University of Massachusetts - Amherst
ScholarWorks@UMass Amherst

Masters Theses 1896 - February 2014 | Dissertations and Theses

2008

Effects of Maternal Job Quality on Children's Reading Achievement

Ayse Yetis Bayraktar
University of Massachusetts - Amherst, ayetis@soc.umass.edu

Follow this and additional works at: http://scholarworks.umass.edu/theses

Yetis Bayraktar, Ayse, "Effects of Maternal Job Quality on Children's Reading Achievement" (2008). *Masters Theses 1896 - February 2014*. Paper 205.
http://scholarworks.umass.edu/theses/205

This Open Access is brought to you for free and open access by the Dissertations and Theses at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

EFFECTS OF MATERNAL JOB QUALITY ON CHILDREN'S READING ACHIEVEMENT

A Thesis Presented

by

AYSE YETIS-BAYRAKTAR

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF ARTS

September 2008

Sociology

TITLE OF THESIS: EFFECTS OF MOTHERS' JOB QUALITY ON CHILDREN'S READING SCORES

A Thesis Presented

by

AYSE YETIS-BAYRAKTAR

Approved as to style and content by:

_____
Michelle Budig, Chair

_____
Naomi Gerstel, Member

_____
Donald Tomaskovic-Devey, Member

_____
Donald Tomaskovic-Devey, Department Head
Department of Sociology

DEDICATION

To my parents, Nuket and Onder Yetis

ACKNOWLEDGMENTS

I would like to thank my advisor Prof. M`ichelle Budig for her extensive help over the course of the project. I'd also like to thank Prof. Tomaskovic-Devey, without his help and advice, I would not have accomplished so much over the last 9 months. I also thank my professors Naomi Gerstel and Joya Misra for their conceptual contributions, and helping me think in a more organized fashion.

It would be a disgrace to their never-ending support and belief in me if I forget my parents. This project started out as a commendation to my mom's life-long work, to enhance the lives of her two children, and many other students in Turkey. I would never have accomplished this work without the beliefs she instilled in me and her teachings about the importance of a woman's ability to stand on her own two feet, without the help of anyone in life, and not to be dependent on anybody.

A special thank you to all those whose support, encouragement and friendship helped me to stay focused on this project.

Finally, a huge thank you to my husband, Halil, who has always believed that I could actually finish this work, supported me all along, rain or shine.

ABSTRACT

EFFECTS OF MATERNAL JOB QUALITY ON

CHILDREN'S READING ACHIEVEMENT

SEPTEMBER 2008

AYSE YETIS-BAYRAKTAR, B.A., KOC UNIVERSITY

M.A., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Michelle J. Budig

I explore the relationship between quality of maternal employment and children's reading achievement between six and thirteen years of age using data from the Panel Study of Income Dynamics. The hypotheses assert that job quality in terms of level of autonomy, supervisory power, complexity with people, data and things, and and family benefits have significant positive effects on children's reading achievement. The least squares estimates indicate that complexity, power, and autonomy has significant positive effects for children whole the effects of family benefits is weak with the exception of the positive effect of union membership for racially disadvantaged groups.

TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS…….....iv

ABSTRACT……..v

LIST OF TABLES...…….....vii

CHAPTER

1. INTRODUCTION…….....1

2. EXISTING LITERATURE ON MATERNAL EMPLOYMENT AND CHILD OUTCOMES……..…….……...3

3. QUALITY OF MATERNAL EMPLOYMENT AND CHILD OUTCOMES……6

3.1Workplace Characteristics……..9

3.2 Ease of Balancing Work and Family…….....9

3.3 Hypotheses…….. ……11

3.4 Other Influences on Reading Achievement……11

4. DATA AND METHODS……..13

4.1 Sample…….....13

4.2 Quality of Employment……14

4.3 Conventional Model of Children's Reading Scores……..….....16

4.4 Control Variables…….....16

4.5 Missing Data……16

5. FINDINGS……...…….....18

6. CONCLUSIONS AND FUTURE RESEARCH…….....22

BIBLIOGRAPHY……...…….....32

LIST OF TABLES

Table Page

1. Percentage of Missing Variables before MI……..…….....26

2. Descriptive Statistics for Employed and Unemployed Mothers……27

3. Children's Reading Scores Regressed on Mother's Employment Measures, Adjusting for (1) Education, (2) Sociodemographic Characteristics……...28

4. Interaction Effects of Union membership with Mother's Socio-demographic Characteristics……29

5. Gender Differences in Children's Reading Scores Regressed on Mothers Employment Measures, Adjusting for (1) Education, (2) Sociodemographic Characteristics…….....30

6. Children's Reading Scores Regressed on Early Maternal Employment…….....31

CHAPTER 1

INTRODUCTION

The past four decades have witnessed a significant rise in women's employment, particularly among women with children in the home. This shift has sparked considerable academic debate regarding the consequences of mothers' employment for families, and especially for children (Jacobs & Gerson, 2004). Findings from the resultant literature are mixed. One set of studies argues that maternal employment is detrimental for child outcomes. For example, Coleman (1988) argues that the most significant negative effect of increasing female labor force participation is on the cognitive achievement of children of employed women. Ruhm (2004) provides empirical support for this proposition. A second set of studies finds that maternal employment neither affects the quality of the mother-child relationship, nor the academic achievement of children measured in test scores (Muller, 1995; Golberg, Greenberger, Nagel, 1996; Parcel, Nickoll, Dufur, 2000, McGroder et al., 2005). Still other scholars suggest that maternal employment generally has favorable effects on child outcomes (Vandell & Ramanan, 1992; Parcel & Menaghan, 1994; Hoffman & Youngblade, 1999).

All three of these literatures focus on the quantity of maternal employment, examining how maternal employment shapes children's academic achievement through mothers' work schedules and work hours, and occasionally mothers' pay. In this paper, I suggest that the *quality* of maternal employment, in terms of its task complexity, autonomy, power, security, and stress, may be important and has been neglected in previous studies.

In this paper, I follow Kohn and Schooler (1973; 1982) who argue that "occupational self-direction…socializes the worker in ways that are generalized to life off the job" (Perry-Jenkins, Repetti, Crouter, 2000). I also build on Parcel and Menaghan's work which found significant effects of job complexity on early child outcomes. This paper is theoretically significant for the literature in the sense that it discusses how job quality might affect children's reading scores and might resolve empirical inconsistencies in the literature that analyzes the

relationship between maternal employment and child outcomes. This paper builds most directly on Parcel and Menaghan (1994a) by replicating their core finding with a new dataset, focusing more clearly on the distinction between hours of work and job quality, investigating the impact of job quality in more disadvantaged households, improving the measurement of job quality and improving the method of dealing with missing values.

