment, but some of them might be working involuntarily less than full-time, because the study sample included part-time employed youths (working at least 20 hours per week). In addition, although the types of employment the youths transitioned into were not identified in this study, other research suggests that many jobs offered to youths who entered employment after high school are relatively insecure and low-paying (Hill & Yeung, 1999).

It also should be noted that a significant percentage of the youths (approximately 18%) was not enrolled in post-secondary education, working, or in the military. Previous research indicates that when young people are not in school, unemployed, or not in the military, they are at a high risk of lagging behind their peers in subsequent years. For example, they are more likely to be poor and to be involved in socially nonproductive outcomes (Mare et al., 1984; Powers, 1996). This is because these youths are not able to shape their educational and employment profiles in ways similar to their counterparts who pursue a post-secondary education. Therefore, more attention should be given to identifying the types of activities in which these youth are involved.

In addition, some maternal work characteristics deserve attention. The study indicates that a significant percentage of these mothers held more than one job (approximately 20%) and had non-standard work schedules (approximately 24%), and the majority of the mothers (73.42%) worked in non-managerial and nonprofessional occupations. These percentages indicate that a large number of mothers might experience unfavorable working conditions, and suggest the need for future research to investigate the impact of these work characteristics on mothers and their families.

Multivariate Analysis Findings

Effects of Maternal Employment Characteristics on Adolescents' Transitions

The first analysis examined whether the characteristics of maternal employment were related to youths' transition outcomes, controlling for individual and family characteristics. The results indicate that mothers holding multiple jobs, work schedule, and types of occupation during the youths' adolescence were significantly associated with the youths' transitions in young adulthood.

The results suggest that when mothers hold multiple jobs for 1 to 25 weeks per year, their youths tend to enter employment rather than post-secondary education, compared with mothers who work only one job for an entire year. Although it might be expected that the unfavorable situations related to youths' transitions to adulthood would get worse when mothers work multiple jobs for longer periods, the study did not find a significant relation between mothers holding more than one job beyond 25 weeks and youths' transition outcomes. More research should be conducted to untangle these findings that are difficult to explain.

The findings of this study also suggest that mothers' non-standard work schedules (e.g., evening shifts, rotating shifts) may increase the likelihood of youths' experiencing other types of transition rather than post-secondary education. Bronfenbrenner's concept of chronosystems suggests that particular aspects of maternal work might negatively affect their adolescents' life transitions in adulthood because of the overlap in the critical timing for both the mothers' life course and their youths' developmental course. For example, mothers' absence resulting from a night or weekend work shift might increase their adolescents' interactions with peers who have alternative values and opportunities to engage in risky behaviors with peers, which in turn can result in unproductive transitions in young adulthood. This might be particularly the case in poor neighborhoods (Dishion et al., 1995; Dishion & McMahon, 1998). In addition, during adolescence, a critical period for planning and preparation for adulthood lives, non-standard work schedules may impede mothers' interactions with their adolescents, such as discussing future plans, college education, and so forth.

Previous studies also support the current finding. That is, mothers' non-standard work schedules or work shifts negatively affect school-aged children's education and behaviors (Bryant et al, 2006; Han, 2006; Heymann, 2000; Heymann & Earle, 2000; Hsueh & Yoshikawa; 2007). In addition, given that a work schedule can indicate the quality or desirability of a job (Acs & Loprest, 2005), and employment in non-standard schedules and shift jobs are particularly high in the service sector in which female workers predominate (Presser, 2003), the relationship between mothers' work schedule and youths' transitions to adulthood requires more research attention.

This study also provides evidence that mothers' occupational complexity is associated with their youths' transition outcomes to adulthood. Compared with youths whose mothers work professional and managerial jobs, youths whose mothers hold manual labors and sales, clerical, and service jobs are more likely to enter employment rather than post-secondary education. This finding is consistent with previous research demonstrating the positive effects of mothers' high-status occupations on their children's college education (e.g., Averett & Burton, 1996; Nguyen & Taylor, 20003). For example, Kalmijn's (1994) study found that in dual-earner families, mothers' professional and managerial occupation was positively associated with their children's college entry, independent of the effect of fathers' occupation.

With regard to the relationship between maternal occupational status and youths' transition outcomes, relevant theories provide possible explanations. First, human capital theory suggests that being aware of the economic returns from various occupations, mothers with high occupational status place greater weight on the value of their children's pursuing a college education rather than entering the labor market. In addition, these mothers, compared with those in low-status occupations, have more resources (e.g., information, problem solving skills) available to assist their children academically and in enrolling in college (Nguyen & Taylor, 2003).

Occupational socialization theory can provide an alternate explanation for the relation between occupational complexity and youths transitions in adulthood. According to this theory, mothers in lower-level occupations have few opportunities to exercise self-direction in their work, experience less autonomy and flexibility, and value children's conformity rather than their self-direction (Kohn, 1969, 1979). Therefore, mothers with a

lower occupational status might be less likely to value facilitating their adolescents' self-direction in schooling and their pursuit of self-directed jobs as well, compared with mothers holding professional and managerial jobs. In these circumstances, youths of mothers with a lower occupational status may be more oriented to enter the labor market rather than plan for college education. As a result, this finding has implications not only for the youths' socio-economic status during adulthood, but for the intergenerational transmission of the mothers' occupational status.

Other maternal work characteristics, such as working hours and annual earnings, were not statistically significantly related to youths' transitions. The lack of a relationship between maternal work hours and youths' transition outcomes is consistent with another study showing no relationship between mothers' work hours and children's attending college (D'Amico, Haurin, & Mott, 1983). However, these results contrast with other studies indicating significant relationships between mothers' work hours and adolescents' educational achievement (e.g., Baum, 2004; Wolfer & Moen, 1996). These inconsistencies may be due to the differences in outcome measurements. The current and D'Amico et al.'s study examined whether mothers' work hours were related to youths' transition outcomes in young adulthood, such as college enrollment, but other studies assessed youths' school performance or high school completion. Even though youths' educational achievement is a strong factor that determines their transitions to adulthood, it does not necessarily correspond to actual destinations after high school graduation.

Although maternal earnings were not significantly related to youths' transition outcomes, the results suggest that youths' experiencing longer term poverty have

increased odds (OR = 3.6) of experiencing other types of transitions rather than post-secondary education, which will be discussed in the next section.

Effects of Maternal Employment Characteristics on Parenting Practices

The results from examining the relationships between maternal work characteristics and parenting practices revealed only one statistically significant relationship. That is, compared with mothers working at least 40 hours per week, mothers working less than 40 hours per week provided less monitoring of their adolescents.

Previous literature has demonstrated that various aspects of maternal employment, such as work hours, work schedules, and wages, are associated with parenting practices (e.g., Han, 2005; Menaghan & Parcel, 1995; Muller, 1995; Raver, 2003), while other studies report no such relations (e.g., Barnett & Gareis, 2007; Han & Waldfogel, 2007). Social capital theory (Coleman, 1988) suggests that an increase in maternal work (e.g., working more hours, working multiple jobs) may unfavorably affect mothers' opportunities to build their children's social capital through developing strong relationships with them. A lack of a strong relationship in turn may obstruct the transmission of maternal values and norms to children. However, the findings of the current investigation do not support the perspective of social capital theory.

The one significant finding in the current study, which indicates that mothers who work less than 40 hours per week are less likely to monitor their children, compared to mothers working at least 40 hours per week, is contrary to the general expectation (e.g., Joshi, 2000; Muller, 1995). Perhaps some mothers working fewer hours may monitor their children less intensively because they spend more time with their children, and thus they can directly monitor their children's activities. Conversely, mothers working more

hours may more frequently monitor the activities of their children when they are available to compensate for the more limited supervision and attention. In support of these possible explanations, Crouter and colleagues (1999) found that in families in which mothers worked longer hours, parents were more knowledgeable of their children's activities than in families whose mothers worked fewer hours.

In summary, the findings of the current study suggest that some maternal work characteristics, such as multiple jobs, work schedules, and occupational complexity, are associated with youths' transition outcomes to adulthood, but only one work characteristic (maternal work hours) predicts parenting practices. This result might be due to the limited measures of parenting practices. Because of the limitations of the dataset, this study could investigate only two main types of parenting practices: parents' educational involvement and parental monitoring (e.g., helping with and checking schoolwork, discussing academic achievement and going to college, limiting the amount of time with friends). These behaviors do not represent the complex process of parenting (e.g., relationship quality, such as parent-adolescent closeness, parent-adolescent conflict, parental acceptance) that may influence relationships between maternal employment and youths' adult transitions.

In addition, other unmeasured factors may affect youths' transition outcomes. A considerable body of research has given attention to the transmission or spillover of mothers' negative psychological and emotional distress (e.g., fatigue, depression, irritability) on families, including children (e.g., Crouter, et al, 1999; Galinsky, 2000; Sallinen, Kinnunen, & Rönkä, 2004). In these studies, some youths of mothers under heavy work loads reported that they had eroded feelings of closeness with their mothers,

and reluctant acceptance, frustration, and resentment resulting from mothers' work stress (e.g., Repetti & Wood, 1997; Trzcinski, 2002). It is notable that youths' negative emotional and psychological distress negatively affects their self-efficacy and competence (e.g., Clausen, 1991, 1993; Ryu & Mortimer, 1996; Pimentel, 1996). Given that self-efficacy and competence as well as psychological problems are also related to youths' work attitudes and academic achievement in late adolescence (Bryant et al., 2006; Torres & Solberg, 2001), it is possible that mothers' psychological distress resulting from unmeasured stressful work experiences in the current study may adversely affect their youths' transition outcomes.

Relationship between Parenting Practices and Adolescents' Transitions

The results of the study suggest that in families in which parents are more involved with their adolescents' education, youths are less likely to transition into employment and other types of transitions rather than post-secondary education. Previous research, especially focusing on higher education, has consistently supported the current findings (Choy et al., 2000; Hofferth, Boisjoly, & Duncan, 1998; Perna, 2000; Perna & Titus, 2005). The findings of this investigation also support Coleman's theory in that social capital generated within family members, such as through parents' educational involvement, plays a critical role for building children's status attainment.

On the other hand, the lack of a relationship between parental monitoring and youths' transition outcomes is inconsistent with previous study findings (e.g., Crouter et al., 1990, 1999; Jacobson & Crockett, 2000). This inconsistency may be due to the older ages of the adolescents used in the current study, compared with previous studies. Older

adolescents may be more independent and autonomous than younger adolescents in their studies and activities, and thus they may be less affected by parental monitoring.

Control Variables in Relations between Maternal Employment, Parenting Practices, and Youth Transition Outcomes.

The statistically significant control variables found in the current study require discussion. First, compared with female youths, male youths are more likely to transition into employment rather than post-secondary education. Earlier research demonstrated that females were more likely than males to graduate from high school, but less likely to attend or complete college (Folger & Nam 1967; Sewell & Shah, 1967, 1968). However, since 1979 more females than males have enrolled in college; indeed, in 2006, approximately 56% of college students were women (U.S. Census Bureau, 2008). Therefore, the current findings are consistent with more recent research.

The findings of this study also indicate that compared to youths whose mothers have more than high school educations, those with mothers who received lower educations are more likely to enter employment and other activities rather than post-secondary education. These findings are consistent with previous research that has emphasized a strong effect of parental education on children's educational outcomes (e.g., Barr & Parrett, 2001; Campbell et al., 2000; Perna & Titus, 2005). From the perspective of human capital theory, Haveman and Wolfe (1995) highlighted parents' human capital (i.e., the years of schooling) as the most fundamental factor affecting children's educational attainment. They also pointed out that a mother's human capital is more strongly related with her child's attainment than is the father's. This might be true given that mothers usually spend more time with their children (Kalmijn, 1994) and are more involved in the children's activities, particularly in relation to children's career interests

and abilities (Otto, 2000). In addition, in families in which mothers attain less than high school educations, compared with parents in families in which mothers receive more than high school educations, parents are less likely to be involved with their children, including involvement in their educations (e.g., Baker & Stevenson, 1986; Shumow & Miller, 2001; Yonezawa, 2000).

As previously noted, this study also provides evidence that experiencing poverty for a longer period is related to youths' transitioning into other activities rather than post-secondary education. This finding is consistent with other research demonstrating that children living in poverty are more likely than non-poor children to show poor educational attainment (e.g., dropping out of high school, lower levels of college entry) (e.g., Berzin et al., 2006; Duncan & Brooks-Gunn, 1997). Human capital theory suggests that poverty constrains parents from accessing sufficient monetary resources to invest in children's college education (e.g., special classes for college preparation, college tuition), which results in children's lack of human capital. In addition, given that human development is influenced by the environment and through a reciprocal process between the person and the environment (Bronfenbrenner & Ceci, 1994), the development of poor youths may be adversely affected by the context of poverty, which makes it less likely that they will transition into college. For example, one study determined that low quality emotional and physical home environments, which lead to school behavior problems, indirectly explain the influence of poverty on youths' academic achievement (Eamon, 2002a). In addition, given that neighborhood economic status could affect the quality of schools (Brooks-Gunn, 1993), schools in low-income neighborhoods may not sufficiently prepare students for college entrance.

Finally, the findings indicate that mothers' marital status and youths' race/ethnicity are related to parenting practices. As previously discussed, the first finding suggests that in families with married mothers and spouses are present, husbands appear to play an important role in parenting. This study also found that Hispanic and Black mothers are more likely to provide parental monitoring than are white mothers. A limited number of studies have examined how levels of parental monitoring vary by race/ethnicity, and they have produced mixed findings (Amato & Fowler, 2002; Barnes et al., 1994; Ceballo & Hurd, 2008). Taken together, no conclusions can be drawn from these studies on whether parental monitoring differs by racial/ethnic groups.

Parenting Practices as Mediators of Relationships between Maternal Employment Characteristics and Youths' Transition Outcomes

A goal of this study was to investigate whether parental involvement and monitoring mediate the relationships between maternal employment characteristics and adolescents' transition outcomes to adulthood, controlling for individual and family characteristics. However, the results of the study did not satisfy the criteria for establishing such mediation, primarily because of the lack of relationships between the maternal work variables and parenting practices. Consequently, the results of the current investigation do not provide evidence that the effects of various aspects of maternal employment on youths' transition outcomes are mediated by parenting practices.

