

***Working Mothers' Contributions to Family Income:
Proportions and Effects***

Anne-Marie C. Fagan,
Princeton University

Dr. Maria Sophia Aguirre
Department of Economics and Business
The Catholic University of America
Washington, DC 20064

With thanks to:
The Hartman Foundation

Directed by:
Dr. Maria Sophia Aguirre
Associate Professor
Department of Business and Economics
The Catholic University of America
Washington D.C. 20064

TABLE OF CONTENTS

Part I : [Introduction](#)

Part II: [Literature Review](#)

A. [Factors Affecting the Working Mother's Contribution to Family Income](#)

1. *Amount Worked*
2. *Gender Wage Gap*
 - i. *Human Capital Acquirement*
 - ii. *Education*
 - iii. *On Job Training*
 - iv. *Dedication and Availability*
 - v. *Occupational Choices*
 - vi. *Hours: Part/full time*
 - vii. *Indirect results of Other factors*
 - viii. *Discrimination*

B. [Reasons for Income of Married Women](#)

1. *In Married Couple Husbands Income not Sufficient*
2. *In Single Parent family, Only Alternative to Poverty*
3. *Sense of Fulfillment of Mother*
4. *Bargaining Power*

C. [Expenditures Incurred as a Consequence of Holding a Job](#)

1. *Childcare*
 - i. *Amount*
 - ii. *Type*
 - iii. *Quality*
 - iv. *Cost of Actual Service*
2. *Effects on Children*
3. *Taxes*
4. *Housekeeping*

5. *Work-related Expenses*

D. Effects on the Family

1. *Increase in Income*

2. *Marital Problems*

i. *Income Negatively Affects Marriage*

ii. *Marital Quality Affects Wives' Income*

iii. *Wife's Income Increases the Likelihood of Divorce*

3. *Povertization of Women and Their Children*

4. *Psychological/Emotional Effects on Parents*

i. *Relationship Between Multiple Roles and Psychological Distress*

ii. *Hours Worked and Perception of Equity*

iii. *Due to Upsetting Gender Perceptions*

iv. *Resulting in Violence Against Wife*

5. *Decreases Number of Children When Mothers Work*

6. *Time Spent with Children*

7. *On Children*

i. *Health*

ii. *Cognitive and Behavioral Skills*

a. *Social Confidence/Competence*

b. *Behavior*

c. *Cognitive Skills*

iii. *Psychological/Emotional Effects on Children*

iv. *Long Term Effects of Working Mothers on Children*

Part III: Working Mother's Net Income Contributions to the Family

1. *Theoretical Framework*

2. *Data and Methodology*

3. *Empirical Results*

Part IV: [Conclusions](#)

[Bibliography](#)

Working Mothers' Contributions to Family Income: Proportions and Effects

By

*Maria Sophia Aguirre and Anne-Marie C Fagan**

Part One: Introduction

Beginning in the late fifties and early sixties, the demand for child-care increased enormously with the entrance of large numbers of women into the workforce. From that point on, the number of both women leaving the home and children entering day care has steadily increased. The shift of women from home to the workplace is dramatically influencing the structure of society, and is presenting many new questions as it does so: Why has the proportion of women and children in poverty markedly increased as more women enter the workforce? How much does the gender gap in wages account for the lower income of working mothers? How are working mothers to afford quality childcare? How does childcare affect the human capital of the child and what are the economic repercussions? Although much has been written addressing many of these questions individually, there has been almost no comprehensive analysis of these subjects in the attempt to evaluate how the woman's entrance into the workforce has affected her children, her family, and herself. This paper attempts to do so through a review of the literature on the topic and a formulation of the net income that women at various income levels working outside the home contribute to the household after work related expenses, including childcare, are taken into consideration. In concrete terms, we seek to shed some light on the question of whether the income that women earn working outside the home has significantly increased the wellbeing of the family. The data used for this purpose comes from the 1997 National Survey of Income and Expenditures.

We find that, on average, the net income added by the secondary contributor, mainly women, to the total family income is significantly different than zero. However, independent of marital status or ethnic background, it is economically insignificant. As could have been expected, this varies with the levels of income and education. We also find that income levels, marital status, and race affect the amount of childcare expenditures. At lower income levels, however, the net contribution of women tends to be negative once other work related expenditures are included. This suggests that the use of childcare, rather than helping the welfare and wellbeing of the family, is hindering it.

Understanding the importance that women place on augmenting the family income, with respect to the other reasons why they work, will define the relevance of the issue addressed in this paper. A brief historical background is helpful in introducing the topic. The division of labor according to sex seems to have been present throughout history.¹ It was not until the nineteenth century, when the advance of technology brought about the Industrial Revolution, that large numbers of women began to enter the labor market. The owners of industries found it particularly profitable to employ women in place of men because they could be paid half of a man's wage and would endure worse work conditions. One of the early purposes of the feminist movement was to protect women from having to enter the labor market, seeking to defend their prerogative to care for their families.² The role of women in the home was respected and viewed as both necessary and honorable until the late 1950's, when once again the advance in technology led women into the public workplace. As household appliances made running a home easier, and as school attendance became a regular occurrence for most children, a significant number of educated wives had time to devote to supplementing the family income. This ability to work was complemented by the qualifications and willingness to work that resulted from the temporary employment of many women during the Second World War. The combination of these elements prompted large numbers of women to enter the labor market. This occurred first among families facing financial difficulty, but the improvement in the quality of life these families experienced led other families with less financial problems to follow their example. This trend was greatly supported by the rising modern feminist movement to empower women. With the publication of prominent books in the 1960's, such as Betty Friedan's *The Feminine Mystique*, the modern feminist movement greatly influenced the influx of women into the labor market. Its effect is evident today since over 60 % of all married women work in the public market.³

The large number of women entering the work force has had an unforeseen effect on family income. Before the 1960's, most married men in the United States earned a "family wage" which was higher than that of single men and women because it was understood that he was supporting not just himself, but an entire family. Unmarried men and women advocated the idea on the understanding that they would benefit from the family wage when they married, as was the case for a large majority of the

* We are especially grateful for the assistance and input provided by William W. Beach and Patrick F. Fagan from the Heritage Foundation. The usual disclaimers apply.

¹ See among others, Fuchs (1988); see also Mead (1952); Hartmann (1976), and Brown (1986).

² See among others, Robinson (1999), Robertson (2000), Fuchs (1988), Zollinger Giel (1995), Mancy (1991), and Skocpol (1992).

population at the time. When married women first entered the workforce, the idea of the family wage was still upheld, because most men were still the single earners in the family. But as it became common for a family to have a double income, employers no longer felt the need to pay the family wage. Women fought against the gender gap in wages, and soon their salaries grew closer to those earned by men. The result was that as women's incomes increased, men's incomes decreased. Women's income evolved from an extra income that increased the quality of life of the family to a salary needed to maintain the quality of life previously provided by her husband alone. This responsibility to support her family has been reinforced by the ideas put forth in the modern feminist ideology which upholds the glory of work in the labor force at the same time that it condemns work in the home as demeaning.

Today a woman is often considered just as responsible for providing family income as her husband, yet still retaining her responsibility for running the household and bringing up her children. This poses a dilemma since she cannot devote herself to a full time job and also give her children the comprehensive care that they deserve. As Sara Davidson, a radical feminist of the 1960's and a mother in the 1980's, said, "How to reconcile family and career is the crucial unresolved issue in women's lives."⁴ This impasse has caused an enormous growth in the use of childcare and with it, a proliferation of the questions asked about the cost, quality, and effects of childcare on the woman, the child, and on the family as a whole.

This paper is divided into four sections. Having presented a brief historical background of women's employment up through the present as an introduction to identifying the reasons why women work, the second section of the paper reviews the literature on maternal contribution to family income. It examines the three primary factors that determine how a woman's entrance into the labor market affects herself and her family. These factors are the amount of money she brings in by working, the monetary costs incurred by having a job, and the effect that her absence from the home has on herself and her family. The third section of the paper is a numerical analysis of the secondary incomes' contributions to family income at various income levels. The last section of the paper presents the conclusions.

Part Two: Material Contribution to Family Income: Literature Review

The influx of women into the labor market has sparked a body of writing encompassing a wide variety of issues related to women in the workforce. The literature generally concentrates on three

³ Furchtgott-Roth and Stolba (1984), p.27.

⁴ Davidson (1984), p. 54.

issues in particular: the gender gap in wages, ‘povertization’ of women, and the increasing need for child care. Regarding the gender gap in wages, the general consensus is that it has been shrinking slowly, so that on average women today earn 74% of men’s weekly wage.⁵ This disparity is attributed to a covert discrimination against women, along with other influences such as social conditioning and family responsibilities. The difference in earning ability is dramatically portrayed among single women with children, whose increased likelihood to live in poverty has been referred to as the ‘povertization’ of women. This phenomenon has escalated with the rising number of divorces and births out of wedlock, and engenders the problem of women who must often single-handedly earn enough to provide for their children. Besides needing to support their children, these women experience the difficulty of ensuring that their children are well cared for during work hours. Many working mothers today share this concern for quality childcare. As more mothers work, the scarcity of quality childcare and its high cost becomes a pressing issue. The lack of professional consensus on the effects of childcare is bewildering, and far more disturbing is the absence of research on the effects of adequate or poor quality childcare. Looking at the issues associated with the woman's entrance into the work force, one distinguishes several factors that will determine her influence on her family's situation.

There are primarily three factors that determine how a woman's entrance into the labor market will affect herself and her family. These are the amount of money she brings in by working, the monetary costs incurred by having a job, and the effect that her absence from the home has on herself and her family. Broader things such as the gender gap in wages, the cost of childcare, and the effects of childcare influence these factors. Although the relevance of each varies with family structure, they tend to influence all families and are important to consider when evaluating the effect of the mother’s income on the family. The rest of the literature review will discuss these factors in detail.

A. Factors Affecting the Working Mother’s Contribution to Family Income

1. Amount Worked

The amount of income a working mother brings into the home is most fundamentally connected to the number of hours she works. In order to comprehend the general earning patterns of working

⁵ U.S. Department of Labor, Women’s Bureau, *Facts on Working Women*.

mothers it is useful to look first at how many work part-time (less than 35 hours per week) and how many work full time (35 hours or more per week).

In 1998, 74% of all working mothers with children ages 18 and under worked full time.⁶ Because so much of the interest in working mothers centers on mothers with young children, it is also important to look at the percentage of mothers with children under age six who work full time. There is little disparity between these mothers and mothers as a whole - of working mothers with children under age six, 69.5% worked full time in 1998.⁷

Fewer working mothers work part time—of all working mothers with children under the age of 18, 26% worked part time.⁸ As was the case for mothers working full time, the percentage of working mothers with children under the age of six was similar to all mothers who worked part time. Of women with children under age six, 31% worked part time.⁹

2. Gender Wage Gap

It is commonly acknowledged that women usually contribute less to the family income than their husbands. While the purpose of this paper is to evaluate precisely how much that contribution is, it is important to first determine why this is so by identifying the factors that account for the smaller size of their income. The gender gap in wages is often perceived to account for this disparity. Historically there has always been evidence of a gender gap in wages. In 1890 the female/male wage ratio was about 0.45, growing to about 0.60 by 1930 where it remained for half a century.¹⁰ This has grown again since the 70's to 0.71 in 1995. While in the past much of this disparity has been attributed to discrimination, in recent years a number of other influences have been identified as affecting women's hourly wages. These influences are largely the result of personal choices made outside the workplace, the most significant of which is a woman's decision to have children.

Throughout economic literature, the presence of children has been shown to have more of an effect on a woman's earning capacity than nearly any other factor. Presser (1994) found that women in general continue to assume the primary responsibility for childcare and other household tasks, even in dual

⁶ Author's calculations taken from Labor force statistics from the current population survey, Table 5, Employment status of the population by sex, marital status presence and age of own children, 1998-99 annual averages.

⁷ *ibid.*

⁸ *ibid.*

⁹ *ibid.*

¹⁰ Fuch (1988), p.49.

earner couples. Many economists and sociologists hypothesize that women's family responsibilities explain, at least partially, gender differences in the extent and nature of women's employment.¹¹ Where family responsibility (as indicated by being married and having children) has any effect on the status or income of married women, it is a negative one.¹²

The effect of family and children on a woman's income has repeatedly proven to be significant when examined from various angles. Rosenfeld and Kalleberg (1990) found that differences in family effects account for 20% of the earnings gap in the United States. However, when examining the number of children instead of the presence of children, 25% of the income gap is caused by differences in family effects. In another estimation, Neumark and Korenman (1992, 1994) found that while marriage did not lower wages, having children did. In 1991 women without children made 95% of men's wages, all other factors accounted for, but mother's made 75% of men's wages.¹³

Effects of family characteristics on women's earnings have been interpreted as reflective of the negative consequences of certain occurrences. This includes the discontinuity in women's labor force experience and careers as well as women choosing occupations in order to maximize coordination between home and employment rather than income. Also, reluctance among employers to invest in women's human capital reflects negative repercussions as well as time and energy constraints on women's commitment to work.¹⁴

Despite children's negative effect on the mother's income, women continue choosing to have children. Women find psychological and physiological satisfaction through the love for their children. Journalist Anne Taylor Fleming describes this relationship, saying of it: There is "a yearning for closeness that isn't always possible with a man, even a husband. That is what babies give to women, and have been giving them for centuries: love with no lines, with an intimacy that is easier and often sweeter than sex."¹⁵ This strong love mothers have for their children is attested to by the large number of women who make sacrifices in their careers to have children. In 1998, 40% percent of employed women had children under the age of 18.¹⁶ This same relationship between mother and child is evident in a more disfigured form in the large number of women who become unwed mothers despite the availability of contraceptives and abortion, and the fact that when parents divorce and remarry,

¹¹ See Becker (1981).

¹² Rosenfeld & Kalleberg (1990). See also Rosenfeld (1980) and Sørensen and Clark (1983).

¹³ Waldfogel (1997) .

¹⁴ Waldfogel (1997).

¹⁵ Fuchs (1988). See also Flemming (1986), p. 6.

continuing contact between the mother and child seems more important than with the biological father.¹⁷ Recognizing how much importance women place in having children is necessary in order to understand many facets of the gender gap in wages.

i. Human Capital Acquisition

Differences in human capital seem to account for a significant portion of the gender gap in wages. In human capital theory, workers are seen as rational actors who make investments in their productive capacities to maximize lifetime income. The investments usually studied are education and on-the-job training, although the theory applies to other investments, such as effort, job search, geographic mobility and health.¹⁸ Human capital, such as education and on the job experience, is thought to reflect the acquisition of skills and other earnings-enhancing properties.¹⁹ Such reflections are considered important determinants of income.

There is an opposing body of thought, which holds that differences in the distribution of income, especially of human capital variables, usually do not explain much of the earnings or income gap.²⁰ Estimates suggest that no more than about half the sex gap in earnings is associated with mean differences in human capital investments.²¹ Proponents of human capital theory claim that more of the wage gap would be explained if more precise and extensive measures of the qualifications of individuals associated with productivity were employed. This argument has become less persuasive as measurement of human capital has improved and at least half of the wage gap remains unexplained. However, more aspects of human capital investment, such as motivation to maximize earnings and the content and quality of education and on-the-job-training have yet to be measured.²² Irrespective of the precise amount, human capital is recognized as being a major factor in the gender gap in wages.

¹⁶ Author's calculations, based on Labor force statistics from the Current Population Survey, Table 5, "Employment status of the population by sex, marital status presence and age of own children", 1998-99. Annual averages were used.

¹⁷ Fuchs (1988) and Zill (1988).

¹⁸ Marini (1989), Becker (1964), and Mincer (1974).

¹⁹ Rosenfeld & Kalleberg (1990), Mincer (1974), and Sewell & Hauser (1975).

²⁰ Rosenfeld & Kalleberg (1990). For further discussion see Duncan & Corcoran (1984), England & McCreary (1987), Madden (1985), Taylor *et al* (1986), and Jones (1983) for contrasting results from Australia where he found only a small residual.

²¹ Marini (1989), Mincer & Polachek (1974 & 1978), Sandell & Shapiro (1978), Corcoran & Duncan (1979), Mincer & Ofek (1982) and US Bureau of the Census (1987).

²² Marini (1989).

ii. Education

One of the initial differences between men and women in human capital acquisition has been their education. The median number of years of schooling attained by women workers is about the same as those attained by men, but other differences in the educational distributions of the two sexes affect the sex gap in earnings.²³ One such difference is the level of education each tends to reach. Although women now earn about half the Bachelor's and Master's degrees awarded, they are less likely than men to earn doctorates and first professional degrees.²⁴

Differences in education also include a tendency for men and women to lean toward different areas of study, with women being less likely to invest in wage enhancing human capital. This occurs at the level of secondary and higher education, where the sexes take different courses and specialize in different fields. For example, from high school onward, males take more advanced mathematics and natural science courses than do females.²⁵ The distributions across vocationally oriented programs in high school also differ markedly.²⁶ These sex differences in fields of specialization in college and graduate school have an important effect on the sex gap in earnings among college graduates.²⁷ Although sex differences in fields of specialization at the college level have narrowed in recent years, they still remain large.²⁸

To some it appears strange that increases in women's education and labor force participation have not produced a significant reduction of the wage gap over the last several decades (from 1979 to 1997, the gap in weekly wages fell from 37.5% to 25.6%).²⁹ Economists have argued that the stability in the wage gap is consistent with the lack of change in relative skills of female and male workers.³⁰ Between 1950 and 1970, the educational attainment of men grew more rapidly than that of women, primarily because men received college and graduate education earlier and in greater numbers than women.³¹ However, more recent increases in women's educational attainment have now almost eliminated sex differences in the attainment of doctorates and advanced professional degrees. For example, while in 1960, women received 2.7% of all professional degrees and 10.5% of all doctorates;

²³ Marini (1989) and Blau & Ferber (1986).