CHAPTER 2

EXISTING LITERATURE ON MATERNAL EMPLOYMENT AND CHILD OUTCOMES

The literature on the effects of maternal employment on child outcomes provides different reasons and mechanisms as to why and how maternal employment might affect child outcomes. On the one hand, scholars who find adverse effects of maternal employment on child outcomes argue that maternal employment, particularly during the first year of life leads to cognitive and behavioral problems in later life (Blau & Grossberg, 1992; Brooks-Gunn, Han & Waldfogel, 2002; Ruhm, 2004). These authors argue that maternal employment adversely affects the home environment, and that non-maternal care used during the first year of life turns out to have negative impact on cognitive outcomes (Waldfogel, Han, and Brooks-Gunn; 2002). They argue that mothers who return to work in the early years of a child's life might inadvertently be less patient, less sensitive, and less nurturing to their children, and thus create a negative home environment hindering their child's cognitive development. In addition, the same authors argue that patterns of breast-feeding in employed mothers tend to be more sporadic and the lack of breast-feeding might be mirrored in lack of intimacy and interactions with the child. Moreover, they contend that the negative effects of early maternal employment might be attributed to non-maternal childcare used during this period (Waldfogel, Han, and Brooks-Gunn; 2002).

Brooks-Gunn, Han, and Waldfogel (2002) also argue that the timing and intensity of maternal employment is important in explaining the negative effects of maternal employment on children. They find that the children of mothers who worked long hours after the child was three years old had lower cognitive development scores. In addition, Ruhm (2004) observes that the children of women who were employed during the child's first three years of life had significantly lower reading and mathematics achievement than those children whose mothers stayed at home in the same period. These findings resonate with Coleman's (1988) argument that maternal employment has unfavorable effects on social capital [that is, "the relations between children and parents"] in the household because it translates into less time the mother spends with

children. Coleman (1988) argues that the level of human capital of the mother is of small importance if she does not use her human capital to increase the social capital of children in the home. Similarly, Desai, Chase-Lansdale, and Michael (1989) find adverse effects of maternal employment on middle-class boys when their mothers started working in the first year of life. The same authors, however, find that the negative effect of maternal employment is absent when mothers start working once the child is older. Thus, it seems that this set of studies argue that timing and intensity of maternal employment may be important factors to consider when we think about the relationship between maternal employment and child outcomes.

Yet, Hochschild (1989), Hays (2001) and Lareau (2003) might argue against this line of reasoning, suggesting instead that motherhood is not only about the absolute hours a woman spends with her child, but about the quality of interactions they have when they spend time together. In other words, the fact that a mother works many hours does not necessarily mean that she is not allocating enough time to her child. She may make up the loss in quantity of time through quality of time spent with her child. Moreover, the assumption that each additional hour a mother works is one less hour she spends with her child is not empirically supported. As Bianchi et al. (2006) demonstrate with time-diary data, employed mother are creative in finding ways to maintain interactional time with children, often by reducing time allocated to housework to leisure, to personal time, and to sleeping time.

Gregg & Waldfogel (2005) find that children of mothers who work part-time in the first eighteen months did not have negative influences on child development, and argue that mothers should have the option of working part-time since it may benefit (or at least not hurt) the child's cognitive development. Conversely, Chase-Lansdale et al. (2003) find no positive effects of shift from full-time to part-time work on children's cognitive development.

Some previous literature uses mother's wage or earnings as a predictor of child outcomes. Family income is important in explaining differential child outcomes because it translates into financial resources available for children's cognitive development and education. Dooley,

Lipman, and Stewart (2005) state that in families where "mothers have greater control over economic resources and are able, therefore, to direct a greater share to uses that benefit the children". As Datcher-Loury (1988) and Blau (1999) argue parental financial resources and preference for expenditures on children's cognitive development is positively correlated with amount of childcare time spent, and number of years of schooling completed by children. In other words, a higher level of family income and wage rate is expected to translate into higher proportions of income spent on children's cognitive development and education.

Finally, scholars who argue that maternal employment can have favorable effects on child outcomes (Vandell & Ramanan, 1992; Parcel & Menaghan, 1994; Kovacs, 1999) argue that daughters of employed women have higher academic achievements than daughters of stay-at-home mothers, although the opposite effect has been observed for boys (Kovacs, 1999). This gender difference was attributed to differential effects of maternal aspirations and role modeling on girls and boys. The contradictory results in past research suggests that the influence of mothers work time on child outcomes is likely to be fairly weak, and perhaps limited to specific developmental moments in parent-child relationships.

CHAPTER 3

QUALITY OF MATERNAL EMPLOYMENT AND CHILD OUTCOMES

I suspect that there is more to maternal employment than average working hours and hourly wage, and I argue that day-to-day tasks and responsibilities of a person defines the relationship with their environment, influences the quality of parenting, and the relationship with their child.

Kohn (1977) defines parental values as those traits that parents desire "to see embodied in their children's behavior". He also argues that the values parents desire to see in their children are those values that they value for themselves. This is a class reproduction argument in which the values and behaviors that are effective in the parents' workplace are values parents teach their children at home. I use Kohn (1977) and Lareau's (2003) class reproduction argument to embed Parcel and Menaghan's (1994) concern for the well being of children in a more general theory of socialization behavior. Kohn (1977) and Lareau (2003) argue that parents' own values and occupational resources define their parenting styles; I follow Parcel and Menaghan's (1994) concern for the well-being of children in the framework of Kohn (1977) and Lareau's (2003) class reproduction argument. That is, the positive influence of mother's job quality on child outcomes, can be understood in terms of both class and cultural capital (Bourdieu & Passeron, 1990) and skills that parents bring from work into the home (Kohn, 1977; Parcel & Menaghan, 1994; Lareau, 2003).

In this paper, I focus on reading achievement. Reading achievement is one important measure of social class reproduction, since it is a prerequisite for all other school success (Farkas, 1996). Kohn (1977) argues that social class reproduction is an important aspect of social structure and that parents tend to teach their kids values that they themselves value. While middle class parents focus on self-direction and creativity, working class parents focus on compliance with authority. Similarly, Farkas (1996) argues that "culture, represented as skills, habits, and styles, is the crucial link between family background and educational, occupational and earnings

attainment". Farkas (1996) attempts to understand the underlying mechanism between family background and culture and child's development of reading skills. He finds that the relationship between social class background and children's reading ability is explained by "basic cognitive abilities" such as auditory processing (the strongest effect), long-term retrieval, and processing speed. He also argues and provides evidence for the importance of linguistic culture in explaining reading deficits of lower-class and African-American individuals. In addition, he argues that children receive different basic reading skills through "copying and "learning by doing" of their family's linguistic culture.