Variations by Poverty, Race/Ethnicity, and Gender in Relations between Maternal Employment and Parenting Practices and Youths' Transitions

The final research question, whether the relations between maternal work characteristics and parenting practices and adolescents' transition outcomes vary by poverty status, race/ethnicity, and gender was first investigated by entering interaction

terms between the maternal work variables and each background variable into the models estimating parenting practices and youths' transition outcomes. The results produced little evidence for variations based on these background factors.

In the alternative sub-group analyses, some of the effects of the maternal work variables on youths' transition outcomes differed by poverty status and gender. First, in the analysis for only non-poor youths, some maternal work characteristics, such as holding multiple jobs (for 1 to 25 weeks per year), and lower-status occupations (manual laborers, sales, clerical, and service jobs), were associated with youths' labor market entry rather than post-secondary education enrollment. In non-poor youths' families, financial deficit might not be a major reason that their youths transitioned into employment rather than post-secondary education. Instead, other factors such as youths' academic preparation for college entry may affect these youths' destinations after high school graduation. For instance, occupational socialization theory, as previously discussed, suggests that mothers in lower-level occupations may place less emphasis on their adolescents' self-direction in schooling and their pursuit of self-directed occupations, and consequently, in these families, the youths are more likely to enter employment rather than college education.

On the other hand, the analysis with poor youths indicates that none of the maternal work variables are related to the youths' transitions. This finding is inconsistent with prior research indicating that poor youths with mothers under tough work conditions are more likely to lead to unproductive and unfavorable outcomes for children, such as school failures, and problematic behaviors (e.g., Han, 2006; Heymann & Earle, 2000). One explanation for this inconsistency is that the sample size of the poor youth group (N

= 309) might be too small to detect a possible effect. Different outcome measures between the current study and these other studies may be an alternative reason as well.

The sub-group analyses also suggest that male youths whose mothers work standard schedules, compared with youths whose mothers work non-standard work schedules, are less likely to transition to other activities rather than post-secondary education. Previous literature supports these findings, and indicates that maternal work itself negatively affects male children's academic achievement more than females (e.g., Bogenschneider & Steinberg, 1994; Goldberg, Greenberger, & Nagel, 1996; Hill & Duncan, 1987). Because boys are more likely to seek independent behaviors and are more vulnerable to conduct behavioral problems, they may need more supervision and guidance than girls (Beyer, 1999; Crouter et al., 1990; Eme, 1979; Goldberg et al., 2008).

The finding that mothers' manual labor, clerical, and service related jobs predict male, but not female, youths' labor market entry rather than college enrollment contrasts with previous research findings that the same-sex parent's occupation is more influential on their children (e.g., Averett & Burton, 1996; Rosen & Aneshensel, 1978). The finding that females whose mothers hold multiple jobs are more likely to enter employment instead of post-secondary education might be explained by these female youths becoming more involved than males in housework and caring for siblings. This speculation is supported by previous research (e.g., Crouter et al., 2001; Dodson & Dickert, 2004; Larson & Verma, 1999). When females assume more household responsibilities, their academic achievement might suffer (Gringeri, 2001), or they might not devote time to making appropriate planning and preparations for college enrollment.

Some differences also were found in the sub-group analyses investigating whether the maternal work characteristics have differing associations with parenting practices depending on poverty status. In poor families, mothers who work less than 40 hours per week and hold multiple jobs for 1 to 25 weeks per year are related to less parental monitoring. On the other hand, in non-poor families, mothers holding multiple jobs beyond 25 weeks is related to less parental monitoring. These different results between the two samples are difficult to explain, and might be the result of chance findings or behaviors specific to parents in this sample.

Given the inconsistencies between the models estimating interaction terms and the models estimated separately by gender and poverty status, some of the unexpected findings, and the small sample size for poor youths, even drawing tentative conclusions is difficult.

Social Policy and Intervention Implications

The findings of this study investigating the associations among maternal employment characteristics, parenting practices, control variables, and youths' transitions to adulthood yield several implications for social policy and social work intervention.

Policy Implications

Youths of mothers who hold multiple jobs, work non-standard work schedules, and have lower-level occupations are more likely to transition into employment or other activities rather than post-secondary education. This draws attention to the need for policymakers to develop relevant policies for these youths and their mothers who work under difficult work conditions. As previously discussed, youths without a college education cannot expect certain benefits, such as higher income returns gained from

higher education, and they are more likely to hold unstable and low-paying jobs (Hill & Yeung 1999). Moreover, youths who are not in post-secondary education, in the labor market, or in the military have an increased risk of experiencing unproductive outcomes (e.g., unemployment, idleness, welfare receipt, single parenthood) (Berzin et al., 2006; Mare et al., 1984; Powers, 1996).

Government funding of youth programs, such as after-school programs, youth development programs, and workforce or career development programs, might be extended to support older children whose mothers work under adverse conditions or at lower levels of occupational status. These programs vary according to goals (e.g., educational or social support) and settings (e.g., schools, community organizations, work place). For example, to prevent youth from risky behaviors and to facilitate their healthy development, after-school programs and youth programs in out-of-school time can provide structured activities as well as adult supervision in schools or communities. In addition, these programs can assist adolescents in preparing for future education or careers. A number of evaluation studies demonstrate that these programs effectively provide important academic and developmental services (e.g., Johnson et al., 1999; Hock et al., 2001; Opuni, 1999; Posner & Vandell 1994; Riggs & Greenberg, 2004). For example, as a prevention-focused youth development program, the Teen Outreach Program reduces school suspension, school dropout, and pregnancy (Allen & Philliber, 2001). The Quantum Opportunities Program (QOP), which provides intensive case management and mentoring for low-income and minority youth, increases high school graduation rates and college enrollment (Hahn, Leavitt, & Aaron, 1994). Nevertheless, many of these programs suffer from a lack of sustainable resources, overcrowded space

and programs, and difficulty in receiving grants due to very high competitiveness (Afterschool Alliances, 2005; Sherman, Deich, & Langfor, 2007). Particularly, in low-income neighborhoods, youth programs tend to have tighter budgets, longer waiting lists to enter the program, and higher youth-to-staff ratios (California Tomorrow, 2003). Therefore, the government could encourage more flexibility in using various governmental funding sources, including Temporary Assistance for Needy Families (TANF) funds, and by expanding the Child Care Development Fund (CCDF) to include older children. This might result in the ability of these programs to assist youths' healthy development and better prepare them for making productive transitions into adulthood.

The finding that youths experiencing poverty for a longer period tend to experience other types of transitions rather than post-secondary education, suggests the need for policymakers to pay particular attention to impoverished youths' development and their transition process to adulthood. For example, given that college tuition and availability of financial aid are significantly associated with the enrollment decisions of low-income students (Kane, 1994, 1995; McPherson & Schapiro, 1991; Paulsen & St. John, 2002), related policies (e.g., financial aid programs) need to be extended to further assist these economically disadvantaged youths in their college education. In addition to providing financial assistance, policies need to pay more attention to poor youths' healthy development, given that prior research demonstrates that these youths are more likely to exhibit low self-esteem, delinquent behaviors, anxiety, and depression (Bolger et al., 1995; Eamon, 2002b; Gerard & Buehler, 1999; Hanson et al., 1997). An example of such policies includes more funding for social programs and interventions targeting impoverished youths' healthy development (e.g., counseling, mentoring program, alcohol

use prevention program, enrichment activities programs), and rigorously evaluating and supervising these programs so as to provide the disadvantaged youths with high-quality programs. When effective and appropriate policies assist poor adolescents in making transitions into post-secondary education, the intergenerational transmission of poverty likely would be attenuated.

The findings that mothers' lower educations and lower levels of occupational status are unfavorably related to youths' enrolling in post-secondary education suggest ways for relevant policies to assist these mothers and their children. In particular, it is important to note that lower levels of education are related to employment in low-wage occupational sectors (e.g., manual labor, sales and service related jobs) and to difficult work conditions, such as non-standard work schedules (Loprest, 1999; Presser, 2003; Presser & Cox, 1997). In contrast, mothers with higher educations are more likely to work in more prestigious, stabler, and higher paying jobs (Coley et al., 2007). Therefore, policymakers could facilitate improvement in mothers' human capital that would allow them to find better jobs through appropriate training or education. In the end, this will assist mothers in building suitable careers for today's labor market. Specifically, policies not only could cover the costs of mothers' education, but could provide incentives for mothers to gain more education (e.g., financial support while furthering their education).

In terms of supporting families of working mothers with adolescents, child care subsidies for younger children could be increased. This suggestion is based on the current finding that when mothers hold more than one job, their female youths are more likely to go into the labor market rather than college, and other related research indicating that female adolescents of working mothers tend to be more involved in sibling care as well as

housework than are males (e.g., Crouter et al., 2001; Gringeri, 2001). In this respect, increased child care assistance may partly help these daughters to lessen family responsibilities, particularly in impoverished families or single-mother families. The daughters might then be able to invest their time more appropriately and strategically to prepare their transitions to adulthood.

Although the current study did not directly investigate the effects of welfare-reliant maternal employment on adolescents' transitions to young adulthood, the findings suggest implications for welfare-to-work policies for low-income families. Specifically, the significant relationships between maternal job characteristics, poverty, and mothers' education and youths' transition outcomes suggest that welfare-to-work programs and policies need to pay attention to the quality of maternal employment and the educational levels of mothers of adolescents in poor families. This is the case because these maternal characteristics appear to influence adolescents in planning their transitions to young adulthood. As discussed previously, if these policies improve mothers' human capital and their job conditions, and also provide their adolescents with adequate youth programs, these endeavors might benefit not only the working mothers' well-being, but their adolescents' successful transitions to adulthood. In addition, these policies might contribute to both decreasing the welfare dependency of working poor mothers, and preventing their adolescents from welfare dependency in adulthood.

Intervention Implications

The findings of the study provide implications for social work intervention as well. First, in addition to conducting a general assessment related to maternal work and other factors, practitioners working in schools and in other community settings need to pay

particular attention to how the characteristics of maternal employment affect adolescents' lives and their transitions to adulthood, particularly in low-income families. They need to first assess how adolescents plan and prepare their transitions in families in which mothers work in difficult conditions, such as holding multiple jobs and working night shifts or in lower-status occupations. The practitioner can then assist these adolescents and their mothers with appropriate interventions (e.g., networking and providing various community resources, such as mentoring programs and academic enrichment activities).

As structured interventions for these youths' planning and preparation for their transitions to young adulthood, after-school and youth programs might play decisive roles for these adolescents. Social workers can either develop or refer youths to such programs. After-school programs provide school-aged children and youths with opportunities to participate in services and activities to improve their academic and social development as well as offering safe environments during out-of-school time (Vandell, Shumow, & Posner, 2005). Social workers also might advocate for these programs to place more focus on career explorations, thus assisting adolescents with their transitions to adulthood, particularly when their mothers are employed in difficult conditions.

Next, the finding that parents' educational involvement is related to youths' transitions toward adulthood suggests interventions for parents. First, practitioners need to facilitate parents' educational involvement, taking various circumstances into consideration. Parents, including working mothers, should be informed about the importance of adolescence in terms of its impact on transitions in young adulthood and adult lives, and also should be aware of how to effectively assist their adolescents in planning and preparing for their future. Considering that youths who experience poverty

for longer periods tend to transition into activities other than post-secondary education, employment, and the military, practitioners should cautiously work with low-income mothers and their adolescents. They can ensure that parents receive information about college financial assistance. This is particularly important because previous research indicates that compared to affluent parents, economically disadvantaged parents may be more pessimistic that their adolescents will go to college, and these attitudes may affect their parenting practices (Crosnoe, Mistry, & Elder, 2002). Practitioners also should pay particular attention to assisting single mothers and mothers with less than a high school education in being more involved with their adolescents' education.

Finally, integrated case management can be a useful approach in working with mothers in difficult work conditions, in low-status occupations, and living in poverty, and their adolescents to assist them in making a successful transition to adulthood. Case management can assess the diverse needs of working mothers and their adolescents; network a variety of school and community resources (e.g., financial resources, extra learning opportunities); collaborate with a broad range of organizations, such as schools, welfare departments, and businesses; and structure adequate individualized services, such as arranging college preparation and job training, seeking financial aid, and assisting in finding child care for younger children (Maxfield et al., 2004). In addition, case managers can specifically assist these youths and their mothers by assessing additional problems, including stress caused by difficult work conditions and unstable employment.

Limitations of the Study

First, because the NLSY does not separate mothers' parenting behaviors from the fathers for older adolescents, capturing only the effect of maternal employment on

mothers' parenting practices could not be possible in the study. In addition, some parenting practices (i.e., parental involvement in adolescents' schools) are missing in the dataset for particular years. Therefore, they could not be used in the analyses. Consequently, the limits of the data restricted the ability of the study to identify parenting processes that account for the relationships between maternal employment and youths' transition outcomes in adulthood.

Second, the measurement of youths' transition outcomes was limited due to other NLSY data shortcomings. For example, previous studies indicate that there may be differences in labor market outcomes and wages depending on the type of college education (i.e., a two-year college, a four-year college, or a technical college) (e.g., Kane & Rouse, 1995; Nguyen & Taylor, 2003; Schneider & Stevenson, 1999). However, because the 2002 and 2004 NLSY data do not identify the types of post-secondary institutions in which youths were enrolled, whether maternal work characteristics are related to these types of youths' post-secondary education was not explored.

Third, although the NLSY datasets include various aspects of maternal employment, they do not include environmental characteristics of their work places, work conditions, and subjective attitudes toward employment. Mothers' experiences in their work settings may affect their children's development and achievement, by influencing mother-child interactions and mothers' interactions with the school (Bronfenbrenner & Crouter, 1982). In addition, because this study did not investigate adolescents' subjective attitudes toward certain aspects of maternal employment, this may also have limited identifying the effects of maternal employment on adolescents' transitions.

Fourth, the current study did not control for some family related factors (e.g., mothers' physical and psychological health, fathers' work conditions, mother-father relationships) that might account for the associations between maternal employment, parenting practices, and youths' transition outcomes. Moreover, other influential factors were not controlled for, such as student-teacher relationships and peer relationships in schools and communities, and the quality of the neighborhood and schools. Contextual effects, such as labor market conditions (e.g., the employment rate of the local labor market) that might affect youths' employment were not controlled for as well (Powers, 1996).