²⁴ Marini (1989), Blau & Ferber (1986), and US Bureau of the Census (1986).

²⁵ Fox *et al* (1979) and Marini & Brinton (1984).

²⁶ American Institutes for Research (1980).

²⁷ Marini (1989), Daymont & Andrisani (1984), US Bureau of the Census (1987).

²⁸ Marini (1989), Jacobs (1985), Blau & Ferber (1986), US Bureau of the Census (1986 & 1987).

²⁹ US Department of labor, Women's Bureau, *Facts on Working Women*.

³⁰ Marini (1989), Smith & Ward (1984), and O'Neill (1985).

today they receive 38.5% of all professional degrees and 40.7% of all doctorates.³² Furthermore, many of these degrees are awarded in fields previously entered mainly by males. In 1995, over 40% of all law degrees and all medical degrees were awarded to women.³³ These changes are somewhat reflected in the recently declining sex gap in earnings among young workers. Among young people ages twenty-seven to thirty-three who never had a child, women's earnings approach 98 percent of men's earnings.³⁴

The recent changes in women's earnings due to increases in education can be expected to be long term. American women who work full time behave according to the opportunity-cost framework, in which higher education considerably decreases the propensity of leaving full-time jobs. Each additional year of schooling decreases the exit rate by almost 5%. No statistically significant numbers have been found for exiting part time jobs, although education has a statistically significant positive effect on reentry for both full-time and part-time employment.³⁵

iii. On Job Training

Another prominent aspect of human capital on the gender gap in wages is on the job training. On the job training occurs in formal programs provided by employers or informal training by supervisors and coworkers, and simply by doing the job. Formal on-the-job-training and labor market experience, particularly experience in the same job and with the same employer, bear positive relationships to the earnings of both men and women.³⁶ However, men and women sometimes experience differences in on the job training. These differences often result in women earning less than do men. Differences in on the job training have been attributed to a number of sources.

The positive relationship of on the job training to earnings is of the same magnitude for the two sexes, although because different types of experience are not equally valuable and men spend relatively more time acquiring the more valuable types of work experience, such as formal and on-the-job-training, the relationship of overall work experience is greater for men than for women. Part-time work experience bears little relationship to earnings growth for either sex, but as women tend to work part-time more than men, their earnings are lower relative to those of men.³⁷ The significance of part-time work on on-the-job training for working mothers is particularly important because in 1998, 36% of

³¹ Marini (1989).

³² Robertson (2000) and US Department of Education (1996).

³³ Furchgott-Roth & Stolba (1999), pp. 26-27.

³⁴ *Women's Figures*, p.xvii.

³⁵ Drobnic *et al* (1999).

³⁶ Marini (1989), Mincer & Polachek (1974 & 1978), Sandell & Shapiro (1978), and Corcoran & Duncan (1979).

employed mothers work part-time compared to 3% of employed fathers.³⁸ This means working mothers have a reduced opportunity to contribute to family income.

The main reason for the difference regarding on-the-job training between men and women is that women complete fewer years of on-the-job-training and acquire less labor market experience than men. Skills typically increase with added years on the job and many women forgo developing these skills by leaving the labor market when their children are born. “A woman who has one child will work, on average, about 2.5 years less over her lifetime than a woman with no children. A second child results in an additional two years of withdrawal of the woman from the labor force, and one additional year for a third child.”³⁹ Since American women typically raise two children, these women will have lost, on average, 4.5 critical years of labor market experience in addition to the skill depreciation that accompanies time away from work.⁴⁰ Furthermore, the critical period of intense investments in worker skills often conflicts with a woman’s normal childbearing years, resulting in a large loss in human capital.⁴¹ For every year spent out of the labor force, the resulting loss in human capital decreases women’s income by as much as the income she does not earn.⁴² Other researchers found that although women experience some loss in earnings during periods of withdrawal from the labor force, possibly because of the resulting depreciation of human capital, their earnings potential is restored rapidly after reentry to the labor force.⁴³

Besides the direct influence of childbearing on women’s presence in the workforce and subsequent acquisition of on-the-job training, it also influences women’s on-the-job training indirectly. Employers are sometimes unwilling to invest job related human capital in women when they are uncertain that a mother will remain in the workforce. In this sense, women, whether or not they have children, are at more of a disadvantage than men due to their ability to bear children.⁴⁴ This might explain why years of experience increase both the chances of receiving on-the-job-training and the skill level of one’s current job much more for men than for women.⁴⁵ A second possibility is that, because individuals are assumed to be able to choose the timing and amount of their investments in on-the-job-training so as to maximize their lifetime earnings, women who plan to leave the labor force may defer

³⁷ Marini (1989), Corcoran & Duncan (1979) and Corcoran *et al* (1983).

³⁸ Author’s calculations from the Bureau of the Census.

³⁹ See Cogan & Berger (1978).

⁴⁰ J.P. Smith (1989) and Marini (1989).

⁴¹ J.P. Smith (1989).

⁴² Fuchs (1989).

⁴³ Marini (1989), Corcoran (1979), Mincer & Ofek (1982), and Corcoran *et al* (1983).

⁴⁴ Fuchs (1988).

on-the-job-training and therefore experience slower wage growth prior to interruptions than do individuals who do not anticipate future interruptions. However, in opposition to both of these theories, Corcoran *et al* (1983) and Gronau (1988) found that there is no evidence proving that a prospective withdrawal from the labor force is associated with lower job requirements or lower wage growth prior to the interruption.⁴⁶

A final prospect, little mentioned, is that women's earnings may affect their attachment to the labor market, with lower wages decreasing this attachment.⁴⁷ This becomes less of a possibility today since a woman has the ever-increasing opportunity to pursue a rewarding career.

iv. Dedication and Availability

A third aspect of human capital theory that contributes to gender gap in wages is the effort one dedicates to one's job. Becker (1985) claimed that because women are primarily responsible for household work and childcare, they invest less effort per hour in market work than married men. Thus, even if the amount of time spent in the labor force by the two sexes were equal, their earnings would differ⁴⁸. A second group of thought proposes that women dedicate less effort to their work, not because they hold it unimportant, but because children cannot be left unattended. According to Reskin and Hartmann (1986), "[t]he care of children...still appears to be largely women's responsibility, and this responsibility undoubtedly conflicts with their entrance into and advancement in a number of occupations that routinely require overtime, job-related travel, or inflexible or irregular hours."⁴⁹ One conflict often mentioned is the case in which a child falls ill and can not attend daycare. This often times requires the mother to remain home. Leigh (1983) found that when a young child is present, women are more likely than men to be absent from work, even at equal levels of education and wages.⁵⁰

However, there are pieces of evidence that do not support the above arguments. Being married and having children have been found to affect a woman's wages only indirectly via effects on measured qualifications other than effort, such as labor force experience.⁵¹ More specifically, Corcoran & Duncan (1979) have found that sex differences in labor force attachment, including absenteeism and self-

⁴⁵Marini (1989), Duncan & Hoffman (1978) and Gronau (1988).

⁴⁶ Marini (1989).

⁴⁷ Marini (1989) and Gronau (1988).

⁴⁸ Marini (1989).

⁴⁹ Reskin and Hartmann (1986), p. 134.

⁵⁰ Leigh (1983), p.360. See also Fuchs (1988).

⁵¹ Marini (1989), Suter & Miller (1973), Mincer & Polachek, (1974), Treiman & Terrell (1975), Sandell & Shapiro (1978), Corcoran & Duncan (1979) and Hill (1979).

imposed restrictions on job choice as well as their effect on sex differences in earnings, to be either unrelated or weakly related to earnings.⁵²

Rather, almost the opposite phenomenon seems to be true. Social psychological research on internal standards of personal entitlement as well as sex differences in self-reports of work effort,⁵³ suggests that, all else equal, women are more likely to allocate more effort to work activities than men do.⁵⁴ This is supported by the fact that today fewer and fewer women leave their jobs while their children are very young.⁵⁵ It seems that women's dedication to their work will only intensify. Drobic *et al* (1999) found that women who are employed and stay employed for longer periods accumulate work experience and other resources that increase their career prospects, strengthen their attachment to the labor market, and increase the opportunity costs of leaving their job.

The conclusion one draws from the literature in this area is that women are dedicated to their work and that a lack of effort does not contribute to the gender gap in wages. What it also makes clear is that women are devoted to their work in spite of their continued responsibility for their families. The result is that women are under a great deal of pressure. Stephanie Coontz(1997) makes this point stating “[w]omen are committed to job despite guilt, time stress and marital conflict in juggling work and family life.”⁵⁶ Women do not lose in wages when they take on both a family and a career, but it might be argued that what they earn in income they lose in stress. This will be discussed later in the paper.

v. Occupational Choice

Aside from human capital, women's choices in occupation also play a very large role in the gender gap in wages. Women are distributed differently across occupations and industries than men. In the United States, for example, they are more likely than men to be in clerical occupations and in service industries. The occupations women hold tend to be predominately female,⁵⁷ often paying less than predominately male ones⁵⁸.

Although traditionally female occupations pay less than traditionally male occupations, it must be recognized that these occupations are partially responsible for the decrease in the gender gap in

⁵² Corcoran & Duncan, 1979; Marini, 1989.

⁵³ Bielby & Bielby (1988).

⁵⁴ Marini (1989), Major *et al* (1984), and Glass & Camarigg (1992).

⁵⁵ Spain & Bianchi (1996)

⁵⁶ Coontz (1997), p.64.

⁵⁷ Reskin & Hartmen (1986).

⁵⁸ Rosenfeld & Kalleberg (1990) and England & McLaughlin (1979).

wages. Wage inequality in the United States has been increasing among both men *and* women.⁵⁹ It is this high level of wage inequality that puts an exceptionally large penalty on being below average in the wage distribution, which includes many predominately female jobs. However, evidence suggests that rising skill prices did not affect men and women in the same way. Katz and Murphy (1992) find that between 1979 and 1987 shifts in demand for output across industry-occupation cells favored women over men for educational levels below a college degree, and favored men over women for those with a college degree; overall, demand shifts favored women over men.⁶⁰

A number of reasons have been put forth to explain women's tendency to fill certain occupations. The human capital model argues that women are less likely to make investments that only pay off if they sustain high-level commitment to the labor force and will depreciate during periods outside the labor force. This reasoning is often used to account for sex differences in fields of specialization and job choice. Following this reasoning, women may avoid fields where the rate of technological change is rapid and concentrate instead on fields where the pace of change is slower. Similarly, they may choose jobs that do not penalize discontinuity in labor force participation, jobs requiring less investment in on-the-job-training, particularly firm-specific training, jobs which can be expected to have lower rates of wage appreciation and higher starting wages with lower rates of depreciation during periods spent out of the labor force.⁶¹ Thus, women employed in predominately female jobs would experience lower earnings returns with each year of labor market experience, higher starting wages, and lower rates of depreciation when out of the labor force than predominately male jobs. There is little to support this: There is little mobility between predominately male and predominately female occupations. Women in predominately female occupations do not experience lower wage depreciation than women in predominately male occupations. When education is held constant, the starting wages of women in predominately female occupations are lower than the starting wages in predominately male occupations. Women with continuous labor force participation are no less likely to be in predominately female occupations than women who have experienced labor force interruptions. There is no association between women's ages and number of children and employment in a predominately female occupation.⁶² Therefore, it must be concluded that the human capital model does not account for women's tendency toward certain occupations.

⁵⁹ Katz & Murphy (1992) and Blau & Kahn (1994).

⁶⁰ Blau & Kahn (1994).

⁶¹ Marini (1989); Zellner (1975), Polachek (1978 & 1981).

⁶² Marini (1989), England (1982 & 1984), Corcoran *et al* (1984), Daymont & Statham (1983), and Rosenfeld (1984).

Because women tend to continue to assume the primary responsibility for child-care and other household tasks, even in dual earner couples, economists argue that this affects their choice of occupations and their allocation of effort to household and workplace activities.⁶³ While the argument that women choose jobs with higher starting salaries but a less steep rise in wages has been debunked, there is the possibility that women contribute to their own “ghettoization” because they take job choice and time for child rearing into greater consideration than men, and act accordingly. There are a number of reasons women tend to occupy jobs in the service sector: 1. There is no premium on physical strength. 2. Work hours are more flexible 3. There are more opportunities for part time work 4. Such jobs are more often in or near residential areas, reducing the time spent commuting 5. The transformation of US into a service economy has provided tens of millions of new jobs for women.⁶⁴ (This last point is partly due to the entrance of women into the workforce, which increased the need for childcare, to eat out, and personal and professional services.)

Several other explanations have been put forth as well. Some people reason that when women are crowded into female-dominated occupations, it increases the supply of workers for these jobs and ultimately lowers the wages an employer can pay to get workers to fill such positions.⁶⁵ Others find that the occupational goals of boys tend to be more in sync with their gender than those of girls, and even preschoolers express sex-typed occupational preferences. Men tend to place higher value on status, power, money, and freedom from supervision, and men may be more willing to take risks. Women more often value working with people, helping others, and creativity.⁶⁶ This last point might explain the phenomenon that women who have begun work in science and engineering jobs, clearing any educational and social hurdles impeding entry, are much more likely to leave these professions than comparable men.⁶⁷ Marriage and children do not seem to be major factors explaining the differences in occupational exit behavior.⁶⁸ Lastly, job choice may also reflect a preference for working with one’s own sex.⁶⁹

⁶³ Drobnic *et al* (1999) and Presser (1994).

⁶⁴ Fuchs (1968).

⁶⁵ Bergman (1986).

⁶⁶ Spain & Bianchi (1996).

⁶⁷ *ibid.*

⁶⁸ Preston (1994).

⁶⁹ Beutel & Marini (1995) and England & Brown (1992).

vi. Hours: part/full time

Another factor that has been identified as a possible influence is whether one works a part-time or a full-time job. In the United States women are much more likely to work part-time; in 1998 26% of all employed women and 11% of all employed men worked part-time. When one accounts for employed women and men with children under age eighteen, one finds a much bigger difference; 36% of employed mothers work part-time, as opposed to 3% of employed fathers⁷⁰.

Household work and the presence of young children require extensive inputs of time that are difficult to combine with full time employment. Because most women take primary responsibility for childrearing, it is proposed that working part-time should be a common strategy of mothers of young children. Part-time work may offer the flexibility required to meet family obligations and may allow women to maintain ties to the labor market. By combining two tasks – part-time work and childcare – women can maximize their investments in both sectors. According to reasoning similar to that used in occupational grouping, women take lower paying jobs in return for shorter, more flexible hours.⁷¹

Evidence on the relationship between family responsibilities and part-time work remains inconclusive. Fuchs (1988) states that statistical analyses of working women show that even after controlling for age, education, and similar factors, the presence of a young child increases a woman's probability of working part-time by almost 10 percentage points. Drobic *et al* (1999) found evidence pointing in a different direction. They report that in the United States, the presence of both preschool and school aged children has a positive effect on women leaving part time work and only that women with older children show an increased statistically significant tendency to accept part-time jobs. The above corresponds to women's explanation of why they work part-time, usually citing the need to work at home.⁷²

Other studies have looked at the role of part-time work in women's employment by looking at its affects on women's wages, promotions, and other benefits,⁷³ or by whether women differ in their

⁷⁰ Author's calculations, based on Labor force statistics from the current population survey, Table 5, Employment status of the population by sex, marital status presence and age of own children, 1998-99 annual averages.

⁷¹ Drobic *et al* (1999).

⁷² Fuchs (1988), p.46.

⁷³ Corcoran *et al* (1984).

employment behavior after giving birth.⁷⁴ These studies report that a direct link between family demands and part-time or full-time work has seldom been verified.⁷⁵

Although it is difficult to understand the reasons why women tend to work part time more than men, it seems to be more by preference than inability to do something else. One indication is that part time work is just as prevalent among women with considerable education as it is for women with little education. Nor does it seem to be a result of gender inequality. In Sweden, where much has been done to promote economic equality between men and women, more women work, women's wages are closer to men's, and there is more subsidized childcare. However, a large number of women work part time. The ratio of male to female part time workers is one to six, much higher than in the US.⁷⁶

vii. Indirect results of other factors

There is reason to believe that the gender gap in wages is partly accounted for by factors that do not stem from decisions on the part of the men and women who make up the labor force.

One such factor is the legislation and policies of a country. Treiman and Roos (1983) found similarities across countries in the processes for income determination. They interpreted these as indicating "deeply entrenched institutional arrangements that limit women's opportunities and achievements."⁷⁷ Rosenfeld and Kalleberg (1990) find that legislation and policies can influence women's employment through the integration of employment and family, such as providing parental leaves and daycare, given a greater responsibility for raising children.⁷⁸ Some find the policies in the United States restrictive of women's employment. The United States is the only industrialized country without guaranteed maternity leave. Women only receive legal protection against dismissal for taking time off from a job for childbirth. They can receive disability benefits while on maternity leave, but these and the length of leave vary from one employer to another.⁷⁹ Even these policies are viewed by some as discouraging the employment of women because while they purport to be protecting women by allowing maternal leave and providing child care policies, these are really only likely to further dissuade employers from hiring women.⁸⁰ Another facet of the current United States legislation that limits women's employment opportunities is the difficulty it places on those who would like to work from

⁷⁴ Desai & Waite (1991).