Kohn and Schooler (1973), Kohn (1963; 1977) and Parcel and Menaghan (1994) claim that working conditions of middle class and working class parents are "important determinants of defining child-rearing values" (Parcel & Menaghan, 1994). Middle class parents with higher-ranking occupations are more likely to raise their children with an emphasis on self-direction, autonomy, and reasoning than those [working class] with lower-ranking occupations (Lareau, 2003). Middle class parents focus on childrearing techniques that stimulate children's cognitive skill development whereas working class parents teach them to obey and comply to authority figures. These class differences in childrearing have consequences for children's cognitive skill development.

Prior studies of maternal employment use a few measures to examine the effects of maternal employment on academic achievement of children. These include mother's employment status, working hours, timing of employment, and wage rate. These all arguably may play into the ways that maternal employment influences academic achievement of children. One shortcoming of these measures is that they conceptualize the issue to be time away from the child, rather than the quality of mother-child interactions. They do not consider that mothers may be strengthened as caregivers because of experiences they have while employed. They skirt the issue of what is job quality, that is, they do not consider the level of autonomy, supervision, level of complexity of tasks one has on the job, and benefits come with or from employment (Kohn &

Schooler, 1973; 1982). One's day-to-day tasks and responsibilities usually define people's relationships with their environment at home and at work, and Lareau (2003) argues that it influences the way people parent their children. Similarly, Parcel and Menaghan (1994) argue that middle class parents who occupy professional occupations tend to teach their children self-direction whereas working-class parents teach their children to be obedient and to comply with authority figures. Following this argument, mothers who have more autonomy, self-direction, and supervisory power in the workplace might transfer these traits to their own children (Perry-Jenkins, Repetti & Crouter; 2000). In other words, mothers' level of autonomy and self-direction on the job may positively influence children's achievement through the type of interaction skills they nurture in the mother.

Autonomy refers to self-directedness at work, and Kohn and Schooler (1973) argue that people's workplace tasks and experience affect their interactions outside the job. Lareau (2003) and Parcel and Menaghan (1994) argue that there are class differences in the home environments, parenting styles, and cognitively stimulating interactions parents provide to their children. Parcel and Menaghan (1994) also contend that children who have been exposed to complex and cognitively stimulating environments have better cognitive and social functioning in childhood and adulthood. Kohn argues that parents who value certain characteristics, such as self-direction, creativity (in the case of middle-class parents), or obedience and neatness (in the case of working-class parents), try to embody these characteristics in their children as well. Thus, children of middle class parents are taught to value, and embody higher levels of self-direction, and intellectual ability contrary to children of working class parents who are taught to value and embody behavioral conformity and neatness. In contrast to Coleman (1988), Parcel & Menaghan (1994) argue that the working conditions and workplace requirements are "at least as important as number of paid work hours" in how they affect people's parenting styles, values, and well-being, and shape "the quality of children's home environments". In other words, having autonomy or supervisory power at work enables mothers to pass these characteristics of self-direction and

intellectual ability on to their children (Kohn & Schooler, 1973). In addition, having self-direction, autonomy and supervisory power may be associated with having more discretionary power on their own schedules and pace of work that they can alter as family needs arise. Parcel and Menaghan (1994) also measure fathers' occupational complexity along with mothers', but they fail to find any significant effect of fathers' job conditions on child outcomes.

Workplace Characteristics

Workplace task characteristics pertain to the nature of activities one carries on in the job. They constitute the everyday tasks and responsibilities of workers. By constructing workplace task characteristics as a measure of job quality, I expect that the children of women with higher levels of complexity, autonomy, and power in the workplace will have better reading achievement scores than children of women with less complexity, autonomy, and power. Parcel and Menaghan offer empirical support for this claim by reporting that children's reading scores improve with increases in mother's job complexity. They also argue that there is close interaction between mothers' intellectual ability and job complexity. Mothers who work in "highly complex work environments" reinforce their intellectual abilities continually. This, in return, translates into better interactions with children in terms of providing cognitively stimulating home environments.

Ease of Balancing Work and Family

Another dimension of job quality is the ease with which a person could reconcile work and family life. This reconciliation might be maintained through opportunities for maternity and sick leaves, flexible work schedules, or a more supportive workplace environment for women with children. These benefits and opportunities often come with union membership. I argue that a balanced work and family life is an important element of employment, and that employed mothers and their children fare better psychologically and developmentally in the presence of policies that foster a supportive environment for balancing work and family life. I also suspect

that being a union member should increase the likelihood of having these benefits in the workplace.

Empirical support for my claims on the benefits of flexible schedules and supportive workplace environment comes from Glass and Estes (1997) who report that there is evidence for difficulties of arranging childcare for mothers with rigid work schedules, and they suggest that flexibility in scheduling work hours reduces work/family conflict. Similarly, Thomas and Ganster (1995) find that in a sample of nurses, a majority of whom were mothers, flexible time reduced work/family conflict, and decreased the likelihood of mental distress in the respondents. Glass and Riley (1998) also find that family-responsive policies that are designed as a security mechanism to "reduce the extent of turnover" through reduction in working hours consistently succeed in making jobs flexible. They suggest that policies "designed to reduce labor force intermittency and job changing surrounding childbirth should focus on lengthening childbearing leaves and eliminating overtime hours for new mothers". In addition to lengthening maternity leaves, women's ability to "avoid excessive work hours proved crucial in women's retention as well". Nevertheless, the absence of formal policies that accommodate childbearing and child rearing compel women to ineffectively balance work and family. Glass and Estes (1997) find that one consequence of job changing and inadequate rewards in the workplace was increased anger and mental stress among mothers, which would increase the likelihood of insensitivity to children's needs, and hinder creation of a cognitively stimulating home environment. Perry-Jenkins, Repetti and Crouter (2000) discuss this phenomenon under "transfer of chronic job stress into families" where work-family conflicts often influence mothers' relationships with their children. This does not mean that these women are bad mothers, but that it is difficult to reconcile work and family life, especially when children are young.

Benefits that may help to balance work-family life may come with union membership. Nonetheless, union membership and its relation to work-family policies should be approached with caution. Although it is expected that unions advocate for work-family policies, Gerstel and

Clawson (2001) discuss the need to think about "what should be considered under the general umbrella of work-family policies". It is important to keep in mind that unions, as well as workplaces, are not monolithic, and policies in both kinds of institutions reflect who constitute them as workers and leaders (Gerstel & Clawson, 2001). Empirically, past research on the effect of union membership on workplace support and workers' well being has been weak. Glass and Estes (1996) find that unionization, as a measure of organization has no effect for mothers' job leaving or worker retention. This finding further strengthens Gerstel and Clawson's (2001) argument that "a more nuanced understanding of unions" should be considered, where we should be careful at making inferences in relation to the benefits of being a union member.

Race has been an integral part of the society and it still partially determines people's position in the society, such as their occupational status. In parallel thinking, race and job quality thought together might show us important ways in which class mobility is possible. In other words, working in jobs that require more autonomy, supervisory power, or working class jobs that require complexity with things, or having a unionized job might be beneficial for mothers who are from disadvantaged households, and consequently for their children.