Fifth, the very low R^2 for the model predicting parenting practices indicates that the maternal work characteristics and other control variables explain only a small portion of the variance in the parenting practices variables. In addition, because causation between the work variables and parenting practices and youths' transition outcomes could not be established, the results of this study must be interpreted with caution.

The sixth limitation is related to the generalization of the study findings. The current study investigated youths who graduated from high school by the time they were 19 through 21 years old, and experienced their transitions to young adulthood after graduation. Therefore, the findings are limited to youths who finished secondary education before they turned 19 or 21 years of age. In addition, this study did not investigate the youths' circumstances after the transition period. For example, because whether they successfully completed post-secondary education or entered more secure employment was not identified, the results allow for limited predictions regarding youths' transitional periods to adulthood. Finally, the findings can only be generalized to youths

between the ages of 19 and 21 who met the study criteria and were born to mothers who were between the ages of the 14 to 21 when they were first interviewed in 1979.

Contributions of the Study

Despite these limitations, this study makes several contributions to increasing the understanding of the influence of maternal work on youths' transition to adulthood.

First, little is known about how maternal employment during adolescence is related to adolescents' transitions to adulthood. In particular, previous studies have focused primarily on the relationship between parents' occupations and their adolescents' college education. This study extends the scope of previous studies by investigating the relations between other aspects of maternal work (e.g., multiple jobs, work schedules) and youths' post-secondary education as well as employment and other types of transitions.

A notable finding of this study is that youths whose mothers work lower-status occupations are less likely to enter post-secondary education, which could increase the likelihood of intergenerational transmission of maternal occupational status to their children. Another significant finding is the positive relation between parents' increased educational involvement during adolescence and the youths' likelihood of enrollment in post-secondary education. This study also highlights the importance of mothers being married and having their spouse in the household, as they tend to be more involved in their children's education.

Finally, the study identifies two important social-demographic factors that are related to youths' transition outcomes other than postsecondary education. Mothers with lower educations increases the risk of youths entering employment; and as family poverty persists, the risk of youths making other types of transitions increases. These findings

confirm previous research suggesting that mothers' human capital and poverty can be transmitted to the next generation.

Directions for Future Research

First, the findings indicate that mothers holding more than one job, work schedules, and occupations are associated with youths' transition outcomes to adulthood. However, because little is still known about maternal work characteristics and youths' transition outcomes to adulthood, more investigation is needed in this area. Examples are investigating the subjective aspects of maternal employment (e.g., mothers' job satisfaction and work attitudes) and their youths' responses to or attitudes toward maternal work.

Second, because of the limitation of the NLSY dataset, the study was not able to investigate maternal parenting practices separately from paternal parenting practices. Future research could collect data or find datasets in which paternal and maternal parenting practices were measured separately. This would allow for investigating whether and in which ways fathers' and mothers' parenting affect their children individually and collectively. Furthermore, future research can consider using broader measures of parenting (e.g., parent-child relationships and parenting types) to examine more thoroughly the relationships between maternal employment, parenting, and youth transitions in young adulthood.

Third, future research needs to specify more types of youths' transition outcomes in young adulthood. Even though this study extends the scope of previous research by categorizing three types of youths' transitions—employment, post-secondary education, and other—future research can be more specific about these transition outcomes. For

example, studies can examine how maternal work characteristics influence different types of post-secondary education (e.g., 2-year college, 4-year college, and technical college), the quality of employment (e.g., occupational status, earnings), and types of other activities (e.g., idleness, pregnancy, incarceration). In addition, considering the current trends in variability in the transition to adulthood, such as delaying college enrollment (Rowan-Kenyon, 2007; Shanahan, 2000), future research could examine youths' employment, college education, and other outcomes for longer periods of time. Research could also identify barriers that hinder these youths from post-secondary education and full-time employment at decent wages. These efforts could provide a more complete picture regarding the relationships between maternal employment and youths' transitions to adulthood.

Fourth, the study sample only included youths who graduated from high school. Those adolescents who did not graduate from high school were likely to be more impoverished than those included in the study, and their mothers likely worked under harsher conditions. Therefore, future research should pay attention to these youths who likely experience more difficult and unfavorable transitions in young adulthood.

Fifth, the study discovered that some maternal work characteristics are related to youths' transitions, but failed to identify that parenting practices mediated these relationships. Therefore, in addition to parenting practices, future studies could examine other possible mechanisms or processes that account for the associations between maternal work and youths' transition outcomes. For example, previous studies examining the mediators of relationships between other factors, such as poverty, and outcomes related to child development suggest that a variety of factors might also mediate the

relationships between maternal employment and youths' transitions. These include psychological and emotional factors (Eamon, 2002b; Galinsky, 2000; Menaghan, 1991), support from extended family (Perry-Jenkins, Repetti, & Crouter, 2000), children's academic attainment (Ellwood & Kane, 2000; Nguyen & Taylor, 2003), adolescents' expectations and aspiration (Gardner, 2004), adolescents' perceptions of maternal work (Galinsky, 1999; Sallinen, Kinnunen, & Rönkä, 2004), and peer influences in schools and communities (Alwin & Thornton, 1984; Barnes & Farrell, 1992; Dishion et al., 1995). Based on research that identifies the mechanisms that explain relations between maternal work characteristics and unfavorable youth transitions, researchers can suggest more appropriate interventions and social policies to assist these youths and their mothers.

REFERENCES

- Acs, G., & Loprest, P. J. (2005). *Who are low-income working families?* Washington DC: The Urban Institute.
- Afterschool Alliance (2005). News Release. Washington, DC: Afterschool Alliance. Retrieved March 20, 2007, from http://www.afterschoolalliance.org/press_archives/Cong_Caucus_03032005.pdf
- Akerstedt, T., Fredlund, P., Gillberg, M., & Jansson, B. (2002). Work load and work hours in relation to disturbed sleep and fatigue in a large representative sample. *Journal of Psychosomatic Research, 53*, 585–58
- Allen, J. P., & Philliber, S. (2001). Who benefits most from a broadly targeted prevention program? Differential efficacy across populations in the Teen Outreach Program. *Journal of Community Psychology, 29*, 637-655.
- Allison, P. D. (1999). *Logistic regression: Using the SAS system*. Cary, NC: SAS Institute Inc.
- Alwin, D. F., & Thornton, A. (1984). Family origins and the schooling process: Early vs. late influence of parental characteristics. *American Sociological Review, 49*, 784-802.
- Amato, P.R., & Fowler, F. (2002). Parenting practices, child adjustment and family diversity. *Journal of Marriage and Family, 64*, 703-716.
- Arnett, J. J. (2004). *Emerging adulthood*. New York: Oxford University Press
- Averett, S. L. (2001). Moonlighting: multiple motives and gender differences. *Applied Economics, 33*, 1391-1410
- Averett, S., & Burton, M. (1996). College attendance and college wage premium: Differences by gender. *Economics of Education Review, 15*, 37-49.
- Baker, D., & Stevenson, D. (1986). Mothers' strategies for school achievement: Managing the transition to high school. *Sociology of Education, 59*, 156-167.
- Banducci, R. (1967). The effect of mother's employment on the achievement, aspirations, and expectations of the child. *Personnel and Guidance Journal, 46*, 263-67.
- Barnes, G.M., and Farrell, M. (1992). Parental support and control as predictor of adolescent drinking, delinquency, and related problem behaviors. *Journal of Marriage and the Family, 54* (4), 763-776.

- Barnes, G. M., Farrell, M. P., & Banerjee, S. (1994). Family influences on alcohol abuse and other problem behaviors among Black and White adolescents in a general population sample. *Journal of Research on Adolescence*, 4, 183–201.
- Bangser, M (2008). Preparing High School Students for Successful Transitions to Postsecondary Education and Employment (Issue Brief). National High School Center. Retrieved February 3, 2009, from http://www.betterhighschools.org/docs/PreparingHSSStudentsforTransition_073108.pdf
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barnett, R. C., & Gareis, K. C. (2007). Shift work, parenting behaviors, and children's socioemotional well-being: A within-family study. *Journal of Family Issues*, 28, 727-748
- Baum, C. L. (2004). The long-term effects of early and recent maternal employment on a child' academic achievement. *Journal of Family Issues*, 25 (1), 29-60.
- Baum, S., & Payea, K. (2004). *Education Pays 2004: The benefits of higher education for individuals and society*. Washington, DC: College Board.
- Baumrind, D. (1991). Parenting styles and adolescent development. In J. Brooks-Gunn, R. Lerner, & A.C. Peterson (Eds). *The encyclopedia of adolescence* (pp.746-758). New York: Garland.
- Beaujot, R. & Andersen, R. (2004). Stress and adult health: Impact of time spent in paid and unpaid work, and its division in families. Discussion Paper no. 04-08. Population Studies Centre. University of Western Ontario. Retrieved, September 19, 2009, from <http://www.ssc.uwo.ca/sociology/popstudies/dp/dp04-08.pdf>
- Becker, G. S. (1964). *Human capital; a theoretical and empirical analysis, with special reference to education*. New York: National Bureau of Economic Research.
- Becker, G. S. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Becker, G. S. (1993). *Human Capital: A theoretical and empirical analysis with special reference to education* (3rd edition). Chicago: The University of Chicago Press.
- Becker, G. S. & Tomes, N. (1986). Human capital and the rise and fall of families, *Journal of Labor Economics*, 4 (3), S1-39.
- Beers, T. M. (2000). Flexible Schedules and Shift Work: Replacing the '9 to 5' Workday? *Monthly Labor Review* 123:33-40.

- Berzin, S. C., De Marco, A. C., Unick, G. J., & Hogan, S. R. (2006). The effect of parental work history and public assistance use on the transition to adulthood. *Journal of Sociology and Social Welfare*, 33 (1), 141-162.
- Beyer, S. (1999). The accuracy of academic gender stereotypes. *Sex Roles*, 40, 787-813.
- Bianchi, S. M. (2000). Maternal employment and time with children: Dramatic change or surprising continuity? *Demography*, 37(4), 401-414.
- Bloom, D., Kemple, J. J., Morris, P., Scrivener, S., Verma, N., & Hendra, R. (2000). *The family transition program: Final report on Florida's initial time-limited welfare program*. New York: Manpower Demonstration Research Corporation.
- Bogenschneider, K. (1997). Parental involvement in adolescent schooling: A proximal process with transcontextual validity, *Journal of Marriage & Family*, 59 (3), 718-733.
- Bogenschneider, K., & Steinberg, L. (1994). Maternal employment and adolescents' academic achievement: A developmental analysis. *Sociology of Education*, 67 (1), 60-77.
- Bourdieu, P. (1986). The forms of capital. In John Richardson (Ed). *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood Press.
- Bolger, K. E., Patterson, C. J., Thompson, W.W., & Kupersmidt, J. B. (1995). Psychosocial adjustment among children experiencing persistent and intermittent family economic hardship. *Child Development*, 66, 1107-1129.
- Brady-Smith, C. (2002). How does early maternal employment affect young children in low-income families? Examining the roles of state welfare policy, maternal well-being, and parenting. Unpublished doctoral dissertation. Dissertation Abstracts International B: *The Physical Sciences and Engineering*, 63 (03), 1585. (UMI No. 3048096).
- Brannen, J. (1995). Young people and their contribution to household work. *Sociology*, 29 (2), 317-338.
- Brayfield, A. (1995). Juggling jobs and kids: The impact of employment schedules on fathers' caring for children. *Journal of Marriage and Family*, 57, 321-332.
- Brooks, P.E. (1995). *Longitudinal study of LA's BEST after school education and enrichment program, 1992-1994*. Los Angeles.

- Bryant, B. K., Zvonkovic, A. M., & Reynolds, P. (2006). Parenting in relation to child and adolescent vocational development. *Journal of Vocational Behavior*, 69 (1), 149-175.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, Mass: Harvard Univ. Press.
- Bronfenbrenner, U. (1986). The ecology of the family as a context for human development. *Developmental Psychology*, 22, 723-742.
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.), *The international encyclopedia of education* (2nd ed., pp. 1643-1647). New York: Elsevier.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lushcer (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619-647). Washington, DC: American Psychological Association.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A bio-ecological model. *Psychol. Rev.*, 101, 568-586.
- Bronfenbrenner, U., & Crouter, A. C. (1982). Work and family through time and space. In S. B. Kamerman & C. D. Hayes (Eds.), *Families that work: Children in a changing world* (pp. 39-83). Washington, DC: National Academy Press.
- Brooks-Gunn, J., Duncan, G. J., & Maritato, N. (1997). Poor families, poor outcomes: The well-being of children and youth. In G. J. Duncan & J. Brooks-Gunn (Eds.), *Consequence of growing up poor* (pp. 1-17). New York: Russell Sage Foundation.
- Brooks, J. L., Hair, E.C., & Zaslow, M.J. (2001). *Welfare reform's impact on adolescents: Early warning signals*. Child Trend Research Brief. Retrieved December 1, 2006, from <http://www.childtrends.org>.
- Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K., & Sealand, N. (1993). Do neighborhoods influence child and adolescent development? *The American Journal of Sociology*, 99(2), 353-395.
- Brown, B. V. & Emig, C. (1999). Prevalence, patterns, and outcomes. In D. J. Besharov (Ed.), *America's disconnected youth* (pp. 101-116). Washington, DC: Child Welfare League of America.
- Burt, R. S. (1992). *Structural Holes*. Cambridge, MA: Harvard University Press.

- Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college-choice process. *New Directions for Institutional Review*, 107, 5-22.
- California Tomorrow. (2003). *Pursuing the promise. Addressing equity, access, and diversity in after school and youth programs*. Oakland, CA: California Tomorrow.
- Cameron, S. V. & Heckman, J. J. (2001). The dynamic of educational attainment for Black, Hispanic, and White Males. *Journal of Political Economy*, 109 (31), 455-466.
- Campbell, J. R., Hombo, C. M., & Mazzeo, J. (2000). *NAEP 1999 trends in academic progress: Three decades of student performance*. Washington, DC: National Center for Education Statistics.
- Cancio, J. A. (2005). *Parental employment and parent-child relationship: Understanding the work-family experience*. Unpublished doctoral dissertation. University of Michigan, MI.
- Castellino, D. R., Lerner, J. V., Lerner, R. M., & Eye, A. (1998). Maternal employment and education: Predictors of young adolescent career trajectories. *Applied Developmental Science*, 2. (3), 114-126.
- Catalano, R. F., Berglund, M. L., Ryan, J. H. S., Lonczak, H. S., & Hawkins, J. D. (1999). *Positive youth development in the United States: Research findings on evaluations of positive youth development programs*. Seattle, Washington: Social Development Research Group, University of Washington School of Social Work, WA.
- Ceballo, R. & Hurd, N. (2008). Neighborhood context, SES, and parenting: Including a focus on acculturation among Latina mothers. *Applied Developmental Science*, 12 (4), 176-180.
- Center for Human Resource Research (2006). *NLSY79 User's Guide*. Columbus, The Ohio State University, OH.
- Cernkovich, S. A., & Giordano, P. C. (1987). Family relationships and delinquency. *Criminology*, 25, 295-321.
- Chase-Lansdale, P. L., & Pittman, L. (2002). Welfare reform and parenting: Reasonable expectations, *The Future of Children*, 12 (1), 166-185.
- Chase-Lansdale, P. L., Moffitt, R. A., Lohman, B. J., Cherlin, A. J., Coley, R. L., Pittman, L. D., Roff, J., & Votruba-Drzal, E. (2003). Mothers' transitions from welfare to work and the well-being of preschooler and adolescents. *Science*, 299. 1548-1552.

- Chavkin, N., & Williams, D. L. (1989). Low-income parents' attitudes toward parental involvement and education. *Journal of Sociology and Social Welfare*, 16, 17-28.
- Chavkin, N., & Williams, D. L. (1990). Working parents and schools: Implications for parents. *Education*, 111 (2), 242-248.
- Csikszentmihalyi, M., & Schneider, B. (2000). *Becoming adult: How teenagers prepare for the world of work*. New York: Basic.
- Choy, S. P., Horn, L. J., Nuñez, A., & Chen, X. (2000). Transition to college: What helps at-risk students and students whose parents did not attend college. *New Directions for Institutional Research*, 107, 45-63.
- Clausen, J. S. (1991). Adolescent competence and the shaping of the life course. *American Journal of Sociology*, 96(4), 805-842.
- Clausen, J. S. (1993). *American Lives: Looking back at the children of the Great Depression*. Berkeley, CA: Univ. Calif. Press.
- Coley, R. Levine, Bachman, H. J., Votruba-Drzal, E., Lohman, B. J., Li-Grining, C. P. (2007). Maternal welfare and employment experiences and adolescent well-being: Do mothers' human capital characteristics matter? *Children and Youth Services Review*, 29, 193-215.
- Colman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-120.
- Colman, J. S. (1990). *Foundation of Social Theory*, Cambridge, MA: The Belknap Press of Harvard University.
- Conger, R.D., Conger, K.J., & Elder, G. (1997). Family economic hardship and adolescent academic performance: Mediating and moderating processes. In G. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 288-310). New York: Russell Sage Foundation.
- Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63, 526-541
- Conklin, M., & Dailey, A. R. (1981). Does consistency of parental educational encouragement matter for secondary students? *Sociology of Education*, 54, 254-262.
- Cooksey, E., Menaghan, E., & Jekielek, S. M. (1997). Life-course effects of work and family circumstances on children. *Social Forces*, 76(2), 637-667.

- Costello, E. J., Angold, A., Burns, B. J., Stangl, D. K., Tweed, D. L., Erkanli, A., and Worthman, C. M. (1996). The great smoky mountains study of youth. *Arch. Gen. Psychiatry*, *53*, 1129–1136.
- Crockett, L. J., & Bingham, C.R. (1994). *Family influences on girls' sexual experience and pregnancy risk*. Unpublished manuscript, The Pennsylvania State University, PA.
- Crosnoe, R., Mistry, R., & Elder, G. H. (2002). Economic disadvantage, family dynamics, and adolescent enrollment in higher education. *Journal of Marriage and Family*, *64*, 690-702.
- Crouter, A. C., & Bumpus, M. F. (2001). Linking parents' work stress to children's and adolescents' psychological adjustment. *Current Directions in Psychological Science*, *10*, 156–159.
- Crouter, A. C., Bumpus, M.F., Mcguire, M. C., & McHale, S.M. (1999). Linking parents' work pressure and adolescents' well-being: Insights into dynamics in dual-earner families. *Developmental Psychology*, *35*, 1453–61.
- Crouter, A. C., Head, M. R., Bumpus, M. F., McHale, S. M. (2001). Household chores: Under what conditions do mothers lean on daughters? *New Directions for Child and Adolescent Development*, *94*, 23-41.
- Crouter, A. C., Helms-Erickson, H., Updegraff, K., and McHale, S. M. (1999). Conditions underlying parents' knowledge about children's daily lives in middle childhood: Between-and within-family comparisons. *Child Development*, *70* (1), 246-259.
- Crouter, A. C., MacDermid, S. M., McHale, S. M., & Perry-Jenkins, M. (1990). Parental monitoring and perceptions of children's school performance and conduct in dual- and single-earner families. *Developmental Psychology*, *26*, 649-657.
- Crouter, A. C., & McHale, S. M. (1993). Temporal rhythms in family life: Seasonal variation in the relation between parental work and family processes. *Developmental Psychology*, *29* (2), 198-205.
- D'Amico, R. J., Haurin, R. J., & Mott, F. L. (1983). The effects of mothers' employment on adolescent and early adult outcomes of young men and women. In C. D. Hayes & S. B. Kamerman (Eds.), *Children of working parents: Experiences and outcomes* (pp. 130-219). Washington, DC: National Academy Press.
- Datcher-Loury, L. (1988). Effects of mother's home time on children' schooling. *Review of Economic & Statistics*, *70* (3), 367-373.

- Dika, S. L. & Singh, K. (2002). Applications of social capital in educational literature: a critical synthesis. *Review of Educational Research*, 72 (1), 31-60.
- Dishion, T. J., Capaldi, D., Spracklen, K. M., & Li, F. (1995). Peer ecology of male adolescent drug use. *Development and Psychopathology*, 7, 803-824.
- Dishion, T. J., & Loeber, R. (1985). Male adolescent marijuana and alcohol use: The role of parents and peers revisited. *American Journal of Drug and Alcohol Abuse*, 11, 11-25.
- Dishion, T. J. & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*, 1(1), 61-75.
- Dodson, L. & Dickert, J. (2004). Girls' family labor in low-income households: A decade of qualitative research. *Journal of Marriage and Family*, 66, 318-332.
- Donahoe, D., & Tienda, M. (2000). The transition from school to work: is there a crisis? What can be done? In S. Danziger, & J. Waldfogel (Eds.), *Securing the Future* (pp. 231-263). New York: Russell Sage Foundation.
- Duncan, G. J., & Brooks-Gunn, J., & Klebanov, P. K. (1994). Economic deprivation and early childhood development. *Child development*, 65, 296-318.
- Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of Growing Up Poor*. NY: Russell Sage.
- Eamon, M. K. (2002a). Effects of poverty on mathematics and reading achievement of young adolescents. *Journal of Early Adolescence*, 22 (1), 49-74.
- Eamon, M. K. (2002b). Influences and mediators of the effect of poverty on young adolescent depressive symptoms. *Journal of Youth and Adolescence*, 31(3), 231-242.
- Eccles, J., & Harold, A. (1996). Family involvement in children's and adolescents' schooling. In A. Booth & J. Dunn (Eds.), *Family-school links: How do they affect educational outcomes?* (pp. 3-34). Mahwah, NJ: Lawrence Erlbaum.
- Edin, K., & Lein, L. (1996). *Making ends meet: How single mothers survive welfare and low-wage work*. Russell Sage Foundation: New York.
- Elder, G. H., Nguyen, T. V., & Caspi, A. (1985). Linking family hardship to children's lives. *Child Development*, 56, 361-375.

- Ellwood, D., & Kane, T. (2000). Who is getting a college education? Family background and the growing gaps in enrollment. In S. Danziger, & J. Waldfogel (Eds.), *Securing the Future* (pp. 283-322). New York: Russell Sage Foundation.
- Eme, R. E. (1979). Sex differences in childhood psychopathology: A review. *Psychological Bulletin*, *86*, 574-596.
- Entswisle, D. R. (1990). Schools and the adolescent. In S. Feldman & G. Elliott (Eds.) *At the threshold: The developing adolescent* (pp. 197-224). Cambridge: Harvard University Press.
- Epstein, J., & Lee, S. (1995). National patterns of school and family connections in the middle grades. In B. Ryan, G. Adams, T. Gullotta, R. Weissberg, & R. Hampton (Eds.), *The family school connection: Theory, research, and practice* (pp. 108-154). Thousand Oaks, CA: Sage.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13* (1), 1-22.
- Fehrmann, P., Keith, T., & Reimers, T. (1987). Home influences on school learning: Direct and indirect effects of parental involvement on high school grades. *Journal of Educational Research*, *80*, 330-337.
- Fergusson, D. M., & Lynskey, M. T. (1993). Maternal age and cognitive and behavioural outcomes in middle childhood. *Pediatric and Prenatal Epidemiology*, *7*, 77-91.
- Fergusson, D. M., & Woodward, L. J. (1999). Maternal age and educational and psychosocial outcomes in early adulthood, *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *40*, 479-489.
- Fleisher, B. M. (1977). Mothers' home time and the production of child quality. *Demography*, *14*, 197-212.
- Folger, John K., and Nam, Charles B. (1976). *Education of the American Population*. Washington, D.C.: Government Printing Office.
- Freeman, K. (1997). Increasing African Americans' participation in higher education: African American high-school students' perspectives. *Journal of Higher Education*, *68*, 523-550.
- Fussell, E. (2002). Youth in Aging Societies. In J. T. Mortimer & R. W. Larson (Eds.), *The changing adolescent experience: societal trends and the transition to adulthood* (pp. 18-51). Cambridge: Cambridge University Press.

- Fustenberg, F. F. (2008). The intersections of social class and the transition to adulthood. In J. T. Mortimer (Ed.), *Social class and transitions to adulthood. New Directions for Child and Adolescent Development, 110* (pp.1-10). San Francisco: Wiley Periodicals, Inc.
- Galinsky, E. (2000). *Ask the children*. New York: Quill.
- Gardner, N P. (2004). *Linking parental work experiences to adolescents' future orientation*, Unpublished doctoral dissertation. University of Michigan, MI.
- Gennetian, L. A., Duncan, G., Knox, V., Vargas, W. G., Clark-Kauffman, E., & London, A. S. (2002). *How welfare and work policies for parents affect adolescents: A synthesis of research*. New York: Manpower Demonstration Research Corporation.
- Gennetian, L.A., Duncan, G., Knox, V., Vargas, W., Clark-Kauffman, E., & London, A. S. (2004). How welfare policies affect adolescents' school outcomes; A synthesis of evidence from experimental studies. *Journal of Research on Adolescence, 14* (4), 399-423.
- Gennetian, L. A., Lopoo, L. M., & London, A. S. (2007). *Maternal work hours and adolescents' school outcomes among low-income families in four urban counties*. National Poverty Center Working Paper Series, National Poverty Center, New York.
- Gennetian, L. A., Lopoo, L. M., & London, A. S. (2008). Maternal work hours and adolescents' school outcomes among low-income families in four urban counties. *Demography, 45*(1), 31-53.
- Gerard, J. M., and Buehler, C. (1999). Multiple risk factors in the family environment and youth problem behaviors. *J. Marr. Fam, 61*, 343–361.
- Goldberg, W. A., Greenberger, E., & Nagel, S. K. (1996). Employment and achievement: Mothers' work involvement in relation to children's achievement behaviors and mothers' parenting behaviors. *Child Development, 67*, 1512-1527.
- Goldberg, W. A., Prause, J., Lucas-Yhompson, R., & Himsel, A. (2008). Maternal employment and children's achievement in context: A meta-analysis of four decades of research. *Psychological Bulletin, 134* (1), 77-108.
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford: Stanford University Press.
- Greenberger, E., O'Neil, R., Nagel, S. K. (1994). Linking workplace and homeplace; Relations between the nature of adults' work and their parenting behaviors. *Developmental Psychology, 30* (6), 990-1002.

- Gringeri, C. E. (2001). The poverty of hard work: Multiple jobs and low wages in family economies of rural Utah households. *Journal of Sociology and Social Welfare*, 28 (4), 3-22.
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schoolings: A multidimensional conceptualization and motivational model. *Child Development*, 65, 237-252.
- Guo, G. (1998). The timing of the influences of cumulative poverty on children's cognitive ability and achievement. *Social Forces*, 77, 257-288.
- Gutman, L. M. & Eccles, J. S. (1999). Financial strain, parenting behaviors, and adolescents' achievement: Testing model equivalence between African American and European American single- and two-parent families. *Child Development*, 70 (6), 1464-1476.
- Hahn, A. (1994). Extending the time of learning. In D.J. Besharov (Ed.) *America's disconnected youth: Toward a preventative strategy* (pp.233-266). Washington, DC: CWLA Press and American Enterprise Institute for Public Policy Research.
- Han, W. J. (2005). Nonstandard work schedules and child cognitive outcomes. *Child Development*, 76 (1), 137-54.
- Han, W. J. (2006). Maternal work schedules and child outcomes: evidence from the National Survey of American Families. *Children and Youth Services Review*, 28, 1039-1059.
- Han, W. J., & Waldfogel, J. (2007). Parental work schedules, family process, and early adolescents' risky behavior. *Children and Youth Services Review*. 29. 1249-1266.
- Hanson, T. L., McLanahan, S., & Thomson, E. (1997). Economic resources, parental practices, and children's well-being. In G. J., Duncan, & J. Brooks-Gunn (Eds.), *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.
- Hao, L. (1995). Poverty, public assistance, and children in intact and single-mother families. *Journal of Family and Economic Issues*, 16, 181-205.
- Haurin, R. J. (1992). Patterns of childhood residence and the relationship to young adult outcomes. *Journal of Marriage and the Family*, 54, 846-60.
- Haveman, R., & Wolfe, B. (1995). The determinants of children's attainments: a review of methods and findings. *Journal of Economic Literature*, 33, 1829-1878.
- Hetherington, E. M., & Clingempeel, W. G. (1992). Coping with marital transitions: A family system perspective. *Monographs of the Society for Research in Child Development*, 57(2-3), 1-14.