⁷⁵ Drobic et al (1999), Ssee, however, Blank (1989) and Perry (1988).

⁷⁶ Fuchs (1988).

⁷⁷ Treiman & Roos (1983), p.612.

⁷⁸ Also see Kamerman (1979).

⁷⁹ Rosenfeld & Kalleberg (1990).

their homes. This would enable a large number of women to work who currently don't want to leave their children, or who can't afford childcare.

Another indirect influence on the gender gap in wages may be differences in socialization. Differences in the social networks of men and women may affect their access to jobs and thereby play a role in explaining the wage gap. Some evidence indicates that personal contacts constitute important sources of information and influence in the job search process; studies suggest that such contacts are likely to be used more by men than by women⁸¹. Granovetter (1974) found that men who heard about their jobs through a personal contact had higher incomes than those who used more formal means of finding a job, although Corcoran *et al* (1980) found that the use of personal contacts by either sex produced only short-term wage advantage.⁸²

A third factor that might have an effect on women's earning ability is their age. The relative earnings of women under 35 began to increase during the 1970's, and it is the earnings of women in this age group that have shown particularly substantial increases since 1980.⁸³ As previously mentioned, data from the National Longitudinal Survey of Youth show that among people ages twenty-seven to thirty-three who have never had a child, women's earnings approach 98% of men's earnings.⁸⁴ Analysis of age related differentials in relative earnings within cohorts suggests that at least some of the improvement in the relative economic position of younger women will be retained.⁸⁵

viii. Discrimination

A very prevalent view is that women earn less not because of their own choices, but as the result of sex discrimination. Labor market discrimination by sex exists when "two equally qualified individuals are treated differently solely on the basis of their sex."⁸⁶ Several theories of discrimination exist.

Becker provided the basis for the modern neoclassical analysis of discrimination, viewing it as derived from a personal prejudice or "taste" for not associating with members of a particular group. Such tastes might be held by employers, coworkers, or customers and could result in employers not hiring someone from that group. In the case of sex discrimination, employers with tastes for

⁸⁰ Folbre (1994).

⁸¹ See also Campbell (1988).

⁸² Marini (1989), Granovetter (1974), and Corcoran *et al* (1980).

⁸³ Marini (1989), Smith & Ward (1984), O'Niell (1985), Fuchs (1986), and Bianchi & Spain (1986).

⁸⁴ Furchtgott-Roth & Stolba (1999), p.xvii.

⁸⁵ Marini (1989), Bianchi & Spain (1986), and Blau & Ferber (1986).

discrimination act as if there is a non-pecuniary cost to associating with women in socially inappropriate roles. They hire women only at a lower wage than men. When discrimination is widespread and the number of women seeking jobs is high, some women must accept lower wages to obtain jobs.⁸⁷

Bergman (1974) has argued that an aversion to hiring women has resulted in the crowding of women in a limited set of predominately female occupations. He claims that this crowding reduced the wages of women in these occupations relative to the wages of men whose employment is not as restricted.⁸⁸

A third view proffers that when men restrict women to lesser paying jobs, they pay the small price of a reduction in women's earned contribution to the family in order to preserve their bargaining power in the household and the labor market. According to this way of thinking, men preserve their advantage without any coordinated effect by making women's subordination seem necessary – someone must sacrifice his individual interest to keep the home (and society) together. They believe women are more suited to such work, therefore they should look after the home while the men are employed. However, this reasoning does not seem to hold true because it does not explain why women are at an economic disadvantage. One does not see this disadvantage in other partnerships where jobs are decided by comparative skill. If women were better at caring for children but did not want to, while men were concerned that it be done, men would have to pay highly to have their preference, and it would be the women who have the bargaining power. This is not the case, it must be concluded that women have a higher demand for children at an economic disadvantage.⁸⁹

Some models of statistical discrimination develop the possibility that employers discriminate not out of personal prejudice but because they perceive that, on average, women are less productive and/or less stable employees than men. Due to a lack of prior knowledge of the applicants, employers will sometimes depend on such stereotypes. Such statistical discrimination is thought likely to be pervasive because the existence of consensual beliefs about differences between the sexes, or sex stereotypes, is well documented.⁹⁰

The problem with theories about discrimination is that there has been little attempt to evaluate empirically and to compare alternative theories of discrimination. Most research on discrimination has

⁸⁶ Blau & Ferber (1986), p.229

⁸⁷ Marini (1989).

⁸⁸ See also Marini (1989).

⁸⁹ Fuchs (1988), p.67.

⁹⁰ Marini (1989), Phelps (1972), Arrow (1973), Aigner & Cain (1977), Broverman *et al* (1972), and Williams & Bennet (1975).

sought to document the existence and extent of discrimination. Attempts to measure sex discrimination in earnings usually employ the very unscientific “residual” approach, whereby sex differences in earnings that cannot be accounted for by sex differences in productivity-related characteristics are attributed to discrimination.⁹¹ Analyses employing the residual approach suggest that discrimination not only exists but is extensive. However, this approach has numerous problems, which make meaningful conclusions about discrimination impossible to draw.

B. Reasons for Income of Married Women

1. In Married Couple Husbands Income not Sufficient

A number of women work in order to supplement their husband’s insufficient contribution to the family income. This situation has become increasingly common as real wages fell for men and families needed additional income to stay afloat. One can trace the events that lead to this state of affairs. Until 1969 the highest percentage of working wives was among the families of lower earning husbands. With the advent of the working woman as a common phenomenon, employers no longer viewed the husband as the sole provider for his family and stopped paying men the family wage. As the median family income began to fall below the family wage standard and the need for additional family income became more evenly distributed across the husband’s income spectrum, the wives of median- and high-earning husbands began supplementing the family income.⁹²

One point often raised in relation to women’s entrance into the labor market is that between 1969 and 1989, the movement of women into the workforce was dominated by women earning high salaries who were married to men with high salaries, suggesting that the husband’s earnings don’t always strongly affect a wife’s decision to work.⁹³ Part of this, as we have just seen, is because a number of lower income women were already working. However, it is interesting to look at the percent of income that high earning wives contribute to the family: the wives’ contribution to the family income is the same percentage of total family income in the top, middle and bottom levels. As income increases so does the number of working wives; less than 1/3 in the lowest sector work, whereas 60-70% in the upper two do. Mothers contribute the same percentage to the family income now as they did in the early

⁹¹ Marini (1989), Coverman (1986), and Parcel & Mueller (1983), p.115.

⁹² Robertson (2000).

⁹³ *ibid.*

1900's when only 5% of mothers worked, roughly 20% of total family income.⁹⁴ Other sources, however, mention higher percentages for married women working full time, earning 41% of family income, and 23% of women who contribute over 50%.⁹⁵

The decrease in husband's wages has been accompanied by government policies which don't acknowledge the necessity of protecting the family, since the family is no longer valued as the basis of economy, but rather as individuals. The difficulty of families to thrive under such policies is made clear in a Congressional Budget Office (CBO) (February 1988) report showing that families with children have not done nearly as well economically as have other households. While the median family income rose 20% between 1970 and 1986, the median income for married-couples with children rose only 13%, despite the dramatic rise in maternal employment. The CBO concedes that families with children needed more workers to reach a given income level: married couples with two full time workers had a median income roughly equal to that of childless families with just one worker.⁹⁶

Under such circumstances the financial cost to families in which the wife chooses to focus her efforts on the home and children has become significantly steeper, with median family income of those families falling by 3.5% compared with a rise of almost 5% for families in which the wife works⁹⁷. Carlson (1993) calculated that in 1976, 40% of all jobs still paid enough to support a family of five in minimal comfort. By 1987, only 25% of jobs paid such a wage. The difficulty experienced by single earner families becomes more evident when viewed with respect to dual-earner families. In 1969, dual earner couples made up only 41% of married couple families with incomes over one-hundred thousand dollars, today they make up 98% of that category.⁹⁸

One of the difficulties confronting families is that, as the family wage ceases to be the norm, prices are adjusted to dual-income family standards across the income spectrum. Carlson (1993) shows that between 1970 and 1988 the cost of housing for families where the wife is not in the paid labor force rose by 64% of family income, compared with a 38% increase for families with working wives. He maintains that similar shifts in the terms of trade, to the disadvantage of single earner families, could be plotted for other commodities.⁹⁹ Similar shifts have been reflected in the inflation of the price of homes.

⁹⁴ *Income Packaging in the Welfare State*

⁹⁵ Spain & Bianchi (1996).

⁹⁶ Carlson (1988) and Congressional Budget Office Report, February 1988.

⁹⁷ Calculated by Robertson, Bureau of the Census.

⁹⁸ Robertson (2000), Carlson (1993), and Furchgott-Roth (1995);

⁹⁹ Carlson (1993), p.84)

In 1989, nearly 80% of all homebuyers came from two income households. At the same time the cost of education rose nearly three times faster than household income between 1980 and 1994.¹⁰⁰

The above trends illustrate the increasing need for mothers to enter employment in order to supplement their husband's income and maintain a constant standard of living for their family. Ironically, rather than bettering the situation for families, an increase in dual earner couples seems to have denied a large number of women the freedom to choose between raising children and work. Often times nowadays, certain circumstances many dictate that they work.

2. In Single Parent Family, Only Alternative to Poverty

Another very prominent reason that mothers work is that in a single parent family the mother's income is the only income and the only insurance against poverty. Nevertheless, even with a woman's ability to work, numerous studies show that divorce usually impoverishes women and children while enriching men.¹⁰¹ Because women's advocates have effectively abolished all remaining protections for women in the law on the theory that the principle of "equal treatment" is essential for women's advancement, courts are less likely to award custody of children to the wife in a divorce proceeding. This makes women more likely to agree to a reduced settlement in order to retain custody.¹⁰²

One reason that a single mother's income is the only alternative to poverty is that child support is not enforced. Child support is defined as a transfer of income to a child living apart from a parent. The traditional private child-support system condoned and thereby fostered parental irresponsibility, was rife with iniquity and contributed to the poverty and welfare and poverty dependence of single mothers and their children. Only six of ten mothers potentially eligible for child support had an award. Of those legally entitled to support, only half received the full amount, and one-quarter received nothing. Awards were too low and too frequently updated to keep pace with either inflation or increases in the nonresidential parent's income.¹⁰³

Although many people believe that non-resident fathers did not pay child support because they were too poor, research indicates that poverty is a small part of the problem. According to the two most widely used child support guidelines, based on the incomes of nonresident fathers and the share of income that should be devoted to child support, in 1983 nonresident fathers should have been paying

¹⁰⁰ American Council on Education (1998).

¹⁰¹ Gallagher & Defoe Whitehead (1997).

¹⁰² Robertson (2000).

¹⁰³ Garfinkle (1994).

between \$25 billion and \$32 billion in child support, when in fact they owed only \$9 billion and paid only \$7 billion. The majority of nonresident fathers paid no child support during the course of the year and suffered no consequences. At the same time thousands of nonresident parents were jailed for failure to pay support.¹⁰⁴

3. Sense of Fulfillment of Mother

Another reason many women pursue a career is for their own development and sense of fulfillment. Women who do paid work, researchers have consistently found, feel less depressed, think better of themselves, and are more satisfied with life than women who do not do paid work. One reason some workers may feel this way at work is that they feel more appreciated and more competent there. Women were not more likely than men to say they felt more appreciated at home. Besides the satisfaction their work affords them, employment opens another social network to women. Women were far more likely than men to have the most friends at work. Paid work, psychologist Grace Baruch argues, “offers such benefits as challenge, control, structure, positive feedback, self-esteem...and social ties.”¹⁰⁵

The problem with this view is that it defines the person by, and limits his importance to, his or her earning ability. It is based on the assumption that a woman cannot respect herself unless she is a successful member of the labor market. Inherent in such an assumption is the idea that one’s home and family do not provide the opportunities for personal development that the workplace offers. It encourages a woman to think primarily of herself above the family, which she has brought into being.

Although many women work for the satisfaction they receive from it, their families still make demands of them, which they cannot ignore; the attempt to balance work and family often leads to high levels of stress, which undermine the very sense of fulfillment that is its cause. This aspect of women’s work force attachment will be addressed later in the paper.

4. Bargaining Power

A fourth reason why many women become employed is in an attempt to increase their power within the marriage. Wives have more power in marriage when they have higher earnings.¹⁰⁶ However,

¹⁰⁴ Garfinkle (1994).

¹⁰⁵ Hochschild (1997) and Baruch (1987).

¹⁰⁶ Blood & Wolfe (1960), Blumberg & Coleman (1989) and Scanzoni (1972).

contrary to anticipations, traditional expectations within marriage, especially regarding the division of labor and breadwinning, are resilient.¹⁰⁷

As more women have moved into paid labor, research on marital power has demonstrated that these resources have a relatively minimal impact on women's power in terms of control over money, decision-making, and the division of domestic labor. However, these studies were of conventional couples in which the husband earns more than the wife.¹⁰⁸

It is in couples where the woman earns more than the man that women would be expected to have the most bargaining power concerning the housework they do and the decisions that are made. Surprisingly, this is far from true. Most spouses, especially husbands, dismiss the idea that a link exists between money and power, and status reversal wives seem to be the most uncomfortable with the idea. Status reversal women eschew any attempt to paint themselves as superior to their husbands, as staking some claim to an extra measure of control over money or decision making, some doing so even while realizing that, if they were in that position, their husbands would have that kind of control.¹⁰⁹

Decision-making patterns don't seem to be related to income and status variables or expertise, but they are strongly influenced by gender, affording the husband with greater control. Many of these status reversal wives back away from whatever power they might derive from their income and status, either giving up control or adopting strategies that make it appear that their husbands are in control.¹¹⁰

The increase in earnings ability seems to have as little effect on the care of the house. Wives in both status reversal and conventional couples maintained responsibility for running the household and making sure things got done. Furthermore, despite the economic and domestic contributions that status-reversal wives make to their families, many of these women feel they don't contribute enough. Half the status reversal wives feel they should be doing more housework and childcare and a significant proportion already carry out most of the household burden. This is an expectation they have for themselves because their husbands think they do "plenty", and because status reversal wives tend to receive more help from their husbands than do conventional wives.¹¹¹

Rather than increasing women's satisfaction with their marriage high earning ability seems to have a negative effect. More than half (64%) of status-reversal couples are dissatisfied with their

¹⁰⁷ Rogers, 1999; Blair & Lichter, 1991; Brayfield, 1995; Blumstein & Schwartz, 1983; Thompson & Walker, 1989.

¹⁰⁸ Tichenor (1999), Berk (1985), Blood & Wolfe (1960), Blumberg (1984), Blumstien & Schwartz (1983 & 1989), Hochschild (1989), Pleck (1985), Saphilios-Rothschild (1967), Scanzoni (1978), and Whyte (1990).

¹⁰⁹ Tichenor (1999) and Rogers (1999).

¹¹⁰ Tichenor (1999) and Blumberg (1991).

¹¹¹ Tichenor (1999).

relationship on some level, and for both husbands and wives the tension revolves around the fact that husbands are not meeting their traditional obligations of income and status. Couples achieved more equitable relationships because of the spouse's determination to subvert traditionally gendered divisions of labor and power not as a goal, but as a part of their efforts to create more companionate, collaborative marriages.¹¹²

C. Expenditures Incurred as a Consequence of Holding a Job

When women, particularly mothers, enter the workforce, they do not receive the full benefit of their earnings because of the expenses which arise upon their exit from the home into the workplace. The greater the women's position within the home, the greater the costs of working since more of the women's role must be supplemented. The purpose of this next section is to identify the costs accrued when a woman goes to work and the role that these costs play in the woman's ability to contribute to the family income.

1. Childcare

i. Amount

The amount of childcare a family employs shows little relation to total family income, but is directly proportional to the amount a mother works. Mothers who can earn more are likely to have children who receive non-maternal care earlier and in greater quantity. Mothers in low income families also tend to employ extensive amounts of childcare. Their income comprises an important part of family income and so they return to work shortly after childbirth. Mothers with high levels of work commitment tend to return to work more quickly after childbirth than those who are less committed and they also use childcare early and in great quantity. Mothers who report relatively high levels of separation anxiety are likely to stay home full time with their children.¹¹³

¹¹² Tichenor (1999), Risman & Johnson-Sumerford (1983), and Shwartz (1994).

¹¹³ NICHD (1997), Leibowitz *et al* (1992), Symons & McLeod (1993), Symons & McLeod (1994), Volling & Belsky (1993), Hock *et al* (1988), and McBride & Belsky (1988).

ii. Type

Of mothers with preschoolers: ¼ use center-based care, ¼ use non-relative family care, and ½ use relative care.¹¹⁴ Because some types of childcare are expensive and because desirable childcare arrangements are not always available,¹¹⁵ parents do not always select the childcare that they consider ideal. Mason and Kuhlthau (1989) found that care by the mother clearly remains the ideal type of care for a majority of women, especially when infants and toddlers are involved. Even when the mother cannot care for her child, most of the women do not regard a modern day-care center as ideal, the majority viewing the father as the ideal caregiver when the mother is unavailable.¹¹⁶ However, the entrance of mothers into the labor force has not been accompanied by much increase in fathers' participation in domestic labor, though modest increases have been noted in two parent households.¹¹⁷

The type of childcare used varies according to parental characteristics. Higher education and higher income enhance the family's demand for (or ability to produce) "child quality". Mothers with higher levels of education and income choose in-home care for their infants but center care for their preschoolers. Mothers with upper-middle incomes believe exposure to other adults and children is beneficial, and they are more likely to choose center care. Families with very low incomes tend to choose center care more frequently than other forms of care. Many mothers, particularly those living in poverty, report that they would change their arrangements if they could.¹¹⁸

The type of childcare used is also affected by the work patterns of the mother. A disproportionate amount of center-based care is used by mothers employed full time (30%) as opposed to 17% used by mothers employed part time. For family based care the percentages are 27% and 14% respectively. Relative care is predominately used by mothers working part time (59% vs. 44%).¹¹⁹

iii. Quality

One aspect of childcare which is often discussed in a one sided manner is the quality of childcare. A great deal of the literature on child care and on the effects of child care is based on good quality childcare, but less often discussed is the actual state of child care in the United States. The actual quality of childcare tends to be much less than good, and the small extent to which this is

¹¹⁴ Blau (1985), US Department of Commerce (1987), Tables D & 4.