Hypotheses

Within the framework of this discussion, I constructed three core hypotheses about the relationship between maternal job quality and children's reading achievement.

H1: Controlling for family background and human capital characteristics, mothers' job quality will positively influence children's reading scores.

H2: Controlling for job quality, family background and human capital characteristics, being a union member will positively influence children's reading scores.

H3: Controlling for job quality, family background and human capital characteristics, working very long hours will negatively influence children's reading scores.

H4: Controlling for job quality, family background and human capital characteristics, working when children are very young may reduce children's reading scores.

H5: Controlling for job quality, family background, human capital characteristics, and job quality measures, union membership will positively influence children's reading scores in more disadvantaged race groups.

Other Influences on Reading Achievement

Mother's education is the strongest alternative explanation to any observed association between job quality and child outcomes. Mother's level of education is typically a strong influence on the quality of maternal employment. Jobs that allow worker to exercise autonomy, and require minimal or no supervision are more likely to be jobs that require higher levels of education (Leibowitz, 1977; Parcel & Menaghan, 1994). Leibowitz (1977) argues that "the association between mothers' education and child outcomes could be due to a correlation between maternal education and genetic abilities, which are passed to the child, or to more educated mothers being more productive in developing abilities." Similarly, Kalmijn (1994) finds that level of maternal education is particularly beneficial for the child because the mother typically spends more time with children than the father. Although Desai, Chase-Lansdale, and Michael (1989) report that mother's employment decreases mother's time spent with the child, Datcher-Loury (1988) and Leibowitz (1977) find that time spent by mothers with their children is affected by their level of education, where more educated mothers attempt intensive mothering (Hays, 1996) which increases the quality of mother-child interactions (Parcel & Menaghan, 1994).

There is a set of additional factors that have been found repetitively in past research to affect child's cognitive development. These can broadly be classified as family and demographic characteristics and include family income, marital status of the parents, race, number of children in the household, and child's age (Farel, 1980; Datcher-Loury, 1988; Kalmijn, 1994; Muller, 1995, 1998; Cherlin, Chase-Lansdale, & McRae, 1998). These, as well as mother's education will be controlled in the models that follow. In addition, I will interact race variables with job quality measures to investigate the possible positive effects of job quality in racially disadvantaged households.

CHAPTER 4

DATA AND METHODS

Sample

The data that is used in this study is taken from the Panel Study of Income Dynamics (PSID). The main data file used is the 1997 Child Development Supplement. In addition, variables from the 1996 PSID Main Family Data, Income Plus, and Work Hours and Wage Rates datasets are utilized for gathering data on maternal characteristics. Variables from the Dictionary of Occupational Titles (DOT) (England & Kilbourne, 1991) were merged onto the PSID main data to provide measures of job quality.

The initial sample size for the study was 2256 (includes only children who were older than age 5, since the reading achievement test was administered to children age 6 and above). This initial sample included children with employed (n=983) and stay-at-home mothers at the time of data collection. For the final analysis, I only used data for children with employed mothers, but I also explore differences in children's reading achievement between working and non-working mothers.

The main dependent variable of this study is the reading achievement of children, and is measured by the Woodcock-Johnson Revised passage comprehension test contained in the PSID-CDS 1997. Woodcock-Johnson Psycho-Educational Battery-Revised (WJ-R) is a well-known and accepted measure of "intellectual ability", including several dimensions such as "current developmental status, degree of mastery in reading and mathematics, and group standing" (PSID-CDS User's Guide, 2002). Children between ages 6 and 12 are administered this test that "measures comprehension and vocabulary skills using multiple-choice and fill-in-the-blank format". This variable is the sum of correct scores the respondent obtains from forty-three subsequent questions. Each question is worth 1 point, where the total score ranges between 4 and 43. The distribution for child test scores is normally distributed with a mean of 32.04 and a

standard deviation of 4.82 for children with employed mothers, and with a mean of 29.14 and a standard deviation of 5.77 for children with unemployed mothers.

Quality of Employment

The primary explanatory concept of interest in this study is the quality of maternal employment. This is an overarching concept that includes a set of variables that brings together several aspects of work quality. These aspects are *complexity, autonomy, authority/power, stress, and flexibility.*

Complexity level of the job is measured through a set of variables from the Dictionary of Occupational Titles (DOT). This set of variables are occupational mean percentages that measure the "level of complexity at which worker functions in relation to data, people, and things" (DOT Codebook, 1991).

Autonomy of the job is measured through a variable from the DOT that reports the occupational mean percentage of workers' "adaptability to accepting responsibility for the direction, control or planning of an activity" (DOT Codebook, 1991).

Authority on the job is measured through a dummy variable from the DOT that reports "whether occupation involves supervisory or managerial power over other workers" (DOT Codebook, 1991).

Complexity with data and people, autonomy, and power had a strong average interitem covariance (R=0.46). Complexity with things was also correlated with other scale variables, but the sign was negative. I believe this is due the class nature of work. In other words, complexity with data, complexity with people, autonomy, and power tend to be present in managerial and professional jobs whereas complexity with things is related more with skilled working class jobs. So while I constructed job quality[1] as a composite scale out of complexity with data, complexity with people, autonomy, and power (Cronbach's alpha=0.77), I kept complexity with things as a

[1] alpha complpeople compldata autonomy power, reverse (complpeople compldata), std gen (jobquality)

separate indicator of job quality[2]. In other words, it will be misleading to think about and measure a working class job only with aspects of work that relates to professional/managerial job complexity.

My measure of job quality is similar to the measure Parcel and Menaghan (1994) created. They included the same DOT measures of complexity with data and people and did not include complexity with things in their measure. In addition, they included "education and training level required to perform work" while I thought that these variables are more related with the level of education a person has. Most importantly, I also include a second measure of job quality focused on manual complexity (working with things). The fact that I created two different measures of job complexity is the key difference in conceptualization and measurement with respect to Parcel and Menaghan (1994).

Flexibility of a job is measured indirectly through union membership. This is a dummy variable that reports whether the worker is part of a union [where it equals 1 if one is a union member, and 0 otherwise]. However, this variable has low face and content validity, because it only measures whether a person is a member of the union. It has low face validity because it does not provide any information on the characteristics of the union, such as whether it is a strong union on family policy issues. Related to this problem, it also has low content validity, because it does not measure other possible facets of flexibility, such as flex-time options, maternity and sick leaves or childcare. Given the weak nature of this variable, it is reasonable not to expect strong results.