- Heymann, S. J. (2000). *The widening gap: Why America's working families are in jeopardy and what can be done about it*. New York: Basic Books.
- Heymann, S. J., & Earle, A. (2000). Low-income parents: How do working conditions affect their opportunity to help children at risk? *American Educational Research Journal*, 37 (4), 833-848.
- Heyns, B. (1982). The influence of parents' work on children's school achievement. In S. B. Kamerman & C. D. Hayes (Eds.), *Families that work: Children in a changing world* (pp. 229-267). Washington, DC: National Academy Press.
- Hill, M. S., & Duncan, G. J. (1987). Parental family income and the socioeconomic attainment of children. *Social Science Research*, 16, 39-73.
- Hill, M. S., & Yeung, W. J. (1999). How has the changing structure of opportunities affected transitions to adulthood? In A. C. Crouter, & M. J. Shanahan (Eds.). *Transitions to adulthood in a changing economy: No work, no family, no future?* (pp. 3-39). Westport: Praeger.
- Hill, M. A., & O'Neill, J. (1994). Family endowments and the achievement of young children with special reference to the underclass. *Journal of Human Resources*, 29, 1064-1100.
- Hock, M. F., Pulvers, K. A., Deshler, D. D., & Schumaker, J. B. (2001). The effects of an after-school tutoring program on the academic performance of at-risk students and students with LD. *Remedial and Special Education*, 22(3), 172-186
- Hofferth, S. L., Boisjoly, J., & Duncan, G. J. (1998). Parents' extrafamilial resources and children's school attainment. *Sociology of Education*, 71, 246-268.
- Hofferth, S. L., Smith, J., McLoyd, V. C., & Finkelstein, J. (2000). Achievement and behavior among children of welfare recipients, welfare leavers, and low-income single mothers. *Journal of Social Issues*, 56, 747-774.
- Hogan, D. P., & Astone, N. M. (1986). The transition to adulthood. *Annual Review of Sociology*, 12, 109-130.
- Hurtado, S., Inkelas, K. K., Briggs, C., & Rhee, B. S. (1997). Differences in college access and choice among racial/ethnic groups: Identifying continuing barriers. *Research in Higher Education*, 38, 43-75.
- Hughes, D., & Galinsky, E. (1989). Balancing work and family lives: Research and corporate applications. In A. E. Gottfried & A. W. Gottfried (Eds.), *Maternal employment and children's development: Longitudinal research* (pp. 233-268). New York: Plenum Press.

- Hsueh, J., & Yoshikawa, H. (2007). Working nonstandard schedules and variable shifts in low-income families: Associations with parental psychological well-being, family functioning, and child well-being. *Developmental Psychology*, 2007, Vol. 43, No. 3, 620–632.
- Jaccard, J., Turrisi, R., & Wan, C. K. (1990). *Interaction effects in multiple regression*, Newbury Park, CA: Sage.
- Jackson, A. P., Brooks-Gunn, J., Huang, C., & Glassman, M. (2000). Single mothers in low-wage jobs: Financial strain, parenting and preschoolers' outcomes. *Child Development*, 71, 1409 – 1423.
- Jacobson, K. C., & Crockett, L. J. (2000). Parenting monitoring and adolescent adjustment: An ecological perspective. *Journal of research on adolescence*, 10 (1). 65-97.
- Jencks, C. (1989). What is the underclass—and is it growing? *Focus* 12, 14–26. Institute for Research on Poverty. University of Wisconsin—Madison, WI.
- Jencks, C., Crouse, J., & Meuser, P. (1983). The Wisconsin model of status attainment: A national replication with improved measures of ability and aspiration, *Sociology of Education*, 56 (1), 3-19.
- Jessor, R., Van Den Bos, J., Vanderryn, J., Costa, F. M., & Turbin, M. S. (1995). Protective factors in adolescent problem behavior: Moderator effects and developmental change. *Developmental Psychology*, 31, 923–933.
- Johnson, L.J., Zorn, D., Williams, J., & Smith, J. (1998-99). *School year program evaluation: Urban school initiative school age child care expansion*. Cincinnati, OH: University of Cincinnati.
- Joshi, P. K. (2000). *Flexibility for whom? The effects of nontraditional work arrangements on parental involvement with children*. Unpublished doctoral dissertation. Brandeis University, MA.
- Kalmijn, M. (1994). Mother's Occupational Status and Children's Schooling. *American Sociological Review*, 59 (2), 257-275.
- Kane, T. J. (1994). College entry by Blacks since 1970: The role of college costs, family background, and the returns to education. *Journal of Political Economy*, 102(5), 878-911.
- Kane, T. & Rouse, C. (1995). Labor-market returns to two- and four- year college. *The American Economic Review*, 85 (3), 600-14.

- Kellaghan, T., Sloane, K., Alvarez, B., & Bloom, B. (1993). *The home environment and school learning*. San Francisco: Jossey-Bass.
- Kerchhoff, A. C. (2002). The transition from school to work. In J. T. Mortimer & R. W. Larson (Eds.), *The changing adolescent experience: societal trends and the transition to adulthood* (pp. 52-87). Cambridge: Cambridge University Press.
- Kim, D. H. (2004). *Social capital in action: Parent and school support in adolescents' transition to postsecondary education*. Unpublished doctoral dissertation. University of Chicago, IL.
- Kimmel, J. & Conway, K. S. (2001). Who moonlights and why? Evidence from the SIPP. *Industrial Relations*, 40(1), 89-120.
- Kohn, M. (1969). *Class and conformity: A study in values*. Homewood: Dorset.
- Kohn, M. (1979). The effects of social class on parental values and practices. In D. Reiss, & H. A. Hoffman (Eds.). *The American family: Dying or developing* (pp, 45-68). New York: Plenum Press.
- Kohn, M., & Schooler, C. (1969). Class, occupation and orientation, *American Sociological Review*, 34, 659-678.
- Kohn, M., & Schooler, C. (1973). Occupational experience and psychological functioning: An assessment of reciprocal effects. *American Sociological Review*, 38, 97-118.
- Kohn, M. L. & Schooler, C. (1978). The reciprocal effects of the substantive complexity of work and intellectual flexibility: A longitudinal assessment. *The American Journal of Sociology*, 84 (1), 24-52.
- Kohn, J. L., & Schooler, C. (1983). *Work and personality: An inquiry into the impact of social stratification*. Norwood, NJ: Ablex.
- Kohn, M., Slomczynski, K. M., & Schoenbach, C. (1986). Social stratification and the transmission of values in the family: A cross-national assessment. *Sociological Forum*, 1, 73-103.
- Korenman, S., Miller, J. E., & Sjaastad, J. E. (1995). Long-term poverty and child development in the United States: Results from the NLSY. *Children and Youth Services Review*, 17, 127-155.
- Ku, I. (2000). *Consequences of maternal welfare receipt for children: The case of educational attainment in young adulthood*. Unpublished doctoral dissertation. University of Washington, WA.

- Kurz, D. (2000). Work-family issues of mothers of teenage children. *Qualitative Sociology*, 23 (4), 435-51.
- Laird, Robert D., Pettit, Gregory S., Bates, John E., and Dodge, Kenneth A. (2003). Parents' monitoring-relevant knowledge and adolescents' delinquent behavior: Evidence of correlated developmental changes and reciprocal influences. *Child Development*, 74 (3), 752-768.
- Lamb, M.E. (1997). *The role of the father in child development*. (3rd ed.). New York: Wiley.
- Land, D., & Legters, N. (2002). The extent and consequences of risk in U.S. education. In S. Stringfield & D. Land (Eds.), *Educating at-risk students* (pp. 1-28). Chicago: National Society for the Study of Education.
- Larson, R., & Richards, M. (1994). *Divergent Realities: The Emotional Lives of Mothers, Fathers, and Adolescents*. New York: Basic Books.
- Larson, R. W., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological bulletin*, 125 (6), 701-736.
- La Valle, I., Arthur, S., Millward, C., Scott, J., & Clayden, M. (2002). *Happy families? Atypical work and its influence on family life*. Bristol, UK: The Policy Press.
- Lee, S. A. (1993). Family structure effects on student outcomes. In B. Schneider & J. S. Coleman (Eds.), *Parents, their children, and school* (pp. 43 -75). Boulder, CO: West view Press.
- Leslie, L., & Brinkman, P. T. (1988). *The economic value of higher education*. New York: Macmillan Publishing Co., Inc.
- Leventhal, T., Graber, J. A., & Brooks-Gunn, J. (2001). Adolescent transitions to young adulthood: Antecedents, correlates, and consequences of adolescent employment, *Journal of Research on Adolescence*, 11 (3), 297-323.
- Lim, V. K. G., & Loo, G. L. (2003). Effects of parental job insecurity and parenting behaviors on youth's self-efficacy and work attitudes. *Journal of Vocational Behavior*, 63, 86-98.
- Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. Cook & R. S. Burt (Eds.), *Social capital: theory and research* (pp. 3-29). New York, NY: Aldine de Gruyter.
- Lindsay, S. (2000). The impact of employment on mother and infant health. *Dissertation Abstracts International*, 39 (5), 1384.

- Linver, M. R., & Silverberg, S. B. (1997). Maternal predictors of early adolescent achievement related outcomes: Adolescent gender as moderator. *Journal of Early Adolescence, 17*, 294–318.
- London, A. S., Scott, E. K., Edin, K., & Hunter, V. (2004). Welfare reform, work family tradeoffs, and child well-being. *Family Relations, 53* (2), 148–158.
- Loprest, P. (1999). *Families who left welfare: Who are they and how are they doing?* (Assessing the New Federalism, Discussion Paper No. 99–02). Washington, DC: The Urban Institute.
- Luster, R. E., & Dubow, E. (1990). Predictors of the quality of the home environment that adolescent mothers provide for their school-aged children. *Journal of Youth and Adolescence, 19*, 475-494.
- Luster, T., Rhoades, K., & Hass, B. (1989). The relation between parental values and parenting behavior: A test of the Kohn hypothesis. *Journal of Marriage and the Family, 51*, 139-147.
- Mare, R. D., Winship, C., & Kubitschek, W. N. (1984). The transition from youth to adult: Understanding the age pattern of employment. *American Journal of Sociology, 90*, 326–358.
- Martel, J. L. (2000). At issues: Reasons for working multiple jobs. *Monthly Labor Review, 123* (10), 42-44.
- Maxfield, M., Castner, L., Maralani, V., & Vencill, M. (2003). *The Quantum Opportunity Program Demonstration: Implementation findings*. Washington DC: U.S. Department of Labor.
- McLanahan, S. (1985). Family structure and the reproduction of poverty. *American Journal of Sociology, 90*, 873-901.
- McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development, 61*, 311-346.
- McLoyd, V. C. (1998). Socioeconomic Disadvantage and Child Development. *American Psychologist, 53* (2), 185-204.
- McLoyd, V. C., Jayaratne, T. E., Ceballo, R., & Borquez, J. (1994). Unemployment and work interruption among African American single mothers: Effects on parenting and adolescent socioemotional functioning. *Child Development, 65*, 562-589.

- McNeal, R. B. Jr. (1999). Parental involvement as social capital: Differential effectiveness on science, achievement, truancy, and dropping out. *Social Forces*, 78, 117-144.
- McPherson, M. S., & Schapiro, M. O. (1991). Does student aid affect college enrollment?: New Evidence on a persistent controversy. *American Economic Review*, 81, 309-318.
- Menaghan, E. G. (1991). Work experiences and family interaction processes: The long reach of the job? *Annual Review of Sociology*, 17, 419-44.
- Menaghan, E. G., & Parcel, T. L. (1990). Parental employment and family life: Research in the 1980s. *Journal of Marriage and the Family*, 52, 1079-1098.
- Menaghan, E., & Parcel, T. L. (1991). Determining children's home environments: The impact of maternal characteristics and current occupational and family conditions. *Journal of Marriage and the Family*, 53, 427-431.
- Menaghan, E., & Parcel, T. B. (1995). Social sources of change in children's home environments: The effects of parental occupational experiences and family conditions. *Journal of Marriage and the Family*, 57, 69-84.
- Mirowsky, J. & Ross, C. E. (1989). *Social Causes of Psychological Distress*. New York: Aldine de Gruyter.
- Moffitt, R. (2002). From welfare to work: What the evidence shows. *Welfare Reform and Beyond Policy Brief no. 13*. Washington, DC: Brookings Institution.
- Montemayor, R., & Clayton, M. C. (1983). Maternal employment and adolescent development. *Theory Into Practice*, 22, 112-118.
- Moore, K. A., & Waite, L. J. (1981). Marital dissolution, early motherhood, and early marriage. *Social Force*, 60, 20-40.
- Moorehouse, M. J. (1991). Linking maternal employment patterns to mother-child activities and children's school competence. *Developmental Psychology*, 27 (2), 295-303.
- Morris, P. A. (2002). The effects of welfare reform policies on children. *Social Policy Report*, 16 (1), 4-18.
- Morris, P., Duncan, G. J., & Chase-Lansdale, L. (2001). Welfare reform's effects on children. *Poverty Research News*, 5, 5-9.