¹¹⁵ NICHD (1997), Chilman (1993), Culkin *et al* (1992), Phillips (1995), and Stolzenberg & Waite (1984).

¹¹⁶ Carlson (1989).

¹¹⁷ Glass (1998), Coverman & Sheley (1986), Hiller & Philliber (1986), Presser (1994), Robinson (1988), and Ross (1987).

¹¹⁸ NICHD (1997), Evan (1987), Gronau (1973), Erdwins & Buffardi (1994), Becerra & Chi (1992), Fuller *et al* (1995), Hofferth & Wissoker (1992), Lehrer (1983), Hofferth *et al* (1991), Hofferth (1995), Kiisker & Silverberg (1991), Meyers & Van Leuwen (1992), and Sonenstein & Wolfe (1991).

¹¹⁹ Blau (1985).

discussed raises concerns that a large number of families are acting on incomplete knowledge and may be harming their children.

Most studies conclude that the quality of childcare in the United States ranges from mediocre to poor. Love *et al* (1996) reviewed the research on child care and found that the quality of experience in the child care centers and in family child care homes in the United States is mediocre¹²⁰. Most day care centers failed to provide adequate contexts for child development. This occurs despite the fact that the average family spends a significant portion of their total earnings on childcare¹²¹. More specifically, child care at most centers in the United States, especially for infants and toddlers, does not meet children's needs for health, safety, warm relationships, and learning.¹²² These findings, show that only 14 % of centers received a rating of developmentally appropriate, while 12% were found to be of such poor quality that basic sanitary conditions were not met, children's safety was endangered, or caregivers offered little or no response to children's attempts to communicate; 40% of infant or toddler rooms were observed to offer poor quality care. The study was based on data from 400 childcare centers in California, Colorado, Connecticut and North Carolina.¹²³ There is reason to believe that reports on day care quality do not even include the worst cases. One study that made multiple assessments of 227 infant and preschool centers in five major metropolitan cities noted that 'the quality of services provided by most centers was rated as barely adequate¹²⁴ and because of the refusal of some centers to participate, the 227 centers subject to intensive scrutiny 'consist[ed] of higher quality centers than in the eligible population as a whole.'¹²⁵

Family and relative care rate as little better. Only 9% of the family child cares homes in the Study of Children in Family Child Care and Relative Care¹²⁶ rated as good quality; 56% of the homes rated as adequate/custodial; and 35% of the homes in the study rated as inadequate.¹²⁷

There are several factors contributing to the widespread lack of quality in childcare. One reason is that staff compensation, including wages and benefits, is exceptionally low. Childcare staff are among the lowest paid of all classes of workers in the United States. Staff compensation is significantly related to the quality of care provided. Another contributor to low quality is the high rate of staff turnover,

¹²⁰ Patten (1999).

¹²¹ Glass (1998), Kamerman & Kahn (1987), Sale (1984), and Zigler & Gilman (1996).

¹²² *Cost, Quality, and Child Outcomes Study Team*, 1995.

¹²³ NICCIC (2000).

¹²⁴ Whitebook *et al* (1990), p.4.

¹²⁵ Belsky (1992).

¹²⁶ Galmisky (1994).

¹²⁷ Patten (1999).

ranging from 25% - 50% each year. This means that children are constantly adapting to new caregivers, and administrators are constantly training and orienting new staff.¹²⁸ A third factor may be deficiencies in state regulation to ensure adequate care. All states regulate center-based care, and most oversee home-based care to some degree, but regulations vary significantly and often don't require good quality care as defined by professional consensus: 22% meet child/staff ratio (CSR), 16% meet group size regulations, 63% had in service training, 18% had parent conferences.¹²⁹

Income seems to play some role in determining who receives a particular quality of childcare. The major factor in the selection of childcare is the earning power of the mother, the husband's presence and income has no effect on the input attributes of the childcare chosen. A nationwide survey of childcare centers found no difference in quality among infant classrooms in centers serving low-, middle-, or upper-income families. This does not seem to be the case for other types of care. A study of infants and toddlers receiving home-based care show clear associations between family income and the quality of care observed.¹³⁰ Poor quality care is of particular concern for children of a disadvantaged background, who would most likely benefit significantly from an enriching childcare program. Unfortunately, it is these children who appear to suffer the most from low quality childcare. For low-income families, the quality of family and relative care providers was found to be quite deficient: 74 percent of children living in families with annual incomes below \$20,000 were observed to be in unsafe, unsanitary, and unresponsive child care¹³¹. Other studies found no significant effects for demographic variables other than income.¹³²

Surprisingly, parental satisfaction with day care does not correspond to the numerous reports of low quality care. About 70% of women parents say they are satisfied with the quality of care for their child.¹³³ However, many economists have serious reservations with studies asking parents about percent of satisfaction with current arrangements if cost were not a factor. While there is no obvious incentive for parents to behave in a manner consistent with the response to a hypothetical question, many parents may very well be reluctant to admit dissatisfaction because it could be interpreted as an admission of poor parental performance. Another explanation for the disparity between quality and parental satisfaction may be differences in professional and parental definitions of quality. Professionals define

¹²⁸ Patten (1999), Whitebook *et al* (1989), *Cost, Quality, and Child Outcomes Study Team*, 1995.

¹²⁹ Blau (1985).

¹³⁰ NICHD (1997), Phillips *et al* (1994), and Galinski *et al* (1994).

¹³¹ Deborah (1996), and Howes and Smith (1994).

¹³² NICHD (1997), McCartney (1984) and Waite *et al* (1991).

¹³³ Krisker *et al* (1989).

quality as depending on: 1. Group size, staff-child ratios, and caregiver qualifications as contributing to child/caregiver interactions, 2. Structure and content of daily activity as related to cognitive development, and 3. Space and facilities as affecting social interactions and development. Parent's idea of quality differed in definition. They were primarily concerned that there be 1. Safe and healthy environment (there is a worry over child abuse), 2. An environment that promotes learning, especially with older children, 3. Convenience (location within 10 to 15 minutes of home or work), and 4. Hours that mesh with mother's work schedule (shift or overtime work). The National Academy of Science Panel on childcare policy concluded that many parents may not be able to weigh considerations of quality in comparison to considerations of cost and convenience because 1. Looking for out of home childcare is new and unfamiliar 2. The childcare delivery system is decentralized, and 3. Resource and referral services aren't universally available.¹³⁴ Similarly, Kisker (1989) found that most parents apply criteria on basis of limited knowledge about the quality of childcare options, and do not look at alternate arrangements before placing a child in childcare.

iv. Costs of actual service

Almost all aspects of childcare, including quality and accessibility, are really a question of cost. While a large proportion of families in which the mother works use child care, not all families pay for childcare, some relying on the presence of relatives or government subsidies for child care. For children under five, the ages most likely to be in childcare, fifty six percent of mothers actually pay for childcare. The proportion of families who pay for childcare varies by employment status of the wife. Of these, full-time employed mothers are more likely than part-time employed mothers to pay for childcare. High-income families are much more likely to pay for childcare than low-income families, regardless of maternal employment status.¹³⁵

Of those paying for care, families with an employed mother spend, on average, \$1.56 per hour for the primary care of the youngest child under five years old. This adds up to an average of \$63 per week, although full-time employed mothers pay more than part-time employed mothers - \$68 compared to \$51. Part-time employed mothers may pay more per hour (\$2.24), but they require fewer hours of childcare, on average, than full-time employed mothers.¹³⁶

¹³⁴ Hayes *et al* (1990) and Sonstein (1991).

¹³⁵ Hofferth *et al* (1990).

¹³⁶ *ibid.*

Far more important than the amount of money spent on childcare is the proportion of family income spent. On average, employed mothers with a youngest child under five years old spend 10% of their family income on the care of all their children, with no differences between full-time and part-time employed mothers. However, the percent of income devoted to childcare differs greatly with family income, the percentage of total income increasing as family income decreases. Although low income employed mothers are less likely to pay for childcare and pay a smaller amount per week for it than high-income employed mothers, those with a family income under \$15,000 who pay for care spend a substantially larger share of their financial resources. Families with incomes under \$10,000 paid an average of 27% of family income, despite the fact that they are using less expensive care. Families with incomes greater than \$50,000 spend only 4% of the family income.¹³⁷

2. Effects on Children

The effects of childcare on the children of an employed mother are barely addressed as another very real form of expenditure. They should be addressed in such a manner though because these effects are a price one must pay for working out of the home. This aspect of expenditure will be addressed further in this paper under the section on the effects of maternal employment in the family (Section II.D.)

3. Taxes

A large amount of most earners' income is taken in taxes and this money can also be included as an "expenditure" related to employment. While the tax system is very complex and varies considerably with earnings and family situation, one way of discerning how it affects maternal employment and the income a woman brings into the home is by looking at the aspects of the tax code that directly concern working wives and mothers.

The "marriage penalty" in the tax system is one aspect that affects the earnings of a very large group of working mothers. A marriage "penalty" or "subsidy" occurs when a change in marital status generates a change, negative or positive, in disposable income. In general, any tax or transfer program can create a marriage penalty or subsidy if two conditions are satisfied: the program imposes taxes or gives subsidies that are based on household income or wealth; and the program imposes different marginal rates at different income levels. The magnitude of the marriage tax penalty or subsidy depends

¹³⁷ Blau (1985).

on a number of specific tax features including rate schedule, standard deduction, and EITC, in total 59 provisions throughout the individual income tax code.¹³⁸

The federal individual income tax system has a progressive marginal tax rate structure with features that vary with legal marital status. Early in the history of the income tax, the individual was the unit of taxation and thus taxes were largely unaffected by marriage. However, the Revenue Act of 1948 made the family the unit of taxation by instituting “income splitting,” in which a couple’s tax liability is the same as the combined taxes of two individuals each with half of the couple’s combined income. This change tended to give large subsidies to married couples and support the institution of the family, protecting its well-being. The introduction of a new schedule for single individuals in the Tax Reform Act of 1969 reversed the situation and instituted for the first time a tax penalty for many married couples, in a sense attacking families in which both parents had to work. It had the effect of discouraging the second earner from working, and if she works, discouraging her working for long hours. Although many changes have been made since its inception, the basic premise of the Tax Reform Act of 1969 remains the same.¹³⁹

However, what has been termed the “marriage penalty” is not always a negative thing; in many cases it can actually be a kind of subsidy. It does stipulate that when people with similar earnings marry, their combined income pushes them into higher tax brackets than they face as singles, so they pay correspondingly higher income taxes. However, when people with disparate incomes marry, their combined income actually lowers the taxes they pay. Thus, what acts as a marriage penalty for a dual earner family is a subsidy for single earner families and for dual earner families where the secondary earner makes less than \$20,000/year. This aspect of the tax system is currently being criticized due to the belief that the single earner couple has a greater ability to pay taxes than a two earner couple because the non-working spouse provides household services that are not taxed; resource sharing gives them a greater ability to pay. It doesn’t recognize the burden of supporting the entire family alone, and some are considering taxing the mother for time spent at home.¹⁴⁰

Other aspects of the tax system also act as sources of marriage non-neutrality that may either penalize or subsidize it. At the lower end of the income scale, the Earned Income Tax Credit (EITC) largely dissuades marriage. It specifies that a single parent cohabiting with another earner can receive Temporary Assistance for Needy Families (TANF) because it is assumed that the other earner is not

¹³⁸ Alm *et al* (1999).

¹³⁹ Alm *et al* (1999). See MaCurdy *et al* for a review of the literature on this point.

¹⁴⁰ Alm *et al* (1999)

contributing to a family that is not his own; but, as soon as they marry, this assumption is reversed and the family often loses the TANF. Although in circumstances such as the above a family will often switch from TANF to EITC, that credit combined with exemptions is often less than the TANF.¹⁴¹

The influence of the “marriage penalty” is widespread. Recent studies showed the percentage of couples experiencing the penalty to be sixty percent, with the average penalty being \$1,200. The number of couples who get a subsidy has fallen to 30% in 1994, with the average subsidy being \$1,100. This decline is due to the rising number of working age married couples with two earners, which has risen from 48% in 1969 to 72% in 1995.¹⁴²

The increasing number of couples experiencing the marriage penalty is not encouraging when one considers the negative effects it has on marriage. The marriage tax penalty affects the probability of marriage: at the mean values of the variable, a 10% increase in the tax leads to a 2.3% reduction in marriage, while at the level of the highest tax penalty a 10% tax increase leads to a 12.5 % reduction in the probability in marriage. Besides influencing the rate of marriage, the marriage penalty affects the probability of divorce, especially for women and low-income individuals.¹⁴³

Included within the tax code are a number of credits, reductions, and subsidies that affect a mother’s ability and need to seek employment. They are summarized below:¹⁴⁴

Income Tax Exclusion for Dependent Care Assistance: the federal income tax exclusion for dependent care assistance program allows a taxpayer to exclude a limited amount of payments from his or her income for dependent care made under an employer’s dependent care assistance program. This income is not subject to federal income or payroll taxes. Payments for dependent care qualify for the income exclusion if the payments are for the care of a dependent child under the age of 13 or for a spouse who is physically or mentally incapable of caring for him or herself. The ITEDCA reduced federal tax payments by an estimated \$910 million. (Federal Programs for Children & Families)

Child Tax Credit: for tax years after 1998, families with qualifying children are allowed a credit against their federal income tax of \$500 for each qualifying child. To qualify for the credit, the child must be the son, daughter, grandson, granddaughter, stepson, stepdaughter or an eligible foster child of the taxpayer. The Child Tax Credit is phased out for taxpayers whose adjusted gross incomes exceed

¹⁴¹ Alm *et al* (1999) and Moffit *et al* (1998).

¹⁴² Alm *at al* (1999) and Alm & Wittington (1996). For a confirmation see Feenberg & Rosen (1995), and Congressional Budget Office – 42% pays tax penalty, Congressional Budget Office, 1997.

¹⁴³ Wittington & Alm (1997) and Dickert-Conlin (1999).

certain thresholds, phase out beginning at: \$110,000 for married couples filing jointly, \$55,000 for married couples filing separately, and at \$75,000 for single persons with one qualifying child. In 1998, the Child Tax Credit was estimated to reduce federal income tax revenue by \$2.7 billion, and in the year 1999, when the credit was fully phased in, it was estimated to reduce federal income tax revenue by \$18 billion. (Federal Programs for Children & Families)

Earned Income Tax Credit (EITC): offers cash aid and/or tax relief to working parents with relatively low incomes who care for dependent children. The EITC is the only federal cash aid program available to all poor working families with children. The credit doesn't apply if parent provides less than half of the money needed to support the family. It is payable in two ways: (1) as a reduction in federal income tax liability and/or (2) as a direct payment from the federal Treasury. Most credits are paid in the second form, as "refunds". Credits are generally disregarded in federally assisted public assistance programs, although, under the Temporary Assistance for Needy Families (TANF) block grant, states may treat EITC payments as they wish. Credits for families with children depend on their earned income, adjusted gross income (AGI), and number of children. The average credit for tax year 1998 is estimated at \$1,810 per family. An estimated 15.7 million families claimed the credit for the 1998 tax year.¹⁴⁵

Temporary Assistance for Needy Families (TANF): TANF block grants are administered by states and local governmental units in order to aid needy families so that children may be cared for in their own homes or those of relatives. It also aims to end the dependence of needy parents on public benefits as well as to prevent and reduce the incidence of out-of-wedlock pregnancies. TANF also plans to encourage the formation and maintenance of two-parent families. TANF block grants give states freedom to set benefit levels and decide what categories of families to help. With some exceptions, states are free to design many other program elements, such as the kind of assistance provided (e.g., child care). However, they must impose a 5-year lifetime limit on TANF-funded benefits and require parents and caretakers to engage in work, as defined by the state, after a maximum of 24 months of aid. The estimated monthly average enrollment in the first 9 months of 1998 was 6.5 million children in 3.3 million families; the estimated federal funding (outlays) for the year 1998 was \$13.3 billion dollars.¹⁴⁶

Child and Dependent Care Tax Credit: reduces a taxpayer's federal income tax by offsetting a portion of the work-related costs of care for a dependent child under the age of 13, or for a spouse or

¹⁴⁴ Summaries taken from A CRS Report for Congress, 1999.

¹⁴⁵ Congress research program (1999).