Stress created through a job is measured through the construction of a dummy variable that accounts for working for very long hours. Even though the prior literature conceptualizes stress exactly in this way, there might be other ways to measure job stress, such as limited job security, or an unsupportive supervisor suggesting limited content validity. However, it has high

---

[2] gen thingcompl=-complthings
egen workclasscompl=std(thingcompl)

face validity relative to the literature, and likely very low measurement error. It does a good job of measuring the effect of having a mother who is away from home for a large part of the day on children. Including this variable has important implications for observing the family-friendliness of a job.

Conventional Model of Children's Reading Scores

To examine my study hypotheses, I develop a model that acknowledges the existing literature on maternal employment and child outcomes. The existing literature argues and sometimes finds that children's reading scores are negatively correlated with the fact that a mother works, and mothers' average working hours, and positively correlated with mothers' average wage rate. Thus I begin my analysis with such a model, before examining the influence of job quality, union membership, and very long hours on children's reading scores.

Control variables

Level of education (a set of dummy variables for being a high school dropout, high school graduate, college dropout, and college graduate, and 0 otherwise; where high school graduate is the reference category) and race of the mother (a set of dummy variables where it equals 1 if one is White, African-American, Hispanic, and Other respectively, and 0 otherwise; where White is the reference category), family income, number of children, and whether or not the parents live together (a dummy variable where it equals 1 if the woman is a single mother, and 0 otherwise) are controlled for in all models.

Missing Data

Dealing with missing data has always been a problem for researchers, and the most prominent method is the deletion of the missing cases. However, Rubin (1987) and Allison (2002) suggest that multiple imputation (MI) is statistically more valid than other methods of imputation. This method is statistically more accurate than mean-imputation because it allows one to maintain the random error of each imputed value rather than clustering the imputed observations around the means as in mean imputation or completely deleting the missing

observations. Before doing my analyses, I constructed a dataset that includes all the variables that I need in my model in addition to a list of variables that are covariates to the variables in the model, and using the *ice* routine in STATA, imputed seven different datasets with random error terms. Thus I had seven different feasible values for each observation that was missing. I compared the descriptive statistics between the observed and the imputed data and did not find any major differences in the set of values. I also run the models on the imputed dataset with and without the imputed observations for the dependent variable. von Hippel (2007) argues that including the imputed observations for the dependent variable does not improve the model and in fact I have found that excluding the imputed observations of dependent variable significantly improves the model. When doing the final regression analysis, I exclude cases with imputed reading scores, and use the *micombine* routine in STATA to run the regression models on all seven datasets, and combine the estimates for each set in one final model. This allows one to adjust pooled standard errors to take into account the random error component of the imputed values.

CHAPTER 5

FINDINGS

Table 2 shows differences in family background and human capital measures for employed and unemployed mothers and their children. Firstly, children of employed mothers score 2.9 points higher than children of unemployed mothers in their reading achievement tests. Secondly, single mothers are approximately 8 times more likely to be unemployed than those women who live in the same household with the biological father of their children. Thirdly, the incidence of having dropped out of high school is 3.5 times more likely for unemployed mothers, and employed mothers are approximately 2 times more likely to hold associate's degrees. There is also an educational gap between employed and unemployed mothers where the average years of schooling completed is approximately 1 year longer for employed women. Finally, the ratio of employed white women to unemployed white women is 2.3:1, whereas the same ratio is 2:3 for African-American women. In comparison, employed mothers tend to have more favorable labor market characteristics.

Table 3 presents the results of regression of children's reading achievement on mother's employment measures controlling for age of child, and family background and human capital measures. In column 1, I focus on both employed and unemployed mothers, and investigate the effects of mothers' employment status on children's reading scores, controlling for maternal education and family socio-demographic characteristics. Mothers working significantly improves child's reading score. I also find significant effects of family income, single motherhood, race and education. In columns 2-6, I focus only on employed mothers. In column 2, I include the two conventional measures of maternal employment; average hours of work and average wage rate on children's reading scores. Controlling for family background, age of child, and mother's level of education, these two variables do not have significant effect on child test scores. This finding is empirically important, because contrary to the previous literature that finds significant positive effect of mothers' hours and wages on children's early childhood outcomes it fails to be

significant even before I introduce measures of job quality. The result is highly consistent with the mixed weak findings in past research.

In column 3, I introduce measures of job quality. These two measures, professional/managerial job quality, and working class job quality are significant in positively influencing child test scores. In columns 4 and 5, I introduce union membership and working for very long hours as measures of job security and level of stress respectively. In both of these models, these measures are not significant. Finally in column 6, I introduce measures of job quality; professional/managerial job complexity, working class job complexity, union membership, and working for very long hours at the same time. This model supports the basic claim that mother's exposure to complex tasks and challenges at work improves child outcomes. When we compare model 2 with model 6, we see that the absolute values of family socio-demographic and human capital measures decline. This suggests that not controlling for job quality overestimates the causal contribution of maternal education and family's socio-demographic characteristics to child outcomes.

In order to see whether there are socio-demographic differences in the effects of union membership, I interacted the variable "union membership" with variables for race and single motherhood. The first panel in Table 4 shows the effects that were significant. I found that for African-Americans, having a union member mother significantly improves children's reading scores. In the second panel in Table 4, I show the interaction effect between union membership and single motherhood. I found significantly positive effects of union membership for single mothers (at 0.1 significance level).

In table 5, I compare the effects of maternal employment for boys and girls. I found that having an employed mother significantly influenced reading scores for girls but not boys. Moreover, when I include measures of quality of employment, we see that the effects of the two job quality measures are significant for boys and girls, and for girls the effect is significantly larger.

In Table 6, I investigated the effects of maternal employment during first, second, and third year of the child on reading scores later in childhood. In columns 1,2 and 3, I tested the effect of employment at each year separately. Contrary to previous literature (Waldfogel et al., 2002), the effects were positive and significant at 0.05 level during the 1st and 3rd years, and not significant during the 2nd year. In column 4, I tested the effect of early employment during each year at once and none of the coefficients were significant. In all of the above discussed tests, the effects the job quality measures reflected my findings from Table 3, where they were positively significant. These results are puzzling in comparison to the findings of Brooks-Gunn, Han, and Waldfogel (2002) and Waldfogel, Han, and Brooks-Gunn (2002). Maternal employment in children's early years might be significant, but this negative effect clearly declines and is eventually reversed by the time the children are age 6-13. In order to check if the effect of early employment was dependent on one's class position, I also ran regressions controlling for different levels of maternal education (in tables not shown), but the findings were not significant. In addition, the previous literature that suggests negative effect of maternal employment was limited to young children and had gender differences. In order to check these effects, I ran the model for children aged 6-8 (the youngest subgroup in my sample), and the effect of early maternal employment was not significant (in tables not shown). I also ran the model for separately for boys and girls (aged 6-8, and 6-13 respectively), and early employment had no differential effect for boys and girls as well. All of these models suggest that the possible negative effects of early maternal employment on child development are not persistent, and any deficit disappears by school age.