- Morris, P., Duncan, G. J., & Clark-Kauffman, E. (2004). *Child well-being in an era of welfare reform: The sensitivity of transitions in development to policy change*. New York: Manpower Demonstration Research Corporation.
- Morris, P. & Gennetian, L. (2003). Identifying the effects of income on children's development using experimental data. *Journal of Marriage and Family*, 65, 716-729.
- Morris, P., A. & Michalopoulos, C. (2000). *The self-sufficiency project at 36 months: effects on children of a program that increased parental employment and income*. Ottawa: Social Research and Demonstration Corporation.
- Mortimer, J. T. & Larson, R. W.(2002). Macrostructural trends and the reshaping of adolescence. In J. T. Mortimer & R. W. Larson (Eds.). *The changing adolescent experience: societal trends and the transition to adulthood* (pp. 1-17). Cambridge.: Cambridge University Press.
- Mortimer, J. T., Lorence, J. and Kumka, D. S. (1986). *Work, family and personality: Transition to adulthood*, Norwood, NJ: Ablex.
- Muller, C. (1995). Maternal employment, parent involvement, and mathematics achievement among adolescents. *Journal of Marriage and Family*, 57, 85-100.
- Murdock, T.B., Anderman, L.H., & Hodge, S.A. (2000). Middle-grade predictors of students' motivation and behavior in high school. *Journal of Adolescent Research*, 15, 327-352.
- National Research Council & Institute of Medicine (2002). *Community programs to promote youth development*. Washington DC: National Academy Press.
- Norwood, J. L. (1992). Working women: Where have we been? Where are we going? *Population and Environment*, 14 (1), 95-103.
- Nguyen, A. N., & Taylor, J. (2003). Post-high school choices: new evidence from a multinomial logit model. *Journal of Population Economics*, 16, 287-306.
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review*, 11, 1-59.
- Opuni, K. A. (1999). *Project GRAD-Graduation Really Achieves Dreams- 1998-1999, Program evaluation report*. Houston, TX: Houston University.
- Ordozensky J (1995) Effects of institutional attributes on enrollment choice: Implications for postsecondary vocational education. *Economics of Education Review*, 14, 335–350.

- Otto, L. B. (2000). Youth perspectives on parental career influence. *Journal of Career Development, 27* (2), 111–118.
- Otto, L., & Atkinson, M. P. (1997). Parental Involvement and adolescent development. *Journal of Adolescent Research, 12*, 68-89.
- Parcel, T. L., & Menaghan, E. G. (1990). Maternal working conditions and children's verbal facility: Studying the intergenerational transmission of inequality from mothers to young children. *Social Psychology Quarterly, 53*, 132-147.
- Parcel, T. L., & Menaghan, E. G. (1993). Family social capital and children's behavior problems. *Social Psychology Quarterly, 56*(2), 120-135.
- Parcel, T. L., & Menaghan, E. G. (1994). Early parental work, family social capital, and early childhood outcomes. *American Journal of Sociology, 99*, 972-1009.
- Parcel, T. L., & Menaghan, E. G. (1997). Effects of low-wage employment on family well-being. *Future of Children, 7* (1), 116-121.
- Parke, R. D. (1995). Fathers and families. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 3) (pp.27-74). Mahwah, NJ: Lawrence Erlbaum.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys*. Eugene, OR: Castalia.
- Patterson, G. R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development, 55*, 1299-1307.
- Paulson, S. E. (1996). Maternal employment and adolescent achievement revisited: an ecological perspective, *Family Relations, 4*, 201-208.
- Paulsen, M. B. & St. John, E. P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *Journal of Higher Education, 73*, 189-236.
- Perna, L. W. (2000). Differences in the decision to attend college among African Americans, Hispanics, and Whites. *Journal of Higher Education, 71*, 117–141.
- Perna, L. W. (2005). The benefits of higher education: Sex, racial/ethnic and socioeconomic group differences. *The Review of Higher Education, 29* (1), 23-52.
- Perna, L. W & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: an examination of racial/ethnic group differences. *The Journal of Higher Education, 76* (5), 485-518.

- Perry-Jenkins, M., Repetti, R., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage and Family*, 62(4), 981–998.
- Phillips, K. R. (202). Parent work and child well-being in low-income families. *Occasional Paper Number 56*. Washington, DC: The Urban Institute.
- Pimentel, E. E. (1996). Effects of adolescent achievement and family goals on the early adult transition. In Jeylan T. Mortimer & Michael D. Finch (Eds.), *Adolescents, work, and family: An intergenerational developmental analysis*. Thousand Oaks, CA: Sage Publications, Inc.
- Piotrowski, C. S., & Katz, M. H. (1982). Indirect socialization of children: The effects of mothers' jobs on academic behaviors. *Child Development*, 53, 1520-1529.
- Planck, S. B., & Jordan, W. J. (2001). Effects of information, guidance, and actions on postsecondary destinations: A study of talent loss. *American Educational Research Journal*, 38, 947-979.
- Plewis, I., Mooney, A., & Creeser, R. (1990). Time on educational activities at home and educational progress in an infant school. *British Journal of Educational Psychology*, 60, 330-337.
- Portes, A. (1998). Social capital: its origins and applications in modern sociology. *Annual Sociology*, 24, 1-24.
- Portes, A. (2000). The two meanings of social capital. *Sociological Forum*, 15 (1), 1-12.
- Portes, A., & Landolt, P. (1996). The downside of social capital, *The American Prospect*, 26, 18-22.
- Posner, J. K., & Vandell, D. L. (1994). Low-income children's after-school care: Are there beneficial effects of after-school programs? *Child Development*, 65: 440-456.
- Powell, M. A., & Parcel, T. L. (1999). Parental work and family size effects on early adolescent educational outcomes: The U.S. and Great Britain Compared. In T. L. Parcel (Ed.), *Research on the Sociology of Work: Work and Family*. Vol.7. (pp.1-29) Greenwich, CT: JAI Press.
- Powers, D. A. (1996). Social background and social context effects on young men's idleness transitions. *Social science research*, 25, 50–72.
- Presser, H. P. (1999). Toward a 24 hour economy. *Science*, 284 (5421), 1778–1779.
- Presser, H. B. (2000). Nonstandard work schedules and marital instability. *Journal of Marriage and the Family*, 62(1), 93–110.

- Presser, H. B. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage.
- Presser, H. B., & Cox, A. G. (1997, April). The work schedules of low-educated American women and welfare reform. *Monthly Labor Review*, pp. 25-34.
- Rangarajan, A. & Schochet, P. (2004). *Characteristics of low-wage workers and their labor market experiences: Evidence from the mid- to late 1990s*. Princeton, NJ: Mathematica Policy Research.
- Randolph, K. A., Rose, R. A., Fraser, M. W., & Orthner, D. K. (2004). Examining the impact of changes in maternal employment on high school completion among low-income youth, *Journal of Family and Economic Issues*, 25 (3), 279-299.
- Raver, C. C. (2003). Does work pay, psychologically as well as economically? The effects of employment on depressive symptoms and parenting among low-income families. *Child Development*, 74, 1720-1736.
- Redd, Z., M. P. P., Brooks, J., & McGarvey, A. M. (2002). *Educating America's youth: What makes a difference*. Washington DC: Child Trends.
- Repetti, R. L., & Wood, J. (1997b). Families accommodating to chronic stress: Unintended and unnoticed processes. In B. H. Gottlieb et al. (Eds.), *Coping with chronic stress. The plenum series on stress and coping* (pp. 191-220). New York: Plenum Press.
- Riggs, N., & Greenberg, M. T. (2004). After-school youth development programs: A developmental-ecological model of current research. *Clinical Child & Family Psychological Review*, 7(3), 177-190.
- Romich, J. L. (2007). Sharing the work: Mother-child relationships and household management. *Journal of Early Adolescence*, 27 (2), 192-222.
- Rosen, B. C. & Aneshensel, C. S. (1978). Sex Differences in the Educational-Occupational Expectation Process. *Social Forces*, 57, 164-186.
- Ross, C., & Wu, C. (1996). Education, age, and the cumulative advantage in health. *Journal of Health and Social Behavior*, 37,104-120.
- Rowan-Kenyon, H. T. (2007). Predictors of delayed college enrollment and the impact of socioeconomic status. *The Journal of Higher Education*, 78, 188-214.
- Rowe, D. C. (1990). As the twig is bent? The myth of child rearing influences on personality development. *Journal of Counseling and Development*, 68, 606-661

- Ryu, S & Mortimer, J. T. (1996). The “occupational linkage hypothesis” applied to occupational value formation in adolescence. In J. T. Mortimer & M. D. Finch (Eds.). *Adolescents, work, and family: An intergenerational developmental analysis* (pp. 167-252). Thousand Oaks, CA: Sage Publications, Inc.
- Sallinen, M., Kinnunen, U., & Ronka, A. (2004). Adolescents’ experiences of parental employment and parenting: connections to adolescents’ well-being. *Journal of Adolescence*, 27, 221–237.
- Schneider, B., & Stevenson, D. (1999). *The ambitious generation: American’s teenagers, motivated but directionless*. New Haven: Yale University Press.
- Schochet, P., & Rangarajan, A. (2004). Characteristics of low-wage workers and their labor market experiences: evidence from the mid- to late 1990s *Final Report*. Princeton: Mathematica Policy Research, Inc.
- Scott, E., Hurst, A., & London, A. S. (2003). Out of Their Hands: Patching Together Care for Children When Parents Move from Welfare to Work. *The Next Generation Working Paper Series No. 16*. New York: Manpower Demonstration Research Corporation.
- Sewell, W. H., & Hauser, R. M. (1975). *Education, occupation, and earnings: Achievement in the early career*. New York: Academic Press.
- Sewell, W. H., & Shah, Vimal P. (1967). Socioeconomic status, intelligence, and the attainment of higher education. *Sociology of Education*, 40, 1-23.
- Sewell, W. H., & Shah, Vimal P. (1968). Parents’ education and children’s educational aspirations and achievements. *American Sociological Review*, 33, 191-209.
- Shanahan, M. J. (2000). Pathways to adulthood in changing societies: variability and mechanisms in life course perspective, *Annual Review of Sociology*, 26, 667-692.
- Sherman, R. H., Deich, S. G., & Langford, B. H. (2007). *Creating dedicated local and state revenue sources for youth programs*. Washington, DC: The Finance Project.
- Shumow, L., & Miller, J. D. (2001). Parents’ at-home and at-school academic involvement with young adolescents. *Journal of Early Adolescence*, 21 (1). 68-91.
- Siegal, M. Economic deprivation and the quality of parent-child relations: A trickle-down framework. *Journal of Applied Developmental Psychology*, 5 (2), 127-144.
- Smith, J. P. (1984). Race and Human Capital. *The American Economic Review*, 74(4), 685-698.

- Stafford, K.H., Lundstedt, S.B. & Lynn A.D. (1984). Social and economics factors affecting participation in higher education, *Journal of Higher Education*, 55, 590-608.
- Steinberg, L., Lamborn, S., Dornbusch, S., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63, 1266-1281.
- Stinson, J. F. (1986). Moonlighting by women jumped to record highs. *Monthly Labor Review*, November, 22-25.
- Strazdins, L., Korda, R. J., Lim, L.L-Y., Broom, D. H., & D'Souza, R. M. (2004). Around-the-clock: parent work schedules and children's well-being in a 24-h economy. *Social Science & Medicine*, 59, 1517-27.
- Strazdins, L., Clements, M. S., Korda, R. J., Broom, D. H., & D'Souza, R. M. (2006). Unsociable work? Nonstandard work schedules, family relationships, and children's well-being. *Journal of Marriage and Family*, 68, 394-410.
- Swartz, T. T. (2008). Family capital and the invisible transfer of privilege: intergenerational support and social class in early adulthood. In J. T. Mortimer (Ed.), *Social class and transitions to adulthood. New Directions for Child and Adolescent Development*, 119, 11-24.
- Taylor, D. E. & Sekscenski, E. S. (1982). Research summaries: Workers on long schedules, single and multiple jobholders. *Monthly Labor Review*, May, 47-53.
- Tienda, M., & Stier, H. (1991). Joblessness and shiftlessness: Labor force activity in Chicago's inner city,' In C. Jencks & P. R. Peterson (Eds.) *The Urban Underclass* (pp. 135-154), Washington DC: Brookings Institute.
- Torres, J. B., & Solberg, V. S. (2001). Role of self-efficacy, stress, social integration, and family support in Latino college student persistence and health. *Journal of Vocational Behavior*, 59, 53-63
- Trusty, J. (1999). Effects of eighth-grade parental involvement on late adolescents' educational expectations. *Journal of Research and Development in Education*, 32 (4). 224-233.
- Trzcinski, E. (2002). Middle school children's perceptions on welfare and poverty: An exploratory. Qualitative Study. *Journal of Family and Economic Issues*, 23, 339-359.
- Trzcinski, E., Brandell, J., Ferro, L., & Smith, D. (2005). Adolescent outcomes and welfare reform: An analysis based on the survey of program dynamics, *Journal of Human Behavior in the Social Environment*, 12 (2/3), 63-87.

- U.S. Bureau of the Census (2002). *Statistical abstracts of the United States: 2002*. Washington, DC: Author
- U.S. Bureau of the Census (2006). College enrollment of recent high school graduates: 1970 to 2004. *The 2007 Statistical Abstract*. Washington, DC: Bureau of Labor Statistics.
- U.S. Bureau of the Census. (2008). *School enrollment in the United States: 2006*. Washington, DC: U.S. Department of Commerce.
- U.S. Council of Economic Advisors. (1999). *The effects of welfare policy and the economic expansion on welfare caseloads: An update*. Technical Report. Retrieved December 20, 2006, from <http://clinton4.nara.gov/WH/EOP/CEA/html/welfare/nontechv3.html>.
- U.S. Department of Labor, Bureau of Labor Statistics. (2006). *Women in the labor Force: A data book: Employment status of women by presence and age of youngest child, 1975-2005*. Retrieved April, 10, 2006, from <http://www.bls.gov/cps/wlf-databook2006.htm>.
- Vandell, D. L., Shumow, L., & Posner, J. (2005). After-school programs for low-income children: Differences in program quality. In J. L. Mahoney, R. W. Larson, J. S. Eccles (Eds.), *Organized activities as contexts of development* (pp. 437-456). Mahwah, NJ: Lawrence Erlbaum associates.
- Vander Ven, T. M. (1998). *Home alone: The impact of maternal employment on delinquency*. Unpublished doctoral dissertation. University of Cincinnati, OH.
- Vander Ven, T., & Cullen, F. T. (2004). The impact of maternal employment on serious youth crime: Does the quality of working conditions matter? *Crime & Delinquency*, 50 (2), 272-291
- Voydanoff, P. (1988). *Work and family life*. Beverly Hills, CA: Sage.
- Voydanoff, P., & Donnelly, B. W. (1998). Parents' risk and protective factors as predictors of parental well-being and behavior." *Journal of Marriage and the Family*, 60, 344-355.
- Waizenhofer, R. N., Buchanan, C. M., Jackson-Newsom, J. (2004). Mothers' and fathers' knowledge of adolescents' daily activities: Its sources and its links with adolescent adjustment. *Journal of Family Psychology*, 18 (2), 348-360.
- Warren, J. R., Sheridan, J. T., & Hauser, H. M. (2002). Occupational stratification across the life course: Evidence from the Wisconsin longitudinal study. *American Sociological Review*, 67 (3), 432-455.