¹⁴⁶ *ibid.*

dependent who is physically or mentally incapable of caring for him or herself. This tax credit is limited to a percentage of a taxpayer's work-related expenses. A taxpayer whose adjusted gross income is \$10,000 or less, is allowed a credit equal to 30% of work-related expenses. The credit percentage is reduced by one percent for each additional \$2,000 in adjusted gross income. For tax year 1996, the Child and Dependent Care Tax Credit was claimed on 6 million income tax returns, reducing federal income tax payments by an estimated \$2.5 billion. The amount for the care of children is not available.¹⁴⁷

Income Tax Exemption for Dependents: when calculating federal income tax, a taxpayer and his or her spouse are each allowed a personal exemption. In addition, a taxpayer is allowed a "dependency" exemption for each dependent. In order to be claimed as a dependent, an individual must (1) live with the taxpayer for an entire year as a member of his household or be related to the taxpayer (2) earn a gross income less than the exemption amount, unless the person is under 19 or a full-time student under the age of 24 (3) have at least half his support furnished by the taxpayer (4) must not have filed a joint income tax return (5) be a citizen or resident of the United States, or a resident of Canada or Mexico. In tax year 1995 (the most recent year for which data is available), 74.9 million exemptions for children occurred, reducing federal income tax payments by an estimated \$25-\$30 billion. (Federal Programs for Children & Families)

The above descriptions demonstrate that the tax code contains some aspects that help mothers enter the workforce by supplementing the expenses (such as child care) that accrue when she does so. This is especially true for low-income families. However, it does not offer an equal aid to families in which the mother is not employed. While the child tax credit and the income tax exemption for dependents applies to them, it applies equally to dual earner families as well, leaving single earner families with the least aid. Some argue that these families have no need for such assistance because they spend less in taxes because the mother is not an earner. Having seen in a previous section that it is the single earner families who are struggling while the dual earner families continue to prosper belies this assumption.

¹⁴⁷ *ibid.*

4. Housekeeping

Another expenditure mothers are forced to make when they enter the workforce is a large decrease in leisure due to housework. Women work much longer hours than men when they add income-earning tasks to their traditional family responsibilities.¹⁴⁸ Although there appears to be an increase in the number of egalitarian, that is, two earner couples who share the “second shift”, many women continue to work full time in the labor force and do more than 60% of the housework.¹⁴⁹ It is true that as women have increased the number of hours spent in the paid labor force, their time on housework has declined, decreasing from about 30 hours per week to about 20 hours per week, although studies show that women still do significantly more housework than men. Married fathers have made up only some of the difference – increasing their household work from about five hours a week to about ten hours a week.¹⁵⁰

When one measures economic well-being per hour of work as the combination of effective income (which measures access to goods and services) and leisure (the time left after market and non-market work hours), women are worse off on average after entering employment. Woman’s effective income, taking into account equal sharing between a husband and wife, increased from \$10.55 (in 1985 dollars) to \$13.80 in 1986, reflecting an increase in economic productivity. Women’s economic well-being, also taking into account equal sharing between a husband and wife, fell relative to men’s, due to the increasing amount of work within the labor force, as well as being kept from responsibilities at home. Even assuming no equal sharing, women’s level of economic well being as compared to men’s is much worse, although effective income per hour shows a small (0.59-0.62) increase due to the increase in women’s wages. This data refutes the fact that women have made great progress in economic well-being by entering the workforce.¹⁵¹

¹⁴⁸ Vanek (1974), Hartmann (1981), Gershung & Robinson (1988), and Picchio (1992).

¹⁴⁹ Robinson & Milkie (1998), Bergmann (1986), Ferree (1991), Hochschild (1989), and Perkins & DeMeis (1996).

¹⁵⁰ Robinson & Milkie (1998), Robinson & Converse (1972), Vanek (1974), Walker (1969), Spain and Bianchi (1996).

¹⁵¹ Fuchs (1988).

5. Work-related Expenses

Although some literature has acknowledged the presence of work-related expenses other than childcare, very little work has been done to identify their nature and magnitude. Several authors¹⁵² have suggested that dual-earner families accrue a number of additional work-related costs such as food away from home, transportation, and personal care. Some empirical examinations of expenditure trends suggest that differences in these expenditures depend on income level. In the low-income group all buyers will be more likely to stress economy and will therefore minimize employment related expenses. In the middle-income group the wife's added earnings allow the family to purchase work-related goods that make life easier. Finally, in the upper income group, income is much less of a restraint and families have more freedom to develop whatever spending patterns they might choose, independent of whether the mother is employed¹⁵³.

Few calculations have been done to find what percentage of the mother's income is spent on work related expenses. In the one study mentioned, Perzeszty found that when certain costs, such as lunches, clothing, personal care, laundry service, carfare, union dues, taxes and insurance, were taken into account, the employed wives' salary was reduced by 46%¹⁵⁴. However, this is not a comprehensive view because it does not include childcare. It is because so little research has been done in this area that this study is being done, and the issue of work related expenses will be addressed again later in the paper after the data has been presented.

C. Effects on the Family

1. Increase in Income¹⁵⁵

A number of studies have attempted to assess the magnitude of the contributions of wives' earnings to family income¹⁵⁶. Wives' earnings generally remain relatively low, ranging from one-fourth to one-third of total husband-wife earnings. Nevertheless, wives' incomes benefit the family in a number of ways.

¹⁵² Strober and Weinberg (1977).

¹⁵³ Hanson & Ooms (1991) and Waldman and Jacobs (1987).

¹⁵⁴ Hanson & Ooms (1991) and Perzeszty (1986).

¹⁵⁵ This section draws heavily from Hanson (1991), pp. 622-634.

¹⁵⁶ Blau (1986), Danziger & Gaottschalk (1986), and Lazear & Michael (1980).

The wife's employment has a considerable impact on families' economic stability by increasing the chances that the family will earn an income that keeps them above the poverty line. Danziger and Gottschalk (1986) calculated that the poverty rate for two-parent families was 35% lower in 1984 than it would have been had wives not worked.¹⁵⁷ In addition to the protection against poverty, wives' earnings provide a buffer against economic hardships associated with family crises such as unemployment, illness, or family dissolution through death or divorce.¹⁵⁸

Another potential benefit of maternal employment is increased savings. However, there has been little research on this topic. In one of the few analyses of family saving behavior and working wives, Hefferan (1979) showed that conclusions about which type of family (single- or dual-earner) saved more were dependent on the definition of saving. Single earner families have greater savings when savings are defined as an increase in liquid assets such as checking and savings accounts as well as cash holdings. However, dual-earner families have greater savings when saving is defined as increases in net worth such as liquid accounts, durable goods, and negotiable as well as debt obligations.¹⁵⁹

A third aspect of a family's economic position that is often positively influenced by maternal employment is home ownership. Research by Levy and Michael (1985) and others shows that the rising home prices and stagnant wages have made it increasingly difficult for families to buy a home. The increasing number of dual-earner families is one of the factors that explain the quite modest decline in rates of home ownership in households with heads under 35 during a period of declining real income.¹⁶⁰

2. Marital Problems

There is substantial research on the relationship between married women's changing economic opportunity and the quality and stability of marriage; conclusions remain both controversial and equivocal.

i. Wife's Income Negatively Affects Marriage

One view concerning the relationship of wives' employment and marriage holds that a wife's income has adverse effects on marriage. Some studies suggest that wives' income negatively affects marital satisfaction by threatening the spouse's complementary role, thus emphasizing the necessity of

¹⁵⁷ Danziger and Gottschalk (1986).

¹⁵⁸ Ferber & Birnbaum (1980) and Hefferan (1982).

¹⁵⁹ Hefferan (1979).

¹⁶⁰ See Manchester (1988).

traditional division of labor for ensuring marital quality and stability.¹⁶¹ According to this view, Becker argues that wives' incomes reduce spouses' gains from the efficiency that is inherent in traditional divisions of labor.¹⁶²

A wife's income may also have negative effects on marital quality to the extent that it challenges a husband's prerogative as the primary breadwinner. This view is supported by the fact that wives' income is most problematic for husbands who have higher earnings, for whom their wives' economic contributions are often less necessary.¹⁶³

Others hold that traditional marriage arrangements and wives' increasing income may lead to conflict, given that women with more income expect more equity in decision making¹⁶⁴ and housework. Wives may view requests for change as overdue, but husbands may view them as challenges to their privileges. Husbands may be especially likely to report any negative effects that wives' employment and income have had on marital quality.¹⁶⁵ However, as we have already seen, this view has been shown to be inaccurate (see previous section on the reasons women work, bargaining power within the marriage).

ii. Wife's income positively affects marriage

A second body of thought argues that declines in the complementing of roles in the family and increases in equity have positive consequences for marriage. Hood found that wives' employment and income were associated with more equal sharing of childcare, more shared interests, and spouses' greater interest in each other as individuals and confidants. All this contributed to greater marital satisfaction among the people in her research. Similar findings by Hochschild (1989) and Gerson (1993) indicated that spouses report happier marriages when marital and work roles are shared equally.¹⁶⁶ However, as we have seen previously in this paper (in the section on reasons why women work), this usually occurs not as a result of the wife working, but as a result of spouse's determination to subvert traditionally gendered divisions of labor and power as a part of their efforts to create more companionate and collaborative marriages.

¹⁶¹ Rogers (1999), Durkinheim (1893 & 1984), Parsons & Bales (1955), and Kingsbury & Scanzoni (1993), for an analysis of this position.

¹⁶² Rogers (1999) and Becker (1981).

¹⁶³ Rogers (1999) and Hood (1983).

¹⁶⁴ Blumstein & Schwartz (1983).

¹⁶⁵ Rogers (1999), Booth *et al* (1984), Hochschild (1989), Goode (1992), and Scanzoni (1972).

¹⁶⁶ Similar results were found by Rogers (1999), Hood (1983), and Scanzoni (1972 and 1978).

Wives' income may also lessen economic hardship and improve a spouse's well-being. Economic hardship has consistent, detrimental effects on spousal interaction and marital quality. Research on rural families in the 1980's indicates that economic hardship contributes to patterns of marital interactions that are more hostile and less warm, patterns significantly associated with reports of lower marital quality. Research suggests that wives' economic contributions to the household are more likely to be accepted and even welcomed by husbands with lower earnings.¹⁶⁷

iii. Marital quality affects wives' income

It remains unclear whether increases in wives' participation in the labor force and increases in wives' income primarily affect marital quality or whether declines in marital quality primarily affect wives' labor force behavior and income. In their research on women's employment and divorce, Booth and colleagues suggest that wives entrance into the labor market "may have reflected the presence of marital instability". Longitudinal research with married women in the 1970's found that women who subsequently divorced had increased their work hours in the three years before marital separation.¹⁶⁸

Research emphasizes the importance of historic increases in women's economic resources at both the individual and aggregate level for reducing their dependence on marriage.¹⁶⁹ This perspective is consistent with the feminist framework that views employment as a mechanism through which women can escape the patriarchal system that keeps wives economically dependent on husbands. This is also consistent with the work of Oppenheimer (1997), who has argued that womens' employment and income do not undermine marital quality or stability.

Even among women not contemplating divorce declines in marital stability may lead to increases in employment, which is now recognized as an appropriate, normative, and intrinsically rewarding aspect of woman's adult life. The rewards vary depending on occupational and workplace characteristics as well as the level of family demands. Wives may also alter their employment behavior in order to change their marital relationships by increasing their power within the marriage.¹⁷⁰

¹⁶⁷ Rogers (1999), Voydanoff (1988), Congar *et al* (1990) and Hood (1983).

¹⁶⁸ Rogers (1999), Booth *et al* (1984), p.579, and Johnson & Skinner (1986).

¹⁶⁹ Rogers(1999), Cherlin (1992), Ruggles (1997).

¹⁷⁰ Rogers (1999), Hochschild (1997), Hood (1983), Scanzoni (1978), Lennon (1994), Glass & Fujimoto (1994), Hochschild, (1989 & 1997), and Blumstein & Schwartz (1983).

iv. Wife's income increase the likelihood of divorce

Little research has been done on the effect of wives' income on divorce. Only four studies before Heckert *et al* (1998) directly examined the association between relative income and marital disruption, and the empirical results were "inclusive and do not provide an adequate test for evaluating the effect of income dependency on marital disruption."¹⁷¹ Other studies have focused on the effects of relative earnings on thoughts of divorce and commitment. Huber and Spitze (1980) found no evidence that wives earnings, as a percentage of family income, affected whether the thought of divorce ever crossed the mind of either spouse. They speculated, though, that it may still affect the actual decision to dissolve the marriage.

A recent study by Heckert *et al* (1985) reported that economic dependence, as measured by respondent's earnings, is positively related to expressed commitment to marriage for both sexes, but the effect is stronger for women. Although the magnitude of the effect is small, the greater one's share of total family income, the smaller amount of commitment to marriage.¹⁷²

For nontraditional couples, in which the wife earns 50-75% of the family income, the odds of separation or divorce are 2.02 times greater than for traditional couples. Reverse traditional couples, in which the wife earns substantially more than the husband, are less than half (0.40) likely to divorce, although the difference is not significant due to the small number of couples in this category. For new traditional couples in which the wife contributes a significant supplemental income the odds that they will divorce are 1.10 times greater than for traditional couples. Again, the difference is not significant. Reciprocally, the husband's relative contribution to the overall number of labor-force hours was negatively associated with dissolution. The more the wife depends on the husband for labor-force contributions, the lower the likelihood of dissolution.¹⁷³

It would seem that the woman's increased income does not so much incite her to divorce because of the economic advantage it would place her in, as is argued by many human capitalists, but rather that it gives her the economic dependence to separate from her husband. This conclusion is supported by the lack of evidence that wives earnings as a percentage of family income affected whether the thought of divorce ever crossed the mind of either spouse, including the wife. Another reason why high-income employment may be related to an increased likelihood for divorce is that higher paying jobs generally

¹⁷¹ See also Greenstein (1990 & 1995), Moore & Waite (1981), and Spitze & South (1985).

¹⁷² Heckert *et al* (1998) and Nock (1995).

¹⁷³ Heckert Nowak, & Snyder, 1998.

involve longer work hours and more pressure, elements that conflict with a woman's obligation to her family. Such a conflict leads to high levels of stress and marital dissatisfaction, which would increase the demand for a divorce at the same time that it economically allows for one to occur.

3. Povertization of Women and Their Children

“It is through gainful employment that woman has traversed most of the distance that separated her from the male, and nothing else can guarantee her liberty in practice” – Simone de Beauvoir (1949/1961 p.361)

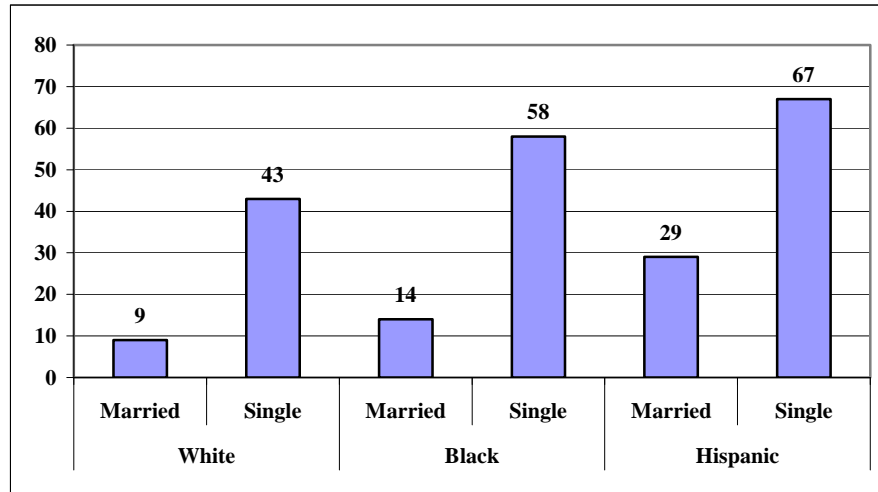
This statement has been shown to be far from true fifty years later. In fact, women's employment and the resulting increase in single mothers lead to a trend of women's confinement within the bonds of poverty. A study by Verum statistically shows that becoming a member of a female-headed household is associated with a decline in income position and that becoming a member of a female-headed household is associated with declines in income mobility.¹⁷⁴ Garfinkel & McLanahan (1986) noted that families headed by single mothers are poor for three reasons. The first is that the earning power of the primary breadwinner, the mother, is relatively low. Also, they are poor because the contributions of other family members – the non-custodial father in particular – are low and because public transfers to women who head such families, with the exception of those who are widows, are meager.

Single mothers earn lower wages for the reasons mentioned in the section on the gender gap in wages. However, even more important in accounting for their low wages is that a large proportion of poor single mothers bore their first child as teenagers. Moore and Burt (1982) have estimated that nearly 60% of all women on welfare in 1975 had been teenage mothers. Early childbirth is associated with lower education and higher fertility, both of which limit the development of skills and relevant experience and reduce earnings capacity. Another factor contributing to the small income of single mothers as a whole is that single mothers participate in the labor force substantially less than married fathers.

Similar results are found in the data used in this paper. Figure 1, presents the percentage of women in poverty by family structure and race. Clearly, single mothers have a higher probability of being victims of poverty than those who live in a stable married situation.

¹⁷⁴ Poor Get Poorer – For Good, 1993; Verum, 1992.

Figure 1
Percentage of Women who are in Poverty by Family Structure and Ethnicity



Source: *Consumer and Expenditure Survey*, 1997. Bureau of labor Statistics.

This may account for a large portion of the poverty among single women. Ellwood (1985) has shown that only about 6% of single mothers who worked full time year round during the 70's were poor in any given year. Others find that the same would not hold true for the average single mother in poverty. Sawhill (1976) has found that women on welfare in the early 70's had very low earnings capacity and that even if they worked full time, more than half would still earn less than their welfare grants.