The effects of measures of mother's education are significant in all models- even when I introduce measures of job quality. This is hardly surprising since the relationship between education and labor market outcomes is well established in the literature. What is important is that job quality measures are significant at 0.05 level even when education measures are in the model. The strong and significant effects of job quality on children's reading scores suggest that

children with mothers who have high occupational complexity scores do better in reading achievement tests. This is true for both professional/managerial and working class children.

CHAPTER 6

CONCLUSIONS AND FUTURE RESEARCH

This paper investigated the influence of maternal job quality on child outcomes. Job quality can be thought to have two dimensions. The first dimension pertains to the tasks one carries on, and responsibilities one has in the workplace. The second dimension is the ease with which a person can reconcile work and family life. I argued in this paper that jobs which score high on the above mentioned dimensions would positively influence children's intellectual development. I have found through my data analysis that job quality, net of mothers' human capital measures, in fact has significant and positive effects on children's reading scores. Complexity of mother's day-to-day work activities has beneficial effects on children's reading scores.

My findings are consistent with the literature that argues that maternal employment tends to be beneficial for child outcomes. Firstly, we see that mother's working has significantly positive effects on children's reading scores. This finding is contrary to Coleman's argument predicts a decline in the social capital of the household when the mother works outside the house. Secondly, among those mothers who work, job complexity (measured by complexity, autonomy, power) is positively correlated with child test scores. These findings demonstrate that children benefit from mother's working, and the effect is more significant when mother's job complexity increases. Although the conventional model I have constructed suggest that there are no effects of maternal employment on children, the tension in the literature regarding the effects of maternal employment on children is resolved when we introduce job quality measure.

Although I found only limited significant effects of unions helping to reconcile work and family life, this is mostly due lack of good measures of workplace stress and security. The main effect of unionization was not significant, but the interaction of union membership with working class job complexity, being African-American, and being a single mother respectively increased children's reading scores. This is an indication that union membership is beneficial for

disadvantaged households, and may act as a positive potential for class mobility. However, having investigated the relationship between union membership and job flexibility, I suspect that the union membership is beneficial in the creation of more stable employment and home environment.

Very long hours as a measure were not significant for the whole sample of working mothers. The fact that I found no effect of working long hours in the whole sample is contrary to the existing literature. This either means that working long hours is either not stressful or that the stress it produces does not translate into less competent parenting.

Similar to previous literature (Kovacs, 1999), I have found that mother's working is more beneficial for girls than boys. When we look across working and non-working mothers, the effect of employment is only significantly positive for girls. When we focus on working mothers only, we see a significantly positive effect for boys and girls, but the magnitude of the effect for girls is 0.35 points larger than that of boys, and the t-test for the differences in means is significant.

I also investigated the potential negative effect of early employment on child outcomes as suggested by Waldfogel, Han, and Brooks-Gunn (2002), and Brooks-Gunn, Han, and Waldfogel (2003), but I did not find any significant effect. This suggests that the negative effect of early maternal employment is limited to very young children, and the deficit disappears by school age.

The job quality scale that I constructed in this paper is improved relative to the job quality measure offered by Parcel and Menaghan (1994). Although their nineteen-item scale is relatively comprehensive, I believe that the scale I introduce here does a better job of capturing job quality. During the process of constructing this scale, I realized that some of the variables Parcel and Menaghan (1994) used were actually reducing the convergent validity of the resultant scale. In addition, although complexity with people and data, along with autonomy and power had high positive interitem covariance, this was not the case with complexity with things. The covariance between item "complexity with things" and the other items was negative. I think that

this reflects the fact that "complexity with things" is a measure of a different underlying dimension of job quality than the other items. Complexity with things measures superior job quality associated with skilled working class jobs. Complexity with data and people, autonomy and power measure job quality typically found in professional and managerial jobs. After constructing these two separate measures of job quality, I explored their respective relation to children's reading scores and mother's level of education, and found the expected positive relation between them. A future version of this paper might attempt to replicate Parcel and Menaghan's earlier measure (1994) precisely and systematically explore the relationship between their measure of job quality and my two measures of job quality and other variables in the models in order to make even more clear that my measures are improvements.

Even though I chose to use variables from the DOT to measure job quality, measures from DOT are only occupational aggregates and so there is measurement error resulting from the mismatch between occupational data from DOT, and the conditions of the actual jobs the mothers in my sample hold. Occupations are not monolithic structures that allow produce for all its members the same conditions of work (Gerstel & Clawson, 2001). For example, an intensive care nurse usually has more responsibility than a school nurse, and they earn more than the latter. The strong and significant effect of the two job quality measures suggest that future research should focus on job and workplace level activities one carries on during the work day. Since I used job occupational-level data to analyze individual behavior of mothers and the effects of the behavior on their children, my models are underestimates of the true relationship between mother's job quality and child test scores. Future research should focus on the job-level measures of job quality to see how these factors affect workers' lives outside the workplace.

The primary aim of this paper was to locate a niche for maternal job quality in the existing literature. Results from prior literature was mixed in explaining the effects of maternal employment on child outcomes. Using work hours, wages, and early employment measures, the existing literature was a plethora of positive, negative, and mixed effects. Testing each of these

existing employment measures while controlling for maternal job quality prevailed these variables has, if any, barely statistical significance in comparison to maternal job quality measures. Therefore, this paper has reintroduced the importance of job quality to the discussion of maternal employment and its effects on child outcomes.

This paper has also shown the consequences of maternal job quality on child outcomes in the framework of class reproduction. While we see class reproduction in professional/managerial households, we also see the potential for upward class mobility in working class families with complex jobs and union membership. On the one hand, children of professional/managerial mothers benefit from their mothers' occupational position. We see an effect that is contrary to Coleman's declining social capital argument where professional/managerial mothers are more able to compensate their daytime separation from their children. On the other hand, we see a potential for upward class mobility in working class and socio-demographically disadvantaged (African-American and single-headed) households through high job complexity and better opportunities for balancing work and family (through union membership). Children of working class parents with higher job complexity tend to score higher reading scores, and this may help them in the future with upward class mobility. However, we also see a continuation of Coleman's social capital argument, mothers who work for long hours are less able to compensate their separation, and their children tend to score lower in their reading tests.