- Weiss, H. B., Mayer, E., Kreider, H., Vaughan, M., Dearing, E., Hencke, R., & Pito, K. (2003). Making It work: low-income working mothers' involvement in their children's education. *American Educational Research Journal*, 40 (4). 879-901.
- Whiteside-Mansell, L., Pope, S. K., & Bradley, R. H. (1996). Patterns of parenting behavior in young mothers. *Family Relations*, 45, 273-281.
- Wimberly, G. L., & Noeth, R. J. (2004). *Schools involving parents in early postsecondary planning: ACT policy report (Rep.)*. Iowa City, IA: ACT, Inc.
- William T. Grant Foundation (1988). *The Forgotten Half 1988*. New York: William T. Grant Foundation.
- Wolfer, L. T., & Moen, P. (1996). Staying in school: Maternal employment and the timing of Black and White daughters' school exit. *Journal of Family Issues*, 17, 540-560.
- Yonezawa, S. (2000). Unpacking the black box of tracking decisions: Critical tales of families navigating the course of placement process. In M. G. Sanders (Ed.), *Schooling students placed at risk: Research, policy, practice in the education of poor and minority adolescents* (pp. 109 – 140). Mahwah, NJ: Erlbaum.
- Zaff, J. F., Moore, K. A., Papillo, A. R., & Williams, S. (2001). *Implications of extracurricular activity participation during adolescence on positive outcomes*. Paper presented at biennial meeting of the Society for Research in Child Development. Washington, DC: Child Trends.
- Zaslow, M. J., Moore, K. A., Brooks, J. L., Morris, P. A., Tout, K., Redd, J. A., & Emig, A. (2002). Experimental studies of welfare reform and children. *Future of Children*, 12 (1). 79-95.

APPENDIX

Appendix Table 1. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Maternal Work Characteristics and Control Variables: A Sensitivity Analysis

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Maternal work characteristics						
Less than 40 hrs worked (40+ hours worked per week)	-0.197	0.184	0.821	0.065	0.220	1.068
Annual earnings (more than \$26,918)						
\$19,381 - \$26,918	0.105	0.260	1.110	-0.034	0.318	0.966
Less than \$19,381	0.114	0.234	1.120	-0.212	0.288	0.809
Imputed earnings	0.543	0.435	1.721	0.680	0.478	1.974
Weeks held more than one job per year (none)						
1 to 25 weeks	0.654*	0.280	1.923	0.473	0.333	1.605
More than 25 weeks	-0.309	0.295	0.734	-0.122	0.338	0.885
Standard work schedule(non-standard)	-0.029	0.197	0.971	-0.524*	0.221	0.592
Occupation (managerial and professional)						
Manual laborers	0.802**	0.280	2.231	-0.090	0.357	0.914
Sales, clerical, & service	0.503*	0.208	1.654	0.296	0.243	1.344
Youth variables						
Gender (female)						
Male	0.529**	0.165	1.697	0.282	0.197	1.326
Race/Ethnicity (white)						
Hispanic	0.253	0.223	1.288	0.487†	0.261	1.627
Black	-0.137	0.203	0.872	0.049	0.243	1.050
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.922***	0.253	2.515	0.984***	0.285	2.676
High school	0.588**	0.191	1.800	0.248	0.234	1.281
Married and spouse present (other)	-0.330†	0.190	0.719	-0.015	0.228	0.985
More than two children (1-2 children)	-0.098	0.173	0.907	-0.070	0.205	0.935
Percentage of years poor	0.535	0.329	1.707	1.264***	0.369	3.541
Intercept	-1.223***	0.342		-1.338***	0.397	
-2 log likelihood	1657.962					
χ^2 (df=34)	129.262***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 2. Multinomial Logistic Regression Model of Youths' Transition Outcomes on Parenting Practices and Control Variables: A Sensitivity Analysis

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Parenting practices						
Parental monitoring	0.043*	0.021	1.044	0.075**	0.026	1.078
Parental involvement	-0.172***	0.031	0.842	-0.200***	0.036	0.819
Youth variables						
Gender (female)						
Male	0.491**	0.165	1.633	0.253	0.197	1.288
Race/Ethnicity (white)						
Hispanic	0.246	0.224	1.279	0.371	0.264	1.449
Black	-0.065	0.203	0.937	0.070†	0.242	1.072
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.971***	0.245	2.640	0.919***	0.276	2.507
High school	0.669***	0.185	1.952	0.256	0.228	1.292
Married and spouse present (other)	-0.274	0.190	0.760	-0.013	0.228	0.987
More than two children (1-2 children)	-0.101	0.174	0.904	-0.054	0.207	0.947
Percentage of years poor	0.586†	0.304	1.796	1.212***	0.340	3.326
Intercept	0.271	0.367		-0.564	0.433	
-2 log likelihood	1648.197					
χ^2 (df=20)	139.027***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 3. Multinomial Logistic Regression Model of Youths' Transition Outcomes: Interaction of Maternal Work Characteristics and Poverty Status

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Maternal work characteristics						
Less than 40 hrs worked (40+ hrs worked per week)	-0.095	0.219	0.910	-0.021	0.273	0.979
Annual earnings (more than \$26,918)						
\$19,381 - \$26,918	0.116	0.270	1.123	0.139	0.327	1.149
Less than \$19,381	0.170	0.252	1.185	-0.206	0.316	0.814
Imputed earning	0.466	0.469	1.594	0.863†	0.504	2.370
Weeks held more than one job per year (none)						
1 to 25 weeks	0.535†	0.324	1.708	0.643†	0.378	1.903
More than 25 weeks	-0.179	0.329	0.836	-0.149	0.405	0.862
Standard work schedule(non-standard)	-0.153	0.234	0.858	-0.466†	0.277	0.627
Occupation (managerial and professional)						
Manual laborers	0.824*	0.332	2.280	0.282	0.423	1.326
Sales, clerical, & service	0.564*	0.230	1.758	0.242	0.276	1.273
Youth variables						
Gender (female)						
Male	0.418*	0.165	1.518	0.281	0.198	1.324
Race/Ethnicity (white)						
Hispanic	0.234	0.224	1.263	0.404	0.262	1.497
Black	-0.102	0.203	0.903	-0.047	0.245	0.954
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.816**	0.254	2.262	0.868**	0.287	2.382
High school	0.616**	0.190	1.852	0.184	0.234	1.202
Married and spouse present (other)	-0.288	0.191	0.750	0.088	0.232	1.092
More than two children (1-2 children)	-0.138	0.173	0.871	-0.064	0.206	0.938
Percentage of years poor	4.640†	2.715	103.490	3.899	2.906	49.368

(continued)

Appendix Table 3. (Continued)

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Percentage of years poor × Less than 40 hrs worked	-0.391	0.570	0.677	0.246	0.644	1.279
Percentage of years poor × \$19,381 - \$26,918	-3.505	2.691	0.030	-3.563	2.878	0.028
Percentage of years poor × Less than \$19,381	-3.770	2.641	0.025	-2.576	2.830	0.076
Percentage of years poor × 1 to 25 weeks	0.023	0.888	1.023	-1.255	1.026	0.285
Percentage of years poor × More than 25 weeks	-0.402	0.976	0.669	0.134	0.989	1.143
Percentage of years poor × Standard work schedule	0.660	0.600	1.935	0.238	0.623	1.268
Percentage of years poor × Manual laborers	-0.891	0.946	0.410	-1.202	1.115	0.301
Percentage of years poor × Sales, clerical, & services	-0.884	0.826	0.413	0.225	0.905	1.253
Intercept	-1.110**	0.367		-1.352**	0.434	
-2 log likelihood	1663.574					
χ^2 (df=50)	133.245***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 4. Multinomial Logistic Regression Model of Youths' Transition Outcomes: Interaction of Maternal Work Characteristics and Race/Ethnicity

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Maternal work characteristics						
Less than 40 hrs worked (40+ hrs worked per week)	-0.433	0.284	0.649	-0.569	0.349	0.566
Annual earnings (more than \$26,918)						
\$19,381 - \$26,918	1.197**	0.386	2.063	0.410	0.460	1.981
Less than \$19,381	0.882*	0.369	3.312	0.286	0.422	1.506
Imputed earnings	0.724	0.466	2.417	0.684	0.504	1.331
Weeks held more than one job per year (none)						
1 to 25 weeks	0.575	0.416	1.776	0.592	0.489	1.807
More than 25 weeks	-0.916*	0.467	0.400	-0.412	0.502	0.662
Standard work schedule(non-standard)	-0.299	0.302	0.742	-0.824*	0.342	0.439
Occupation (managerial and professional)						
Manual laborers	0.913*	0.426	2.490	0.478	0.526	1.613
Sales, clerical, & service	0.427	0.299	1.533	0.361	0.362	1.435
Youth variables						
Gender (female)						
Male	0.469**	0.168	1.598	0.235	0.199	1.265
Race/Ethnicity (white)						
Hispanic	0.361	0.828	1.435	0.774	0.852	2.169
Black	0.495	0.627	1.640	-0.395	0.723	0.674
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.875***	0.262	2.399	1.019***	0.294	2.772
High school	0.592**	0.195	1.808	0.215	0.237	1.240
Married and spouse present (other)	-0.286	0.194	0.751	0.052	0.232	1.053
More than two children (1-2 children)	-0.163	0.177	0.850	-0.107	0.210	0.898
Percentage of years poor	0.603†	0.341	1.827	1.233**	0.380	3.433

(continued)

Appendix Table 4. (Continued)

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Hispanic × Less than 40 hrs worked	0.650	0.488	1.915	1.299*	0.578	3.664
Hispanic × \$19,381 - \$26,918	-1.767**	0.646	0.171	-0.994	0.756	0.370
Hispanic × Less than \$19,381	-1.191†	0.610	0.304	-1.094	0.718	0.335
Hispanic × 1 to 25 weeks	-0.581	0.800	0.559	-0.456	0.865	0.634
Hispanic × More than 25 weeks	1.247	0.826	3.480	0.652	0.929	1.919
Hispanic × Standard work schedule	1.029	0.648	2.799	-0.001	0.617	0.999
Hispanic × Manual laborers	-0.653	0.723	0.520	-1.076	0.910	0.341
Hispanic × Sales, clerical, & services	-0.371	0.534	0.690	-0.179	0.629	0.836
Black × Less than 40 hrs worked	-0.021	0.431	0.980	0.846†	0.510	2.331
Black × \$19,381 - \$26,918	-2.173***	0.596	0.114	-0.482	0.690	0.617
Black × Less than \$19,381	-1.080*	0.521	0.340	-0.603	0.635	0.547
Black × 1 to 25 weeks	0.299	0.640	1.348	-0.337	0.790	0.714
Black × More than 25 weeks	0.873	0.675	2.393	0.163	0.789	1.178
Black × Standard work schedule	0.210	0.436	1.233	0.859†	0.504	2.361
Black × Manual laborers	-0.233	0.635	0.792	-0.930	0.807	0.395
Black × Sales, clerical, & services	0.276	0.488	1.317	-0.071	0.558	0.931
Intercept	-1.386**	0.468		-1.142**	0.578	
-2 log likelihood	1639.212					
χ^2 (df=66)	157.608***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 5. Multinomial Logistic Regression Model of Youths' Transition Outcomes by Interactions between Maternal Work Characteristics and Gender

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Maternal work characteristics						
Less than 40 hrs worked (40+ hrs worked per week)	-0.307	0.263	0.735	0.265	0.309	1.303
Annual earnings (more than \$26,918)						
\$19,381 - \$26,918	0.261	0.349	1.298	-0.276	0.449	0.759
Less than \$19,381	0.240	0.328	1.271	-0.111	0.403	0.895
Imputed earnings	0.476	0.435	1.609	0.628	0.480	1.874
Weeks held more than one job per year (none)						
1 to 25 weeks	0.804†	0.414	2.235	0.603	0.492	1.827
More than 25 weeks	-0.541	0.438	0.582	-0.300	0.508	0.743
Standard work schedule(non-standard)	0.259	0.288	1.295	-0.289*	0.311	0.749
Occupation (managerial and professional)						
Manual laborers	0.411	0.394	1.508	0.226	0.486	1.253
Sales, clerical, & service	0.411	0.284	1.508	0.498	0.351	1.646
Youth variables						
Gender (female)						
Male	0.749**	0.547	2.114	1.001	0.625	2.721
Race/Ethnicity (white)						
Hispanic	0.217	0.224	1.242	0.408	0.262	1.503
Black	-0.070	0.203	0.932	0.056	0.243	1.057
Mother and family variables						
Mothers' education (more than high school)						
Less than high school	0.851***	0.254	2.342	0.926**	0.287	2.525
High school	0.637***	0.190	1.890	0.225	0.233	1.253
Married and spouse present (other)	-0.276	0.190	0.759	0.016	0.228	1.016
More than two children (1-2 children)	-0.141	0.173	0.868	-0.060	0.205	0.942
Percentage of years poor	0.572†	0.332	1.772	1.247***	0.372	3.480

(continued)

Appendix Table 5. (Continued)

Variables	Employment vs Post-secondary education			Other vs Post-secondary education		
	Coeff.	S.E.	Odds Ratio	Coeff.	S.E.	Odds Ratio
Male × Less than 40 hrs worked	0.230	0.367	1.259	-0.428	0.438	0.652
Male × \$19,381 - \$26,918	-0.299	0.487	0.742	0.531	0.588	1.701
Male × Less than \$19,381	-0.212	0.444	0.809	-0.220	0.546	0.802
Male × 1 to 25 weeks	-0.410	0.560	0.664	-0.194	0.672	0.824
Male × More than 25 weeks	0.601	0.594	1.823	0.390	0.690	1.477
Male × Standard work schedule	-0.496	0.397	0.609	-0.369	0.444	0.692
Male × Manual laborers	0.603	0.546	1.827	-0.682	0.706	0.506
Male × Sales, clerical, & services	0.070	0.406	1.072	-0.359	0.482	0.698
Intercept	-1.308**	0.445		-1.682**	0.515	
-2 log likelihood	1665.393					
χ^2 (df=50)	131.427***					