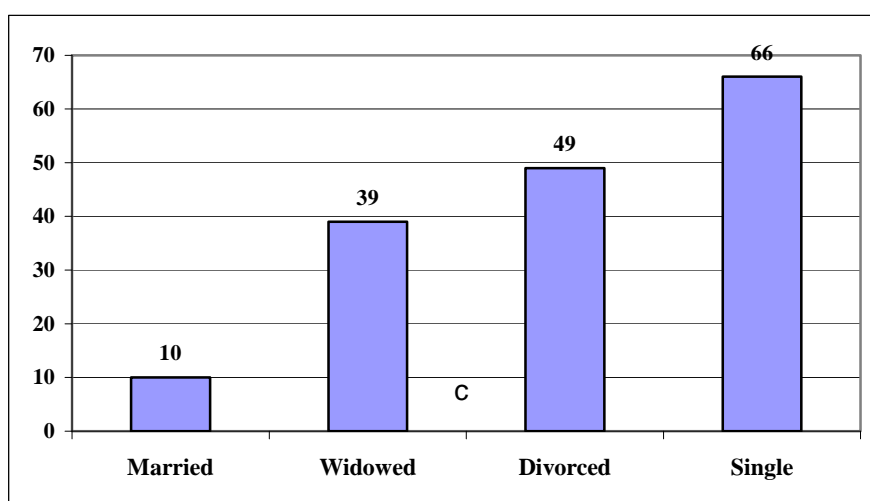
Common sense and economic theory both suggest that public benefits to mother-only families will contribute to the rising number of such families. Studies by Honig (1973), by Ross and Sawhill (1982), and by Danziger *et al* (1982) find that benefit levels are associated with single female family headship, although their estimates of the magnitude of the effects are widely varied¹⁷⁵. Garfinkel & McLanahan (1986) concluded that the increase in welfare benefits can account for some of the growth of mother-only families. Relative to other factors, though, the effect of this growth is small.

One of the most important factors in the dramatic increase in poverty among women and their children is found in changing family structure. Eggebeen and Lichter (1991) detect in the dramatic rise

¹⁷⁵ Honig (1973), Ross & Sawhill (1982), and Danziger *et al* (1982).

in poverty “the economic effects of changing family composition.”¹⁷⁶ Specifically, the analysis shows that many more children are living in poverty now than in 1970 because fewer children are living in married-couple families. The researchers conclude that 51% of the increase in poverty among children between 1980 and 1988 “can be accounted for by changes in family structure during the 1980’s.”¹⁷⁷ Similar results are reflected in the data used for this study. Figure 2, presents the percentage of children who are in poverty by family structure.

Figure 2
Percentage of Children who are in Poverty by Family Structure



Source: *Consumer and Expenditure Survey, 1997.* Bureau of labor Statistics..

The patterns for blacks and whites are similar in a sense since most of the growth in single parenthood is due to changes in marital behavior. The difference is that whites marry and increasingly divorce, whereas blacks are increasingly likely to never marry at all. For whites, the major factor has been the increase in women’s labor force participation and the economic independence that accompanied it; for blacks, the major factor has been the decline in employment opportunities among males. Research concludes that social norms and attitudes about single parenthood tend to follow rather

¹⁷⁶ Eggebeen and Lichter (1991), p. 47.

¹⁷⁷ *ibid.* Similar results are presented by Pushed into Poverty (1992).

than lead to changes in family behavior. Once a trend is established, however, attitudes play an important feedback function in sustaining and augmenting earlier growth.¹⁷⁸

4. Psychological/Emotional Effects on Parents

Maternal employment is often accompanied by an increase in psychological or emotional effects in the parents because of the stress brought on by a high level of responsibility and gender conflicts. These effects tend to be quite prevalent and can be very detrimental in a number of ways.

i. Relationship between multiple roles and psychological distress

One of the greatest challenges of maternal employment is that mothers must try to balance a number of demanding roles including that of employee, parent, and housekeeper. There are several views as to the effect that this has on the woman. The role-strain approach proposes that the greater the role accumulation, the greater the demands and role incompatibility, meaning the greater the role strain and conflict.¹⁷⁹ Role strain and conflict are positively related to psychological distress and have negative effects on the woman's well-being.¹⁸⁰

Other views acknowledge the difficulties that are inherent in fulfilling so many roles, but deny that this has an overall negative effect on the mother. The role-enhancement approach suggests that performing multiple roles provides rewards and privileges that assist in the management of these roles and outweigh the negative effects of role accumulation.¹⁸¹ In this case role strain and conflict are negatively associated with psychological distress.

A third view, the sex-role hypothesis, predicts that due to gender differences in role demands and salience, gender moderates relationships between role involvement and psychological distress. This view is opposed by the social-role hypothesis, which predicts that stress related effects of social roles are inherent in the roles themselves; comparable role involvements should have similar effects on psychological distress for men and women. In general, research provides more support for the social-role hypothesis than for the sex-role hypothesis.¹⁸² Voydanoff and Donnelly (1999a) suggest that this may be due to a convergence in the role patterns of men and women over the past decades.

¹⁷⁸ Garfinkel & McLanahan (1986).

¹⁷⁹ Burr *et al* (1979) and Goode (1960).

¹⁸⁰ Voydanoff & Donnelly (1999a).

¹⁸¹ Voydanoff & Donnelly (1999a), Marks (1977), and Sieber (1974).

¹⁸² Voydanoff & Donnelly (1999a), Umberson *et al* (1996), Barnett *et al* (1995), and Rushing & Schwabe (1995). for reviews.

Another study, the only one of its kind, gives some credence to the sex-role hypotheses. The study tested for curvilinear relationships, and reported that husband's paid work hours and household work hours are positively related to depression with no curvilinear effects. For wives, spending more than 46 hours per week in paid work, was found to be positively related to depression. For hours of household work, the curvilinear relationship with depression is such that the number of household work hours is positively related to depression with a diminishing effect as hours increase.¹⁸³

Limited research on perceived unfairness in the performance of household chores and paid work to self or spouse has shown that it is positively associated with psychological distress for wives but not for husbands. Perceived fairness of paid work is negatively related to depression for husbands, but not for wives.¹⁸⁴

ii. Hours worked and perception of equity

A second cause of parental stress in dual-earner couples is the division of household labor. Clinical research reveals that the distribution of family work is one of the most critical issues faced by distressed dual-earner couples. The distribution of family work is a crucial issue in marital satisfaction among non-distressed couples as well.¹⁸⁵

European and American reviews point out that women still do the largest part of the housework, regardless of their own or their husband's employment status.¹⁸⁶ However, the issue of fairness is important because some research suggests that perceptions of equity or the meanings that spouses attach to the division of domestic labor may be more important than the actual or objective division of labor itself.¹⁸⁷ Scholars examining perceptions of the equity and fairness of the unequal division of labor do not find a simple relationship between men's lack of contribution and a sense of unfairness. Women and men generally say the division is equitable and fair, although nontraditional women are more likely to perceive inequities as well as those who work more hours in the paid labor force.¹⁸⁸ Yet when unfairness is perceived, negative associations such as depression, thoughts of divorce, and actual breakups have been found in both women and men.¹⁸⁹ Although women appear to be in less conflict

¹⁸³ Voydanoff & Donnelly (1999a) and Glass & Fujimoto (1994).

¹⁸⁴ Voydanoff & Donnelly (1999b), Glass & Fujimoto (1994), Lennon & Rosenfield (1994), and Robinson & Spitze (1992).

¹⁸⁵ Price-Bonham & Murphy (1980), Rice (1979), Yogeve (1983), and Yogeve and Brett (1985).

¹⁸⁶ Tichenor (1999), Ferree (1991), Kalleberg & Rosenfeld (1990), Menaghan & Parcel (1990), Spitze (1988), Thomson & Walker (1989), and Kluwer *et al* (1996).

¹⁸⁷ Tichenor (1999), Hochschild (1989), Perry-Jenkins & Folke (1994).

¹⁸⁸ Robinson & Milkie (1998), Greenstein (1996), Thompson (1991), Sanchez (1994), and Berk (1985).

¹⁸⁹ Milkie & Peltola (1999), Glass & Fujimoto (1994), Greenstein (1996), Robinson & Spitze (1992).

with men surrounding the issue of housework than might be expected, some level of it is present and possibly with potentially serious consequences such as divorce.¹⁹⁰ Although this does not seem to be as much of a problem for women with traditional ideologies, the number of hours spent on household chores and childcare is negatively related to marital stability for women with nontraditional gender ideologies.¹⁹¹

iii. Due to upsetting gender perceptions

Another factor of maternal employment mentioned as leading to psychological distress is that it can upset gender perceptions. Recent work on masculinities and the social construction of gender suggests the gendered division of labor – practices that assign men to activities outside the home and women to activities inside the home – is a primary basis for construction of gender. For men in particular, working is a critical means of constructing masculinity.¹⁹² Notions of masculinity remain strongly tied to beliefs about being a good provider and breadwinner.¹⁹³ Yet, because masculinity is always constructed in reference to femininity, the crucial issue is not simply male employment but male employment in relation to female employment. For this reason, women’s employment, as distinguished from their income or occupational status, have strong effects on their husband’s mental health, most detrimental being the loss of their role as sole breadwinner.¹⁹⁴ This idea is upheld by statistical patterns, which show that: “When married men become unemployed, their wives tend also to withdraw from paid work.”¹⁹⁵ Among the several possible reasons noted for wives’ dropping out of the work force was that “one of the consequences of unemployment in men is a feeling of having failed in the role of father-as-breadwinner. This may make wives reluctant to take on the breadwinner role....[I]n some communities a wife will not become an earner while her husband is out of work because of the danger of further undermining his self respect.”¹⁹⁶

Although gender based psychological distress is little predicted for women, Bergman *et al* (1975) propose that a woman’s workforce participation may lead to such distress. They note: “Once a woman acquires an economically productive professional position, a woman’s opinion of her husband shifts, so that he is now no longer seen (as formerly) as a brilliant student but as a co-worker. The husband’s

¹⁹⁰ Robinson & Milkie (1998), Spitze (1988), Hochschild (1989), Huber & Spitze (1983), and Pogrebin (1983).

¹⁹¹ Voydanoff & Donnelly, 1999b; Greenstein, 1995.

¹⁹² MacMillan & Gartner, 1999. Connell, 1995; Thoits, 1992.

¹⁹³ Thoits, 1992.

¹⁹⁴ MacMillan & Gartner, 1999; Kessler & McRae, 1982.

¹⁹⁵ Cooke (1987), p. 378

changes in his self-perception and in his appearance to the outside world tend to be far less dramatic than those of his wife...the effect on the marriage of this sudden shift in the husband's apparent status occasioned by the wife's rise to being a fellow-professional and the husband's apparent drop in "superior" rating is in itself confusing to both, but particularly for the wife. She is still demanding unconsciously that her husband be her superior (her old conditioning) while consciously she expects him to be her equal (her new ideals). Therefore, the husband who is now truly an equal is seen as weak and less desirable at a time when other men around the wife (colleagues in particular) appear strong and challenging. She of course can not move either way, because if he attempts to re-establish his superiority, she balks; yet his willingness to accept her new status tends to be perceived as weakness."¹⁹⁷

This idea, though plausible in some cases within our society, is based on a view that the person is defined and given his worth solely by his or her ability to produce an income. It is this ability that causes the wife to admire her husband and because this is a very superficial quality, if it is all that she sees of him, when he loses this quality in her eyes she can not see the worth he retains by the simple fact that he is a human being. The same applies to the woman's view of herself. She only views herself as a person of real worth once she starts earning money, not aware of the fact that she is equally capable of developing herself as a person no matter what she is doing. Whether it be in the marketplace or in work of the home a woman can undergo development of herself because it is the way that she chooses to do things rather than what she does that defines her.

iv. Resulting in violence against wife

One result of distress caused by attacks on gender differentiations is an increase in violence against the wife. Employment almost triples a woman's risk of being systematically abused when her male partner is unemployed, yet the risk is moderately decreased when her partner is employed.¹⁹⁸

There are two theories put forth to explain this phenomenon. The idea of resource deprivation suggests that diminished resources lead to stress, frustration, and conflict that can accumulate in violence between spouses.¹⁹⁹ This explanation does not seem entirely plausible, because if employment is simply an indicator of economic resources, it should have little effect on spousal violence, independent of more direct measures of economic resources such as household income. Kalmus and

¹⁹⁶; Carlson (2000), p.5.

¹⁹⁷ Bergman *et al* (1975), p.246.

¹⁹⁸ MacMillan & Gartner (1999).

¹⁹⁹ Dutton (1988) and Gelles (1974).

Straus (1990) argue that employed women are less dependent on their husbands, whereas unemployed women lack the resources to leave abusive relationships or negotiate changes in their partner's behavior. In this case, a wife's employment rather than a husband's should reduce spousal violence.²⁰⁰

5. Decrease Number of Children When Mothers Work²⁰¹

Sander (1990) discovered a clear and consistent relationship between women's wages and fertility between 1950 and 1980. As wages for women have risen, fertility has dropped. "An increase in the earning ability of women increases the price of children" and consequently "reduces fertility."²⁰² This trend has been augmented by the extensive use of contraception and abortion, which make it easier to restrict family size.

While a decrease in fertility is mentioned as often accompanying women's employment, the far-reaching effects of a decrease in population are little spoken of in relation to the entrance of women into the workforce. For some twenty years, decreasing fertility has affected developed countries such as Northern and Western Europe, Canada, US, Japan, Australia, and New Zealand. The reversal of the age pyramid affects virtually all societies today, but more so the industrialized countries. The causes of the present aging population are complex. Some sources have been found in the living conditions and socio-cultural changes that countries have faced in the past 30 years. Among these are:

- Decreased infant mortality rates. (Contributing to a growth in the number of older people)
- The marriage rate has declined in an environment that is hostile to matrimony.
- The mean age at which women first give birth has sharply increased.
- Labor codes do not facilitate women's desire to harmoniously integrate their family life and professional activity.
- A lack of true family policies does not allow families to have the number of children that they would like.
- In developed countries, there is a widespread attitude that keeping a certain quality of life is more important than having children.
- There is a diversion between pessimism and hope experienced by the population.

Results of decreasing population are widespread:

²⁰⁰ See also MacMillan & Gartner (1999) and Kalmus and Straus (1990).

²⁰¹ This section takes much of its content from Aguirre (1999)

²⁰² Sunder (1990), p.56.

- A smaller population needs to support an aging population that is less active and has a greater need of healthcare and medical services. If one adds to this the fact that most social security systems are predominately of the pay-as-you-go type, the absence of younger generations endangers the possibility of supporting the elder generation.
- Solutions proposed to alleviate the situation include resorting to euthanasia. In fact, some EU countries have already legalized it.
- Within the active population there is a tension between the young and somewhat older people, as the latter try to protect their jobs while younger generations enter into reduced job markets.
- An impact on education in order to provide for the economic burden of the elderly, there is a great temptation to cut down on the money allocated for the training of new generations. Consequently, the transmission of cultural, scientific, technical, artistic, moral and religious common goods is thereby endangered.
- Danger of “moroseness” or a lack of intellectual, economic, scientific, and social dynamism as well as reduced creativity, which results in systematic stagnation.
- Population growth expands the market and facilitates creativity and dynamism. An important question arises regarding whether it is possible to maintain economic growth with population implosion.
- The problem of increasing illegal immigration into imploding countries.
- Increased loneliness among the population because of small families and reduction of extended family.²⁰³

6. Time Spent with Children

In general, questions about how much parental time children need are difficult to research and remain largely unanswered.²⁰⁴ However, findings show that much more time was spent with children in households with a mother at home full time – even though relatively little of that time was spent directly interacting with children. The care of children was an auxiliary or secondary activity to other tasks like doing housework. Nevertheless, employed mothers did not fully compensate for quantity with quality. Mothers who were not in the labor force also spent more time in quality activities, such as reading to and playing with children.²⁰⁵

²⁰³ Eberstadt (1995).

²⁰⁴ Bianchi & Robinson (1997) and Presser (1995).

²⁰⁵ Bianchi & Robinson (1997) and Nock & Kingston (1988).

Nock and Kingston (1988) found that maternal employment significantly cuts down time with children. Full time mothers with young children spent about two hours more per weekday with them than did their employed counterparts. The gap in maternal involvement showed up across a wide range of activities, with the traditional mothers spending more time with their children than employed mothers in play, education, child care, homemaking, and “fun.” This occurrence is consistent with an ecological perspective²⁰⁶ and the notion of spillover as stressful job conditions have been associated with less positive family dynamics after work, including reduced time spent with children.²⁰⁷

There also exists a body of research that claims there is little difference in time spent with children by maternal employment. Robinson (1993) found that mothers in his 1985 national survey spent just as much time with children on average as mothers in a 1965 national survey. Taking the higher 1985 maternal employment levels into account, it could be argued that mothers gave children slightly more of their available time at the later point.²⁰⁸

Most literature finds that fathers’ time with children is uninfluenced by maternal employment. Fathers in dual-earner homes spend approximately the same amount of time with their children as fathers in traditional homes. The only significant difference showed up at mealtime and on Sundays, when fathers of preschoolers in traditional families spend more time with their children than their counterparts in dual-earner families.²⁰⁹

The decrease in time that mothers spend with children when they enter the workforce can have potentially harmful effects on the children as parental monitoring is an important predictor of children’s and adolescents’ psychosocial functioning.²¹⁰

7. On children

Nearly every mother with children not yet in school employs some sort of childcare when she enters employment. Therefore, a summary of the effects of maternal employment must include the effects of childcare on children. The following section does this. The effects of non-maternal care on child development, such as daycare, continues to be controversial in both popular and scholarly press.²¹¹ However, the overall effects tend to be negative.