TABLE 1. Percentage of missing variables before MI

Variable Name	Percent Missing
Children's reading score	6.03
Mother's wage rate	17.75
Mother's average working hours	17
Mother's level of education (in years)	6.03
Family income net of mother's income	17
Child's race	0.25
Child's age	0.25
Single motherhood	0.2

TABLE 2. Descriptive Statistics for Employed and Unemployed Mothers

	Employed (N=983)				Unemployed (N=1273)			
	Mean	SD	Min	Max	Mean	SD	Min	Max
Reading scores	32.04	4.82	8	43	29.14	5.77	4	43
Mother's average working hours	34.79	12.81	1	112	-	-	-	-
Natural logarithm of mother's wage	2.22	0.72	-3.21	3.09	-	-	-	-
Child's age	9.19	1.94	6	13	8.85	2	6	12
Natural logarithm of family income	10.76	0.79	0.69	11.61	10.32	1.15	4.74	11.62
Single motherhood	0.05	0.22	0	1	0.42	0.49	0	1
Number of children	2.33	0.96	1	9	2.5	1.25	1	8
Professional/managerial job quality	0	0.79	-1.11	2.17	-	-	-	-
Working class job complexity	0.11	1	-2.03	1.26	-	-	-	-
Union membership	0.18	0.31	0	1	-	-	-	-
Very long hours	0.1	0.39	0	1	-	-	-	-
Mother's level of education (in years)	13.58	2.17	7	17	12.4	2.92	1	17
Hs dropout	0.1	0.31	0	1	0.34	0.47	0	1
Hs graduate	0.32	0.46	0	1	0.27	0.44	0	1
Some college education	0.13	0.33	0	1	0.11	0.31	0	1
Associate's degree	0.16	0.37	0	1	0.07	0.26	0	1
College graduate	0.28	0.45	0	1	0.21	0.41	0	1
Race: White	0.65	0.47	0	1	0.28	0.44	0	1
Race: Black	0.3	0.46	0	1	0.45	0.5	0	1
Race: Hispanic	0.01	0.11	0	1	0.18	0.39	0	1
Race: Other	0.03	0.18	0	1	0.09	0.28	0	1

TABLE 3. Children's reading scores regressed on mother's employment measures, Adjusting for (1) Education, (2) Sociodemographic Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)
Mother's employment status	0.54 (0.27) *					
Mother's average working hours		-0.003 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.02 (0.02)
Natural logarithm of mother's wage rate		0.02 (0.2)	-0.08 (0.2)	-0.02 (0.22)	0.03 (0.22)	-0.13 (0.21)
Professional/managerial job complexity			0.81 (0.23) ***			0.84 (0.24) ***
Working class job complexity			0.47 (0.16) ***			0.52 (0.16) ***
Union membership				0.67 (0.57)		0.92 (0.57)
Very long hours					0.67 (0.50)	0.71 (0.49)
Age of child	-0.03 (0.06)	0.04 (0.01)	0.03 (0.1)	0.05 (0.1)	0.04 (0.1)	0.03 (0.10)
Natural logarithm of family income	0.55 (0.13) ***	0.52 (0.21) **	0.44 (0.21) *	0.5 (0.2) **	0.49 (0.21) **	0.39 (0.21) **
Number of children	0.03 (0.1)	0.18 (0.16)	0.21 (0.16)	0.16 (0.16)	0.18 (0.16)	0.19 (0.16)
Single motherhood	-1.04 (0.3) ***	-1.65 (0.75) *	-1.4 (0.74) *	-1.6 (0.75) *	-1.6 (0.75) *	-1.4 (0.73) *
Race: African-American	-3.67 (0.27) ***	3.46 (0.35) ***	-3.42 (0.34) ***	-3.51 (0.36) ***	-3.39 (0.36) ***	-3.42 (0.35) ***
Race: Hispanic	-3.54 (0.44)***	1.19 (0.133)	-1.46 (1.33)	-1.12 (1.33)	-1.06 (1.32)	-1.24 (1.31)
Race: Other	-2.52 (0.5) ***	-2.49 (0.89) ***	2.6 (0.88) ***	-2.5 (0.89) ***	-2.46 (0.89) ***	-2.6 (0.89) ***
Less than HS degree	-0.73 (0.34) *	-0.8 (0.52)	-0.57 (0.51)	-0.79 (0.52)	-0.79 (0.52)	-0.57 (0.51)
Associate's degree	2.00 ((0.39) ***	1.95 (0.45) ***	1.69 (0.4) ***	1.96 (0.46) ***	1.95 (0.45) ***	1.70 (0.46) ***
Some college education	1.15 (0.38) ***	1.62 (0.50) ***	1.49 (0.5) ***	1.6 (0.5) ***	1.6 (0.5) ***	1.45 (0.50) ***
College degree	0.25 (0.22)	3.06 (0.41) ***	2.68 (0.42) ***	3.04 (0.41) ***	3.05 (0.41) ***	2.63 (0.42) ***
Intercept	26.09	25.65	27.08	25.8	26.29	28.01

TABLE 4. Interaction effects of union membership with mother's socio-demographic characteristics[3]

Union membership	Union membership	Race: African-American	Interaction
	0.15	-3.63 ***	1.84*
	Union membership	Single motherhood	Interaction
	0.81	-1.61 *	5.01†

[3] *, **, ***, significant at 0.05, 0.01, 0.001 level respectively.

TABLE 5. Gender differences in children's reading scores regressed on mother's employment measures, Adjusting for (1) Education, (2) Sociodemographic Characteristics[4]

	(1)		(2)	
	Boys	Girls	Boys	Girls
Mother's employment status	0.18 (0.38)	0.88 (0.38) **		
Mother's average working hours			-0.02 (0.03)	-0.03 (0.02)
Natural logarithm of mother's wage rate			-0.03 (0.37)	-0.25 (0.30)
Professional/managerial job complexity			0.71 (0.33) *	0.95 (0.36) ***
Working class job complexity			0.36 (0.22)*	0.79 (0.24)***
Union membership			1.23 (0.83)	0.74 (0.79)
Very long hours			0.81 (0.64)	0.51 (0.79)
Age of child	-0.07 (0.09)	0.002 (0.08)	-0.03 (0.14)	0.1 (0.14)
Natural logarithm of family income	0.66 (0.19) ***	0.45 (0.17) ***	0.31 (0.29)	0.54 (0.31) *
Number of children	0.11 (0.13)	-0.07	0.13 (0.22)	0.2 (0.22)
Single motherhood	-1.19 (0.42) ***	-0.95 (0.46) *	-0.69 (1.14)	-1.7 (0.91) *
Race: African-American	-3.58 (0.38) ***	-3.69 (0.42) ***	-3.44 (0.52) ***	-3.32 (0.59) ***
Race: Hispanic	-4.05 (0.64) ***	-3.09 (0.63) ***	-1.56 (1.73)	1.38 (2.09)
Race: Other	-1.7 (0.71) **	-3.3 (0.7) ***	0.71 (1.15)	-4.65 (1.24) ***
Less than HS degree	-0.81 (0.42) *	-0.59 (0.51)	-0.48 (0.71)	-0.63 (0.75)
Associate's degree	2.18 (0.54) ***	1.74 (0.6) ***	2.11 (0.64) ***	1.43 (0.67) *
Some college education	0.7 (0.51)	1.56 (0.52) ***	0.69 (0.71)	2.23 (0.69) ***
College degree	2.05 (0.41) ***	2.39 (0.45) ***	2.61 (0.58) ***	2.78 (0.59) ***
Intercept	25.56	26.7	26.92	28.7

[4] The t-test for the differences in the means of the dependent variable across gender is significant.