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 6. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Poverty Status

Variables	Parental involvement	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	0.060	0.292
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	0.233	0.357
Less than \$19,381	0.103	0.334
Imputed earnings	-0.517	0.580
Weeks held more than one job per year (none)		
1 to 25 weeks	-0.137	0.424
More than 25 weeks	-0.698	0.435
Standard work schedule (non-standard)	0.084	0.309
Occupation (managerial and professional)		
Manual laborers	-1.011*	0.443
Sales, clerical, & service	-0.597*	0.299
Youth variables		
Gender (female)		
Male	-0.247	0.217
Race/Ethnicity (white)		
Hispanic	0.023	0.291
Black	0.431	0.266
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.953**	0.324
High school	-0.315	0.254
Married and spouse present (other)	0.426†	0.251
More than two children (1-2 children)	0.006	0.227
Percentage of years poor	0.392	2.398
Percentage of years poor × Less than 40 hrs worked	-0.320	0.692
Percentage of years poor × \$19,381 - \$26,918	-1.506	2.323
Percentage of years poor × Less than \$19,381	-2.233	2.246

(continued)

Appendix Table 6. (Continued)

Variables	Parental involvement	
	Coeff.	S.E.
Percentage of years poor × 1 to 25 weeks	-1.672	1.048
Percentage of years poor × More than 25 weeks	0.992	1.164
Percentage of years poor × Standard work schedule	0.112	0.708
Percentage of years poor × Manual laborers	2.631*	1.181
Percentage of years poor × Sales, clerical, & services	1.195	1.006
R^2	0.059	
Adj R^2	0.030	
ΔR^2	0.012	
F	2.06**	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 7. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Poverty Status

Variables	Parental monitoring	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-0.491	0.404
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.231	0.493
Less than \$19,381	0.455	0.461
Imputed earnings	0.158	0.801
Weeks held more than one job per year (none)		
1 to 25 weeks	0.138	0.586
More than 25 weeks	-1.382*	0.601
Standard work schedule (non-standard)	0.141	0.426
Occupation (managerial and professional)		
Manual laborers	0.127	0.612
Sales, clerical, & service	-0.249	0.413
Youth variables		
Gender (female)		
Male	0.450	0.299
Race/Ethnicity (white)		
Hispanic	0.907*	0.402
Black	1.413***	0.367
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.293	0.448
High school	-0.041	0.350
Married and spouse present (other)	0.716*	0.346
More than two children (1-2 children)	0.209	0.313
Percentage of years poor	0.427	3.311
Percentage of years poor × Less than 40 hrs worked	-1.294	0.956
Percentage of years poor × \$19,381 - \$26,918	0.630	3.207
Percentage of years poor × Less than \$19,381	-0.916	3.101

(continued)

Appendix Table 7. (Continued)

Variables	Parental monitoring	
	Coeff.	S.E.
Percentage of years poor × 1 to 25 weeks	-2.343	1.447
Percentage of years poor × More than 25 weeks	2.449	1.607
Percentage of years poor × Standard work schedule	0.376	0.977
Percentage of years poor × Manual laborers	0.439	1.631
Percentage of years poor × Sales, clerical, & services	0.791	1.389
R^2	0.054	
Adj R^2	0.026	
ΔR^2	0.013	
F	1.89**	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 8. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Race/Ethnicity

Variables	Parental involvement	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	0.079	0.360
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	0.309	0.482
Less than \$19,381	0.033	0.450
Imputed earnings	-0.316	0.542
Weeks held more than one job per year (none)		
1 to 25 weeks	0.552	0.518
More than 25 weeks	0.620	0.551
Standard work schedule (non-standard)	0.395	0.375
Occupation (managerial and professional)		
Manual laborers	-0.040	0.540
Sales, clerical, & service	-0.712†	0.379
Youth variables		
Gender (female)		
Male	-0.236	0.214
Race/Ethnicity (white)		
Hispanic	2.052*	0.989
Black	0.737	0.779
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.917**	0.326
High school	-0.341	0.253
Married and spouse present (other)	0.587*	0.248
More than two children (1-2 children)	-0.039	0.226
Percentage of years poor	-0.515	0.414
Hispanic × Less than 40 hrs worked	-0.519	0.618
Hispanic × \$19,381 - \$26,918	-1.297	0.822
Hispanic × Less than \$19,381	-1.926*	0.776

(continued)

Appendix Table 8. (Continued)

Variables	Parental involvement	
	Coeff.	S.E.
Hispanic × 1 to 25 weeks	-2.289*	0.978
Hispanic × More than 25 weeks	-3.808***	1.027
Hispanic × Standard work schedule	-0.734	0.740
Hispanic × Manual laborers	0.397	0.928
Hispanic × Sales, clerical, & services	0.854	0.686
Black × Less than 40 hrs worked	-0.008	0.544
Black × \$19,381 - \$26,918	0.404	0.738
Black × Less than \$19,381	0.795	0.661
Black × 1 to 25 weeks	-1.820*	0.806
Black × More than 25 weeks	-1.385	0.849
Black × Standard work schedule	-0.503	0.549
Black × Manual laborers	-1.158	0.815
Black × Sales, clerical, & services	0.183	0.610
R^2	0.087	
Adj R^2	0.050	
ΔR^2	0.040	
F	2.35***	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 9. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Race/Ethnicity

Variables	Parental monitoring	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-0.631	0.501
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.802	0.671
Less than \$19,381	-0.402	0.627
Imputed earnings	0.474	0.755
Weeks held more than one job per year (none)		
1 to 25 weeks	0.466	0.722
More than 25 weeks	-0.025	0.768
Standard work schedule (non-standard)	0.905†	0.523
Occupation (managerial and professional)		
Manual laborers	0.947	0.752
Sales, clerical, & service	0.172	0.528
Youth variables		
Gender (female)		
Male	0.506†	0.299
Race/Ethnicity (white)		
Hispanic	2.730*	1.378
Black	1.944†	1.086
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.442	0.454
High school	-0.183	0.352
Married and spouse present (other)	0.822*	0.345
More than two children (1-2 children)	0.295	0.316
Percentage of years poor	-0.019	0.577
Hispanic × Less than 40 hrs worked	-0.218	0.862
Hispanic × \$19,381 - \$26,918	0.615	1.145
Hispanic × Less than \$19,381	0.746	1.082

(continued)

Appendix Table 9. (Continued)

Variables	Parental monitoring	
	Coeff.	S.E.
Hispanic × 1 to 25 weeks	-3.966**	1.363
Hispanic × More than 25 weeks	-3.142*	1.432
Hispanic × Standard work schedule	-1.553	1.031
Hispanic × Manual laborers	-1.131	1.293
Hispanic × Sales, clerical, & services	-0.492	0.956
Black × Less than 40 hrs worked	-0.242	0.759
Black × \$19,381 - \$26,918	1.581	1.028
Black × Less than \$19,381	1.744†	0.922
Black × 1 to 25 weeks	-0.249	1.123
Black × More than 25 weeks	-0.477	1.183
Black × Standard work schedule	-1.289†	0.765
Black × Manual laborers	-1.576	1.135
Black × Sales, clerical, & services	-0.663	0.850
R^2	0.065	
Adj R^2	0.027	
ΔR^2	0.024	
F	1.72**	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 10. OLS Regression Model of Parental Involvement: Interaction of Maternal Work Characteristics and Gender

Variables	Parental involvement	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-0.329	0.342
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.297	0.464
Less than \$19,381	0.046	0.428
Imputed earnings	-0.321	0.526
Weeks held more than one job per year (none)		
1 to 25 weeks	-0.590	0.535
More than 25 weeks	-0.558	0.546
Standard work schedule (non-standard)	0.334	0.362
Occupation (managerial and professional)		
Manual laborers	-0.538	0.519
Sales, clerical, & service	-0.607†	0.368
Youth variables		
Gender (female)		
Male	-0.552	0.696
Race/Ethnicity (white)		
Hispanic	-0.014	0.292
Black	0.426	0.266
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.984**	0.324
High school	-0.312	0.253
Married and spouse present (other)	0.478†	0.249
More than two children (1-2 children)	0.001	0.226
Percentage of years poor	-0.420	0.411
Male × Less than 40 hrs worked	0.545	0.478
Male × \$19,381 - \$26,918	1.084†	0.636
Male × Less than \$19,381	-0.132	0.584
Male × 1 to 25 weeks	0.287	0.725

(continued)

Appendix Table 10. (Continued)

Variables	Parental involvement	
	Coeff.	S.E.
Male × More than 25 weeks	0.031	0.760
Male × Standard work schedule	-0.500	0.503
Male × Manual laborers	0.161	0.712
Male × Sales, clerical, & services	0.336	0.528
R^2	0.057	
Adj R^2	0.028	
ΔR^2	0.010	
F	1.98**	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 11. OLS Regression Model of Parental Monitoring: Interaction of Maternal Work Characteristics and Gender

Variables	Parental monitoring	
	Coeff.	S.E.
Maternal work characteristics		
Less than 40 hrs worked (40+ hrs worked per week)	-1.458**	0.473
Annual earnings (more than \$26,918)		
\$19,381 - \$26,918	-0.434	0.640
Less than \$19,381	0.433	0.590
Imputed earnings	0.561	0.726
Weeks held more than one job per year (none)		
1 to 25 weeks	-0.004	0.738
More than 25 weeks	-1.265†	0.753
Standard work schedule (non-standard)	0.596	0.500
Occupation (managerial and professional)		
Manual laborers	-0.450	0.716
Sales, clerical, & service	-0.136	0.508
Youth variables		
Gender (female)		
Male	0.143	0.960
Race/Ethnicity (white)		
Hispanic	0.838*	0.402
Black	1.441***	0.366
Mother and family variables		
Mothers' education (more than high school)		
Less than high school	-0.420	0.447
High school	-0.063	0.350
Married and spouse present (other)	0.762*	0.344
More than two children (1-2 children)	0.244	0.312
Percent of years poor	0.111	0.567
Male × Less than 40 hrs worked	1.284†	0.660
Male × \$19,381 - \$26,918	0.691	0.878
Male × Less than \$19,381	0.031	0.806
Male × 1 to 25 weeks	-0.693	1.001

(continued)

Appendix Table 11. (Continued)

Variables	Parental monitoring	
	Coeff.	S.E.
Male × More than 25 weeks	0.722	1.049
Male × Standard work schedule	-0.857	0.694
Male × Manual laborers	1.163	0.982
Male × Sales, clerical, & services	0.073	0.728
R^2	0.053	
Adj R^2	0.024	
ΔR^2	0.012	
F	1.84**	

Note: Reference categories are in parenthesis. ΔR^2 indicates the increase in variance after the interactions were entered into the model. The change in R^2 was not statistically significant.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 12. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables: Comparison between Non-Poor Youth and Poor Youth

Variables	Parental involvement			
	Non-poor youth (N=540)		Poor youth (N=309)	
	Coeff.	S.E.	Coeff.	S.E.
Maternal work characteristics				
Less than 40 hrs worked (40+ hrs worked per week)	0.074	0.310	-0.240	0.393
Annual earnings (more than \$26,918)				
\$19,381 - \$26,918	0.251	0.375	-0.031	1.056
Less than \$19,381	0.066	0.352	-0.336	0.916
Imputed earnings	-1.099	0.700	0.171	0.872
Weeks held more than one job per year (none)				
1 to 25 weeks	-0.116	0.443	-1.184†	0.640
More than 25 weeks	-0.710	0.446	-0.227	0.725
Standard work schedule (non-standard)	-0.013	0.329	0.144	0.410
Occupation (managerial and professional)				
Manual laborers	-0.912†	0.475	0.204	0.653
Sales, clerical, & service	-0.598†	0.310	-0.177	0.553
Youth variables				
Gender (female)				
Male	-0.472†	0.268	0.101	0.375
Race/Ethnicity (white)				
Hispanic	0.170	0.348	-0.309	0.541
Black	0.196	0.337	0.568	0.450
Mother and family variables				
Mothers' education (more than high school)				
Less than high school	-1.115*	0.434	-1.119*	0.498
High school	-0.225	0.301	-0.679	0.475
Married and spouse present (other)	0.459	0.317	0.538	0.422
More than two children (1-2 children)	0.011	0.280	-0.144	0.384
R^2	0.050		0.054	
Adj R^2	0.020		0.002	
F	1.70*		1.03	

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix Table 13. OLS Regression Model of Parental Involvement on Maternal Work Characteristics and Control Variables: Comparison between Male Youth and Female Youth

Variables	Parental involvement			
	Male youth (N=398)		Female youth (N=451)	
	Coeff.	S.E.	Coeff.	S.E.
Maternal work characteristics				
Less than 40 hrs worked (40+ hrs worked per week)	0.232	0.333	-0.322	0.355
Annual earnings (more than \$26,918)				
\$19,381 - \$26,918	0.749	0.484	-0.279	0.491
Less than \$19,381	-0.266	0.425	0.226	0.449
Imputed earnings	-0.550	0.742	-0.037	0.754
Weeks held more than one job per year (none)				
1 to 25 weeks	-0.243	0.482	-0.693	0.551
More than 25 weeks	-0.488	0.517	-0.569	0.562
Standard work schedule (non-standard)	-0.184	0.344	0.283	0.375
Occupation (managerial and professional)				
Manual laborers	-0.583	0.503	-0.343	0.543
Sales, clerical, & service	-0.405	0.378	-0.542	0.382
Youth variables				
Race/Ethnicity (white)				
Hispanic	0.252	0.407	-0.319	0.422
Black	0.647†	0.384	0.208	0.369
Mother and family variables				
Mothers' education (more than high school)				
Less than high school	-0.566	0.461	-1.288**	0.456
High school	-0.047	0.364	-0.567	0.353
Married and spouse present (other)	0.947**	0.344	-0.042	0.362
More than two children (1-2 children)	-0.117	0.323	0.151	0.318
Percent of years poor	0.139	0.564	-1.123†	0.601
R^2	0.049		0.074	
Adj R^2	0.009		0.040	
F	1.23		2.17**	

Note: Reference categories are in parenthesis.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$