²⁰⁶ Bronfenbrenner & Crouter (1982) and Bronfenbrenner & Morris (1998).

²⁰⁷ Bumpus *et al* (1999), Bronfenbrenner & Crouter (1982), Bronfenbrenner & Morris (1998), and Staines (1980).

²⁰⁸ Bianchi & Robinson (1997).

²⁰⁹ Carlson (1989).

²¹⁰ Chilcoat & Anthony (1996) and Dishion & McMahon (1998).

²¹¹ Violato & Russell (1998), Gallagher (1998), NICHD (1998), and Scarr (1998).

i. Health

The effects of childcare on children's health are not widely publicized, partly because they are usually not extremely serious although they have been consistently negative. Childcare greatly increases a child's risk of contracting a number of infectious diseases including respiratory tract illnesses that lead to hospitalization, invasive bacterial illnesses such as *Neisseria Menengitidis* and *Haemophilus Innfluenzae* type B, hepatitis A, acute gastrointestinal illnesses, streptococcus pneumonia, and ear infections that can necessitate hospitalization and can cause hearing loss and consequent delays in cognitive, language and emotional development²¹²

Increased risk of contracting these diseases due to higher contact with potential carriers is not the only factor that raises children's incidence of getting sick. Nyquist (1999) highlights the overuse of antimicrobials by pediatricians, which has resulted in a dramatic emergence of illness caused by multi-drug resistant streptococcus pneumonia. He notes "the major reason cited by 54% of pediatricians surveyed for inappropriate use of oral antibiotics was parental pressure.. [adding that]...physicians felt pressure from mothers to prescribe an antibiotic and wanted to allow parents to return to work earlier."²¹³

ii. Cognitive and behavioral skills

a. Social confidence/competence

Most research literature finds that children from their high quality, university-based center appeared more socially confident during testing throughout the first and second year of life than did those without infant care experience.²¹⁴ Some research shows that social confidence depends on the strength of the mother-child attachment with the home-reared securely attached children functioning in a more competent fashion in day-care than the securely attached children. However, when the mother-child attachment is weak, day-care children who were insecurely attached were less socially withdrawn than home-reared insecurely attached children.²¹⁵

²¹² Nyquist (1999).

²¹³ Nyquist, 1999, p. 457. See also Anderson *et al* (1988), Presser (1988), Hurwitz *et al* (1991), Berg *et al* (1991), Alexander *et al* (1990), Kogan (2000), Hoekelman (1991), Glezer (1991), Shapiro (1991), Pass (1991), Morrow (1991), and Shapiro & Hadler (1991).

²¹⁴ Ramey *et al* (1982) and Belsky (1988).

²¹⁵ Egeland & Hiester (1995).

b. Behavior

Attendance of daycare has a decidedly negative effect on children's behavior. In contrast to children reared at home, children who have been brought up in childcare are consistently identified as having a number of behavioral problems. This includes an increased likelihood to use aggressive acts, such as hitting, kicking, and pushing, than children in the control group. They are also more likely to threaten, swear, and argue. They demonstrate these propensities in several school settings—the playground, the hallway, the lunchroom, and the classroom. Teachers were more likely to rate these children as having aggressiveness as a serious deficit in social behavior and viewed these children as less likely to use such strategies such as walking away or discussion to avoid or extract themselves from situations that could lead to aggression.²¹⁶

Several studies held that the negative behavioral effects associated with childcare were not permanent, finding that there was no evidence that this aggression persisted.²¹⁷ Indeed, three of those studies found that program children had better classroom behavior later.²¹⁸ Other studies found no significant effects on primary grade teacher ratings of classroom behavior.²¹⁹

In some cases, particularly those dealing with children from very low income families, certain kinds of childcare can have significant positive behavioral effects. Four evaluations, all focusing on programs that combined early childhood education with family support services, assessed the long-term (more than five years post-program) effects of antisocial behavior and/or actual delinquency records on parent or teacher ratings. These programs offered both home visits and center-based educational child care or preschool. All four demonstrated positive effects.²²⁰

c. Cognitive skills

Research on the relationship between childcare and cognitive development remains inconclusive, often showing effects that are neither strong nor consistent.²²¹

Some research suggests that, net of socioeconomic status; maternal employment negatively affects student achievement and teacher's rating of the cognitive abilities of elementary school age children.²²²

²¹⁶ R. Haskins (1985), p. 689-703, Belsky (1988), p. 235-272, Engeland and Hiester (1995), Lally & Honig (1988), Seitz *et al* (1985), Sitz & Apfel (1994), and Haskins (1985).

²¹⁷ Lally & Honig (1988), Seitz *et al* (1985), Sitz & Apfel (1994), and Haskins (1985).

²¹⁸ Lally & Honig (1988), Seitz *et al* (1985), Sitz & Apfel (1994).

²¹⁹ Jester & Guinagh (1983), Weikart *et al* (1978), Schweinhart *et al* (1993), and Barnett *et al* (1994).

²²⁰ Johnson & Walker (1987), Lally *et al* (1988), Schweinhart *et al* (1993), and Seitz, & Apfel (1994).

A large body of literature contends that childcare can have positive effects on children's cognitive ability. One study found that children who took part in a high-quality center-based program had significantly higher IQ and verbal ability scores than children who did not, regardless of the welfare status of their parents.²²³ Several studies have estimated that ECCE had a large effect on the graduation rate, though the three studies with larger sample sizes found the effect to be statistically significant.²²⁴ However, added support is provided by the other studies that find effects of childcare on achievement, grade retention, or special education placement—all of which are predictive of high school graduation.²²⁵

Other research contends that the effect of childcare on cognitive development is related to the quality of the child's home environment. For children from impoverished homes, earlier entry and/or more years in care produced a larger effect on reading scores than fewer years. Conversely, effects were negative for children in the highest-income families. The key may be differences in the quality of the children's home environments rather than income per se: children whose home environments were very highly supportive of cognitive development and socialization actually had lower scores if they had been in care outside their homes. Children whose home environments were relatively poor gained the most from outside care.²²⁶

Others found maternal employment to be unrelated to child outcomes, or related only to outcomes for select subgroups: the relation is negative for high income, negative for boys in single-parent families, negative if employment is full time and occurs in the first year or two of life, but positive if it occurs in subsequent preschool years.²²⁷

Although one might expect the findings on cognitive development to follow the same trend of negative results found in the effects of childcare on socialization and behavior, Rutter (1985) concludes from a very large body of evidence that the experiences most important for supporting optimal cognitive development differ greatly from the experiences which have the most impact on socio-emotional and behavioral development.²²⁸

²²¹ Bianchi & Robinson (1997), Heyns & Catsambis (1986), and Parcel & Meneghan (1994).

²²² Bianchi & Robinson (1997), Stafford (1987), Milne *et al* (1986).

²²³ Brooks-Gunn *et al* (1994) and Smith and Brooks-Gunn (1994).

²²⁴ Miller & Bizzell (1983a-b & 1984), Gray *et al* (1982 & 1983), Weikart *et al* (1978), Schweinhart *et al* (1993), Barnett *et al* (1994), Fuerst & Fuerst (1993), and McDonald & Monroe (1981).

²²⁵ Weikart *et al* (1978), Schweinhart *et al* (1993), Barnett *et al* (1994), Ekstron *et al* (1988), and Roderick (1994).

²²⁶ Barnett (1995), Caughy *et al* (1994).

²²⁷ Dawson (1991), Leibowitz (1977), Desai *et al* (1989), Krein & Beller (1988), Belsky & Eggebeen (1991), Blau & Grossberg (1992), and Bianchi & Robinson (1997).

²²⁸ Cohn (1991) and Rutter (1985).

iii. Psychological/emotional effects on children

The largest body of literature on the effects of childcare deals with the influence of childcare on mother-child attachment. Attachment refers to the emotional bond that develops between a parent and child.²²⁹ The central tenet of attachment theory is that disruptions to the affectionate bond produce an instinctive fear response in the child that, if unattended, might disrupt the formation of a secure attachment and increase a child's vulnerability to psychological disorder.²³⁰ It is argued that on the basis of early parent-child interactions, children develop mental representations or internal working models of their relationships with their parents.²³¹

These attachment styles are believed to become increasingly stable and resistant to change over the course of development, providing a prototype for expectations, strategies, and behavior in later relationships.²³²

Four possible types of attachment have been identified:²³³

SECURE: Securely attached babies are able to use the attachment figure as an effective secure base from which to explore the world. When moderately stressful events, such as brief (3-minute) separations in an unfamiliar environment occur, these securely attached babies approach or signal the attachment figure at reunion and achieve a degree of proximity or contact that suffices to terminate the attachment behavior. They accomplish this with little or no open or masked anger, and soon return to exploration or play.

AVOIDANT: Babies with avoidant attachments are covertly anxious about the attachment figure's responsiveness and have developed a defensive strategy for managing their anxiety. Upon the attachment figure's return after the same moderately stressful events, these avoidant babies show mild versions of the "detachment" behavior that characterizes many infants after separations of two or three weeks. That is, they fail to greet the mother, they ignore her overtures, and they act as if she is of little importance.

AMBIVALENT: in babies with anxious/ambivalent attachments, both anxiety and mixed feelings about the attachment figure are readily observable. At reunion after brief separations in an unfamiliar environment, they mingle openly angry behavior with their attachment behavior.

²²⁹ Wardwood *et al* (2000) and Bowlby (1982).

²³⁰ *ibid.*

²³¹ Wardwood *et al* (2000) and Main *et al* (1985).

²³² Wardwood *et al* (2000), Bretherton (1985 & 1992), and Main *et al* (1985).

DISORGANIZED/DISORIENTED: Babies classified into this group appear to have no consistent strategy for managing separation from, and reunion with, the attachment figure. Some appear to be clinically depressed while some show mixtures of avoidant behavior, openly angry behavior, and attachment behavior. Some children show odd, often uncomfortable and disturbing behaviors and behavior sequences.

In the debate over the effects of childcare on attachment, a number of researchers have expressed concern about infant daycare in particular.²³⁴ Here it is believed that infants in day care are particularly at risk since it is at this time that attachment to a principle caregiver is being formed. If the principle caregiver (e.g. mother) is absent for long periods of time (e.g. due to employment commitments) the infant is at an increased risk for insecure attachment and subsequent development problems. There is very little consensus on this view, and conflicting and confusing conclusions continue.²³⁵

The tendency for infants to experience attachment disorders, when left in daycare at an early age and for considerable amounts of time, is well documented. 701 cases from 16 different studies reported a 23% rate of attachment insecurity for children under the age of one experiencing less than 20 hours of non-maternal care/week, and a 43% rate of attachment insecurity for children under one experiencing more than 20 hours of non-maternal care/week.²³⁶ This evidence has been confirmed time and time again in numerous studies that have found that early and extensive childcare results in attachment disorders. The risk of such disorders increases with the amount of hours spent in childcare.²³⁷ The most concern is expressed for infants in childcare as being particularly vulnerable to attachment disorders and similar findings have been reported for preschool-aged children in childcare as well.²³⁸

Other research finds little to no difference in mother-child attachments between children in childcare and children cared for by their mothers. This is reported of both infants,²³⁹ and preschool-aged children,²⁴⁰ although such evidence is less numerous than that supporting the relationship between child care and mother-child attachment.

There is some evidence that all attachment data is not an absolute but it bears exceptions. One researcher found that when families enrolled in the research process after the child's first year, no effects

²³³ Cohn (1991).

²³⁴ Barglow *et al* (1987), Belsky (1986 & 1988), Belsky & Rovine (1988), and Gambler & Zigler (1986).

²³⁵ Violato & Russell (1991), Belsky & Braungart (1991), Clark-Stewart (1988), and Scarr (1998).

²³⁶ Lamb *et al* (1992).

²³⁷ Barglow *et al* (1987), Belsky & Rovine (1988), Jacobson & Wille (1984), Howes and Hamilton (1992), Sroufe (1988), Lamb & Sternberg (1990), Clarke-Stewart (1989), Lamb *et al* (1992), ; Vaughn *et al* (1985).

²³⁸ Howes & Hamilton (1992).

²³⁹ Howes and Hamilton (1992), Belsky & Braungart (1991), and Belsky, and Rovine (1988).

on attachment were discerned. When families were enrolled before they knew how daycare and family relationships developed, the rates of insecurity were much higher among children experiencing 20 hours or more of non-parental childcare within their first year.²⁴¹ Fuchs (1998) notes that 50% of mothers are employed within the first year of their child's birth, and of these 75% are employed full time. Therefore, it is very convenient to minimize the magnitude of the assessment relating childcare and attachment insecurity.

The effects of secure and insecure attachments are visible in children later in the child's life. Securely attached infants engage in more imaginative, symbolic play than both avoidant and ambivalent infants.²⁴² Furthermore, securely attached infants were more enthusiastic and complied with maternal requests more frequently than insecure babies; they ignored the mother less, spent less time away from the task, and exhibited fewer frustration behaviors. Other tests indicated that infants classified as securely attached at 18 months were also higher on positive affect and lower on saying "no," crying or whining, negative affect, and engaging in aggression toward mother.²⁴³ In a test which presented children with the stressful scenario of the parents leaving for a two week vacation, insecurely-attached children responded by acting strained and tense during the test. Some denied that the child in the picture had any feelings of vulnerability. Some were overly pessimistic. A few even said that the parents might never come back. Most of the coping behaviors these defended children suggested were unrelated to the reported feelings or were plainly unrealistic.²⁴⁴ There is evidence that the effects of mother-child attachment are far reaching and extend over a long period of time.²⁴⁵

iv. Long term effects of working mothers on children

Research literature includes findings on the long term effects of maternal employment on children aside from the affects of childcare. Studies of adolescents or high school students are less positive with respect to the effect of work.

Stafford concluded that mother's work has a significantly negative effect on school performance. The pattern appears pervasive, showing up strongly on four of the seven scales used by teachers to evaluate student performance. Mother's time doesn't seem to matter. Milne *et al* (1986) reported that the fact that the mother works has negative effects on reading and mathematics scores; Krein and Beller

²⁴⁰ NICHD (1998).

²⁴¹ Belsky & Rovine (1988).

²⁴² Matas *et al* (1978).

²⁴³ *ibid.*

²⁴⁴ Grossmann & Grossmann (1991) and Colin (1996).

²⁴⁵ Grossmann and Grossmann, 1991.

(1998), using the NLS youth sample, reported that the mother's working has negative consequences for the educational attainment of sons.

Behavioral problems accompany maternal employment into the child's adolescent years and beyond. Hagen *et al* (1985) found that in more egalitarian families, in which mothers and fathers both have authority in the workplace, daughters show levels of delinquency, which are increasing to the much higher delinquency rates of young males.²⁴⁶

Maternal employment seems to affect gender perceptions and gender relations in their children as well. Ellis found that androgynous students were more likely to have a mother who worked outside the home than students defined as distinctly masculine or feminine. Statistical analyses of the data showed that results indicated a relationship between mothers' working outside the home and the development of androgynous characteristics in children. Booth and Amato (1994) report that children from marriages based on egalitarian sex roles often have poor relationships with their fathers, and daughters of nontraditional marriages are more likely to cohabit.²⁴⁷

However, there are some who find that maternal employment has little negative effect. Hoffman (1979) concluded that there is no evidence that maternal employment has harmful effects on children, and some evidence that effects are positive, especially for daughters. Heyns (1985) reached similar conclusions.

Garfinkle and McLanahan (1986) recommend that literature on the mother's working be interpreted with caution. In particular, they state, one should be cautious about positive findings. First, since working is highly correlated with earnings capacity, any positive effects may be due simply to selection into the labor force. This would be especially true of mothers with small children, where selection would be the strongest (due to the high costs of child care) and where observed effects are most positive. Second, positive effects may be due to higher income since mother-only families in which the mother works are clearly better off than those in which she stays home. Heyns and Catsambis (1986) note that most of the difference disappears once income is taken into account. This does not mean that the positive benefits of earned income are unimportant, but simply that the mother's working itself may not have any particular benefits beyond those of income. Finally, it is possible that positive effects come through a "modeling effect," rather than through the effect of outside work itself. Some

²⁴⁶ See also Carlson (1987).

²⁴⁷ See also *Working Mothers, Androgynous Children*, 1995, and Carlson (1995).

studies have found that the mother's employment and occupational status have positive effects on the career expectations and aspirations of high school girls.²⁴⁸

Part Three: Working Mother's Net Income Contributions to the Family

This section presents an empirical analysis of the net income contribution of the secondary income, which for the most part comes from women, to total family income. The framework used is a cross-section estimation of the net income provided by the secondary income in the family. Net income is calculated by deducting taxes, other expenses of the secondary earner related to their work, and childcare from the income received. A one-period approach is used.

The review of the literature, as presented in the previous section, clearly shows that a mother and a father in a stable relationship is the best for the development of the human person. The literature also reveals that the presence of the parents is very important for the child, especially during the first years of his or her life. Yet, since the 1960s, the number of two income families has continued to increase and with it, the use of childcare of different kinds. The literature has extensively studied child-care including its availability, quality cost, the appropriate role of the government and the family in providing care for children, and the labor supply and child care demand, among other topics. It has also extensively studied the conditions under which women are working. Yet, little studies are available where the economic impact of the contribution of the women working outside the home is considered.

A. Theoretical Framework

For a family with young children, the working of both parents outside of the home requires the need to ensure the care of the children while they are not in school. In addition, other expenses are incurred, such as clothing and housekeeping. The model is intended to apply to households in which young children requiring continuous childcare are present and in which the one or two adults present in the house are employed. This assumption does not eliminate the possibility of every household having some source of free care, but it does get rid of the possibility of having access to all the needed childcare from a free source. This source can include, within our sample, teenagers or other relatives and friends who live elsewhere.