TABLE 6. Children's reading scores regressed on Early Maternal Employment[1]

Maternal employment at age 1	0.74 (0.39) *			0.07 (0.47)
Maternal employment at age 2				-0.002 (0.52)
Maternal employment at age 3		0.59 (0.41)	0.78 (0.41) *	0.71 (0.52)

[1]Models included all variables in Table 3.

BIBLIOGRAPHY

Blau, D.M. (1999). The Effect of Income on Child Development. *The Review of Economics and Statistics*, 81, 261-278.

Blau, F.D., Grossberg, A.J. (1992). Maternal Labor Supply and Children's Cognitive Development. *The Review of Economics and Statistics*, 74, 474-481.

Bianchi, S.M, Robinson, J.P., Milkie, M.A. (2006). *Changing Rhythms of American Family Life.* New York: Russell Sage Foundation.

Bourdieu, P., Passeron, J. (1990). *Reproduction in Education, Society, and Culture.* Trans. Richard Nice. London: Sage.

Brooks-Gunn J., Han, W., Waldfogel, J. (2002). Maternal Employment and Child Cognitive Outcomes in the First Three Years o Life: The NICHD Study of Early Child Care. *Child Development*, 73,1052-72.

Chase-Lansdale et al. (2003). How are Children Affected by Employment and Welfare Transitions? *JCPR Policy Briefs*, 5.

Coleman, J. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, 95-120.

Datcher-Loury, L. (1988). Effects of Mother's Home Time on Children's Schooling. *The Review of Economics and Statistics*, 70, (367-373).

Desai, S., Chase-Lansdale, P.L., Michael, R.T. (1989). Mother or Market? Effects of Maternal Employment on the Intellectual Ability of 4-Year-Old Children. *Demography,* 26, (545-561).

Dooley, M., Lipman, E., Stewart J. (2005). Exploring the Good Mother Hypothesis: Do Child Outcomes Vary with the Mother's Share of Income? *Canadian Public Policy*, 31, (123-143).

Farel, A. (1980). Effects of Preferred Maternal Roles, Maternal Employment, and Sociodemographic Status on School Adjustment and Competence. *Child Development*, 51, (1179-1186).

Gerstel, N., Clawson, D. (2001). Unions' Responses to Family Concerns. *Social Problems,* 48 (277-297).

Glass, J.L., Estes, S.B. (1997). The Family Responsive Workplace. *Annual Review of Sociology*, 23 (289-313).

Glass, J.L., Riley, L. (1998). Family Responsive Policies and Employee Retention Following Childbirth. *Social Forces,* 76 (1401-1435).

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.

Gregg P., Waldfogel, J. (2005). Symposium on Parental Leave, Early Maternal Employment and Child Outcomes, Introduction. *The Economic Journal*, 115.

Hays, Sharon (1996). The Cultural Contradictions of Motherhood. New Haven: Yale University Press.

Hochschild, A.R. (1989). The Second Shift. Penguin Books: New York.

Hoffman, L.W., Youngblade, L.M. (1999). Mothers and Work: Effects on Children's Well-Being. Cambridge University Press: New York.

Jacobs, J.A., Gerson, K. (2004). The Time Divide: Work, Family, and Gender Inequality. Harvard University Press: Cambridge.

Kalmijn, M. (1994). Mother's Occupational Status and Children's Schooling. *American Sociological Review*, 59, 257-275.

Kohn, M.L. (1963), Social Class and Parent-Child Relationship: An Interpretation. *American Journal of Sociology*, 68 (471-480).

Kohn, M.L. (1977). Class and Conformity: A Study in Values, with a Reassessment. University of Chicago Press: Chicago.

Kohn, M.L., Schooler, C. (1973). Occupational Experience and Pyschological Functioning: An Assessment of Reciprocal Effects. *American Sociological Review*, 38 (97-118).

Kohn, M.L., Schooler, C. (1982). Job Conditions and Personality: A Longitudinal Assessment of Their Reciprocal Effects. *The American Journal of Sociology,* 87, (1257-1286).

Kovacs, D.D. (1999). Maternal Employment and Child Outcomes: The Direct Relationships. In L.W. Hoffman & L.M. Youngblade (Eds), Mothers at Work: Effects on Children's Well-being (152-173).

Lareau, A. (2003). Unequal Childhoods: Class, Race, and Family Life. University of California Press: Berkeley.

Leibowitz, A. (1977). Parental Inputs and Children's Achievement. *The Journal of Human Resources,* 12, (242-251).

McGroder et al. (2005). The Estimated Effect of Maternal Employment on Children under Mandatory and Non-Mandatory Employment Circumstances. *Community, Work and Family*, 8, 331-357.

Muller, C. (1995). Maternal Employment, Parent Involvement, and Mathematics Achievement among Adolescents. *Journal of Marriage and the Family*, 57, 85-100.

Muller, C. (1998). Gender Differences in Parental Involvement and Adolescents' Mathematics Achievement. *Sociology of Education*, 71, 336-356.

Parcel T.L., Menaghan, E.G. (1994). Parents' Jobs and Children's Lives. Aldine De Gruyter: New York.

Parcel, T.L., Nickoll, R.A., Dufur, M.J. (2000). The Effects of Parental Work and Maternal Nonemployment on Children's Reading and Math Achievement. In T.L. Parcel & D.B. Cornfield (Eds.), Work & Family: Research Informing Policy (189-213). Thousand Oaks: Sage Publications, Inc.

Perry-Jenkins, M., Repetti, L.T., Crouter, A.C. (2000). Work and Family in the 1990s. *Journal of Marriage and Family,* 62, (981-998).

Ruhm, C. (2004). Parental Employment and Child Cognitive Development. *The Journal of Human Resources*, 39, (155-192).

Thomas, L.T., Ganster D.C. (1995). Impact of Family Supportive Work Variables on Work-Family Conflict and Strain: A Control Perspective. *Journal of Applied Psychology*, 80, (6-15).

Vandell, D., Ramanan, J. (1992). Effects of Early and Recent Maternal Employment on Children from Low-Income Families. *Child Development*, 63, (938-949).

von Hippel, P.T. (2007). Regression with Missing Ys: An Improved Strategy for Analyzing Multiple Imputed Data. *Sociological Methodology*, 37, (83-117).

Waldfogel, J., Han, W., Brooks-Gunn J. (2002). The Effects of Early Maternal Employment on Child Cognitive Development. *Demography*, 39, (369-392).