The household is assumed to maximize the value of the utility function $U = U(L_M, L_O, G, Q)$, where L_M is the mother's time spent with their children (i.e., all non-market activity), L_O is the non-

²⁴⁸ Garfinkl & McLanahan (1986).

market activity of the free potential childcare provider, G is the composite market good, and Q is the average childcare per hour.²⁴⁹ The three potential sources of childcare are the mother, the potential free childcare provider, and market childcare. Every hour that the mother works in the market requires an hour care by someone else.²⁵⁰ The free childcare provided is denoted by T_o . Finally, it is assumed that a continuum of market childcare is available at price P_Q per unit, which Q_P representing the childcare purchased.²⁵¹

The household faces the following constrain: $L_M + M_M = L_o + H_o + T_o + Q_P = 1$, where H_M and H_o are hours worked by the mother and other, respectively. Given the normalization of total available time to unity, average childcare, Q , is just a weighted sum of the different sources of childcare provided. $Q = L_M Q + Q_P (H_o - T_o) + H_o - T_o$, where the weights are the number of hours of each type of care used and are sum to one and where $H_m - T_o \geq 0$. The budget constraint is $G = E + W_m H_m + W_o H_o - N P_Q Q_P (H_M - T_o) - O$, where E is the net exogenous income (including earning of the husband if he is not a potential child-care provider, in which case $W_o H_o = 0$), O are other expenses related to the secondary earner work, W_m , and W_o are exogenous wage rates, and G is the total net income.

The household chooses L_M , T_o and Q_P to maximize the utility function subject to the time and budget constraints. Two possible solutions, given the constraints included in the model, are: (1) the mother works and all childcare is purchased in the market and (2) the mother works and some care is provided by the market and some by the mother and/or the free provider.

One can derive the effects of changes in the choice of childcare providers and the hours worked in the market by the secondary earner on the total net income of the household. Presumably, given the empirical evidence on the poor quality and harmful effects that the use of market childcare has on children, the main reason for a potential secondary earner to work in the market place is an economic need. Thus, it is relevant to determine whether this contribution is significantly different from zero, and if so, what are the relevant factors affecting the behavior of the net secondary earner's income.

²⁴⁹ For simplicity all children in a given household are assumed to receive the same quality childcare and the number of children requiring care is taken as exogenous and given by N .

²⁵⁰ This is a simplifying assumption but seems to be consistent with customary practice, in which the mother is the main child-care provider.

²⁵¹ Its is straightforward to incorporate into the model a fixed price of using market or informal childcare in addition to the variable cost P_q , but this would leave the analysis essentially unchanged.

B. Data and Methodology

The quarterly data used is from the 1997 Consumer Expenditure Survey. The survey collected extensive information from a sample of 22,184 households on family labor, childcare expenditures and use, and a wide variety of other relevant variables.²⁵² This empirical analysis was performed on a sample of 1,589 households in which there were two earners if two adults were present in the household or one earner if the head of the household was single or separated/divorced, where children were present and all under 18, and where paid childcare was used.²⁵³ Of the 1,589 households included in the study, 76% contained married couples and 24% did not. The ethnic distribution of the survey includes 84% of White/Hispanic, 12% of Blacks, 12% of American Indians, and 3% of Asians. The education distribution is more evenly distributed: 15% of the households have only primary education, 29% high school education, 33% some level of college education but no degree, 25% have a bachelor's degree, and 13% have a masters degree or higher. As previously mentioned, weights have been used that permit nationally representative estimates to be obtained.

The data used was seasonally adjusted. The survey provides the amount of childcare spent, as well as data that allows for the calculation of income and expenditures related to the secondary earner's income. It also provides, among other things, information on marital status, race, income level, and education. Table 1 presents the table characteristics of secondary earner's income, net secondary earner's net income, childcare expenditures, and other secondary earner's work related expenditures.

Figures 3-5 present the quarterly distribution of a household's secondary earner income, childcare and other work related expenditures, and net secondary earner income respectively. For 95% of the sample the quarterly secondary income is below \$2,000 (Figure 3). Those receiving above \$2,000 fall in the highest three income brackets (\$35,000 and higher per quarter.)

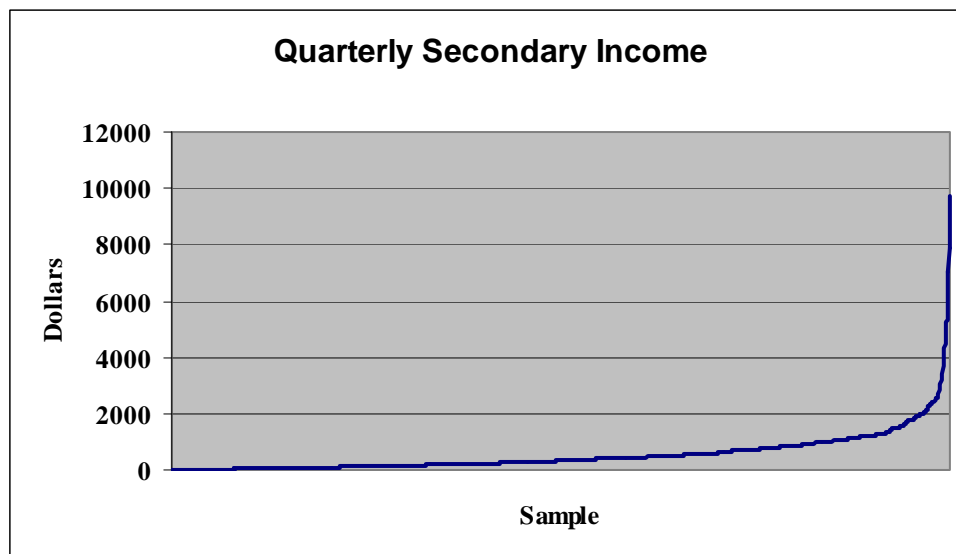
²⁵² The sample is not random with respect to the national population. Low income households are overrepresented. It also oversamples and undersamples certain demographic groups. Weights are available, however, that permit nationally representative estimates to be obtained.

²⁵³ The literature has suggested that the presence of relatives as a substitute for the presence of the mother is more helpful the normal development of the child than external childcare. In addition, the childcare provided by grandparents is typically free,

Table 1: Sample Characteristics

Variable	Mean	Standard Deviation
Secondary Income	552.76	18.51
Net Secondary Income	43.51	5.30
Childcare Expenditures	493.55	16.57
Other Work Related Expenditures	15.63	1.88

Figure 3



When analyzing the childcare cost (CCEXP) together with other related expenditures (OTHEXP), the range follows closely to that of the secondary income (Figure 4). The highest childcare expenditure is \$9,440, and the value spreads down to as low as two digit figures. Work related expenditures are significantly lower than this, reaching at most \$1,460 per quarter. This is an indication

and thus no cost is involved in such childcare. Hence, our criteria for selection require not only the absence of any other adult beside the parents, but that childcare is paid.

of the significant burden that childcare costs have on the capacity for the secondary income's earner to significantly increase the household income. Therefore, it is not surprising for the quarterly net secondary earner's income to have the shape it has (Figure 5). For the most part, the net income contributed is close to zero with the exception of the highest and lowest income levels. The lowest one actually generates negative net income.

Figure 4

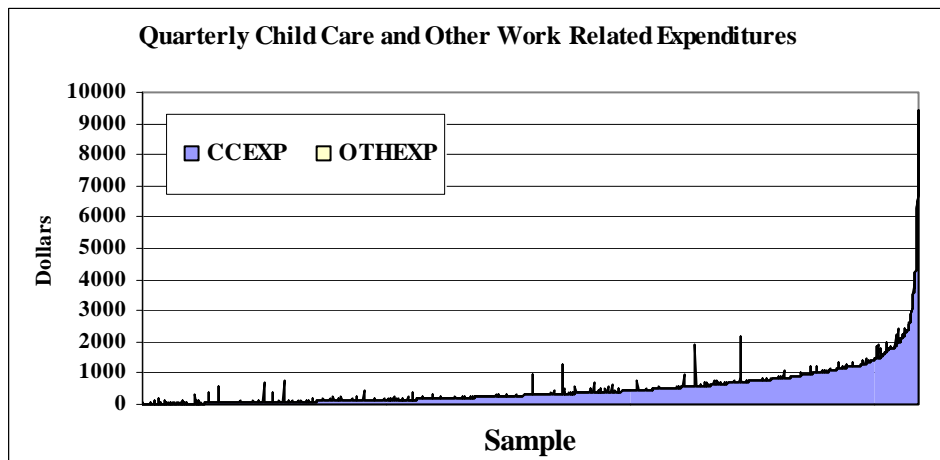
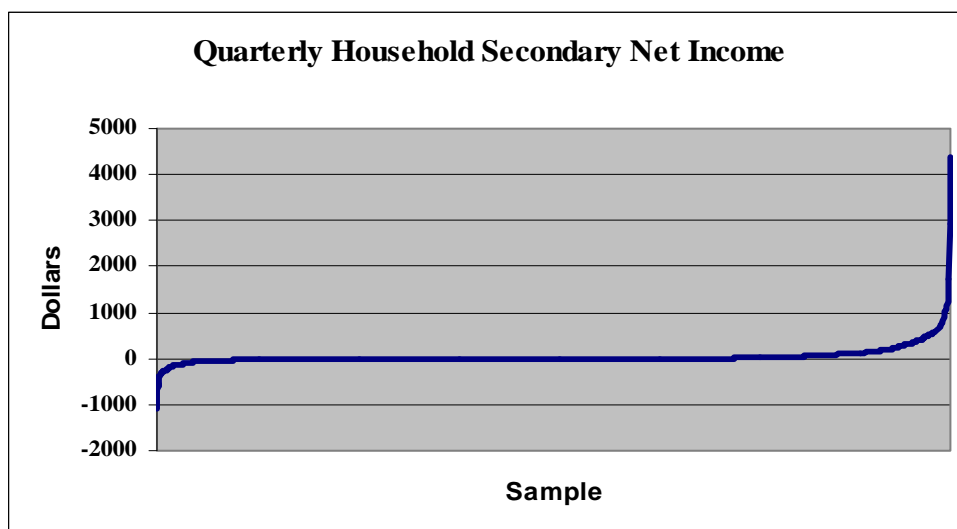


Figure 5



In order to determine whether, on average, the contribution of the secondary earner to household income is significant, we used a t-test to compare them across marital status and other characteristics; we use either t-tests or one way and two-way analyses of variance (ANOVA).

C. Empirical Results

When testing for the statistical significance of the average net secondary earner's income ($H_0: \mu=0$ versus $H_A \neq 0$), we find significant results at the 1% level; on average, the income earned by the secondary income earner increases the total net income of the family. Yet, in absolute numbers, the mean is \$43.41, and therefore, economically insignificant. It would be a mistake, however, to conclude that the contribution of the secondary earner's income is always economically insignificant, as can be observed Figure 5. This suggests that other factors play an important role in determining the secondary earner's income level. We also tested for the statistical significance of average childcare costs. We also found this significant at the 1% level. (Means and standard deviations were reported in Table 1.)

In order to further understand the dynamics of both net income and child care cost, some of the variables identified by the literature as factors determining the demand for childcare and women's wages were incorporated into the analysis. Specifically, we controlled for levels of education, marital status, race, and income levels. We first tested for the independent impact of each of these variables on net income and childcare expenditures. Then, we examined the interactions of these variables. To test the significance of the effect of these variables on net secondary income of the households, we used one and two way ANOVA tests respectively. These results are reported in tables Table 2 and 3.

When analyzing the impact of each of these variables on net secondary income, we find that all of these variables are significant in determining it (Table 2.) Overall, we find that married couples consistently perform better than not married couples. On average, the first one is twice as high as the second one (Figure 6). Race and education, although they provide different levels of income, do not significantly differentiate the level of income of married vs. not married secondary earners (see Table 3, Row 1). The level of income, however, significantly differentiates in the net income of married versus not married couples. The first of these groups performed significantly better than the second one, with the exception of the lowest percentile and those households whose income is above \$50,000. Figure 7 present three graphical representations of these results. Results also suggest that the difference in net

Table 2
One-Way ANOVA

Net Secondary Earner's Income			
Variable	F (t) statistic	p-value	Null Hypothesis Tested
Marital Status	2.26	0.024	$\mu_M = \mu_{NM}$
Race	3.95	0.09	average income equal among races
Level of Income	97.14	0.00	average income equal levels of income
Education	66.53	0.00	average income equal among different levels of education
Childcare Expenditures			
Marital Status	23.52	0.00	$\mu_M = \mu_{NM}$
Race	84.97	0.00	average expenditure equal among races
Level of Income	107.23	0.00	average expenditure equal levels of income
Education	251.54	0.00	average expenditure equal among different levels of education

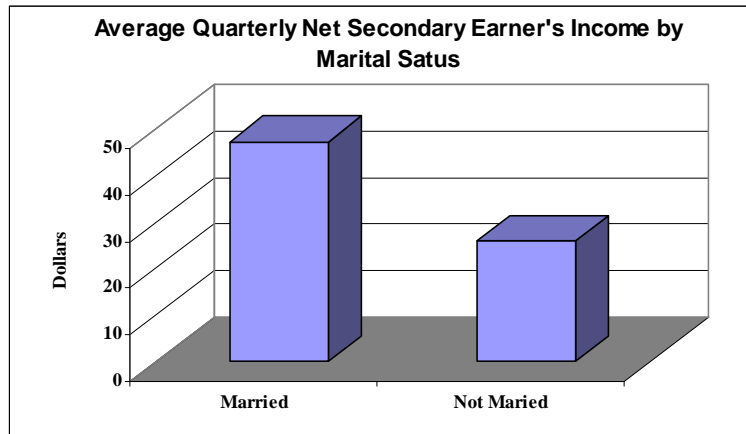
Table 3
Two-Way ANOVA

Net Secondary Earner's Income				
	Variable	1	2	3
		Race	Level of Income	Education
1	Marital Status	1.23 2.23	1.32 24.59*	10.04* 0.03
2	Level of Income	7.7* 2.85**		
3	Education	3.31* 2.19	2.51** 2.72**	
Childcare Expenditures				
4	Marital Status	6.35** 14.94*	9.78* 9.81*	2.51** 2.72**
5	Level of Income	1.41 0.97		2.53** 3.83*
6	Education	1.42 0.98		

- Notes:* 1. The first F statistic correspond to the variable in the row and the second statistics correspond to the variable in the column.
2. * and ** indicate significance at 5%, and 10% levels respectively.

secondary earner's income caused by race is not as strong as it is significant only at the 10% level (Table 2). The highest income corresponds to whites (W), followed by Asians (AS). The contribution of the Black (B) secondary earner is $\frac{1}{4}$ of the White's contribution. This is not as surprising when one controls for income and race.

Figure 6



Asians and Whites perform significantly better than the Blacks and the American Indians, these last ones reporting the lowest income (Figure 7).

The household level of income is also a significant factor in the determination of the net secondary income. The variable is significant in all cases (Table 3, Rows 1-3). The higher the level of household income, the higher is the net secondary income. This pattern holds for the interaction of all the explanatory variables analyzed. Once again, married households fair the best, the highest net income corresponding to whites, then to Asians, followed by Blacks and American Indians. Figure 8 presents the graphical results.

After the household income level, it is the level of education of the secondary earner which significantly affects the net secondary income (Table 3, Row 3 and Column 3). Secondary earners' with only grade school education have average net income that is negative, and it increases by a factor of 4 when an earner possess a graduate degree (Figure 9).

Once again, when levels of education are combined with race and levels of income, Whites register the highest net secondary income (Figure 8) and highest education, followed by Asians and Blacks. When the level of education is compared *vis a vis* marital status,

Figure 7

Average Quarterly Net Secondary Income and Marital Status Interactions

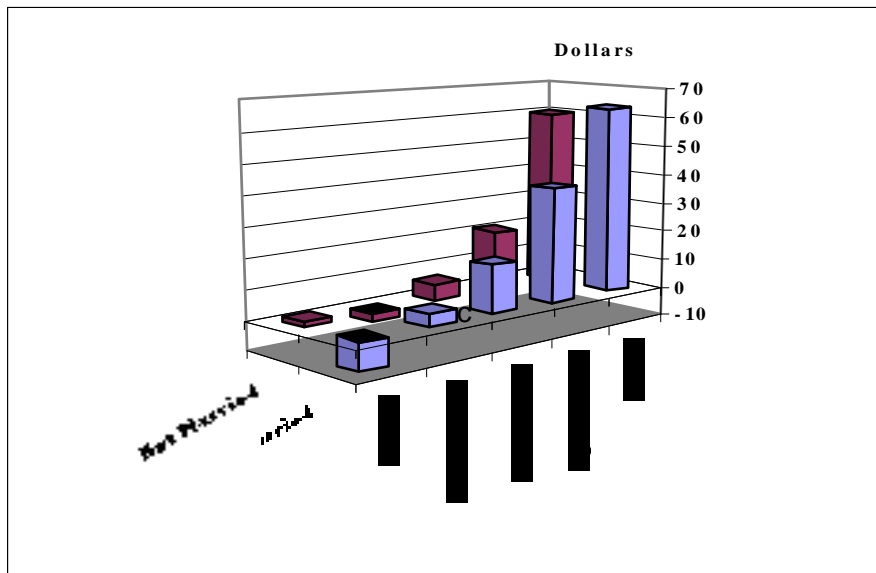
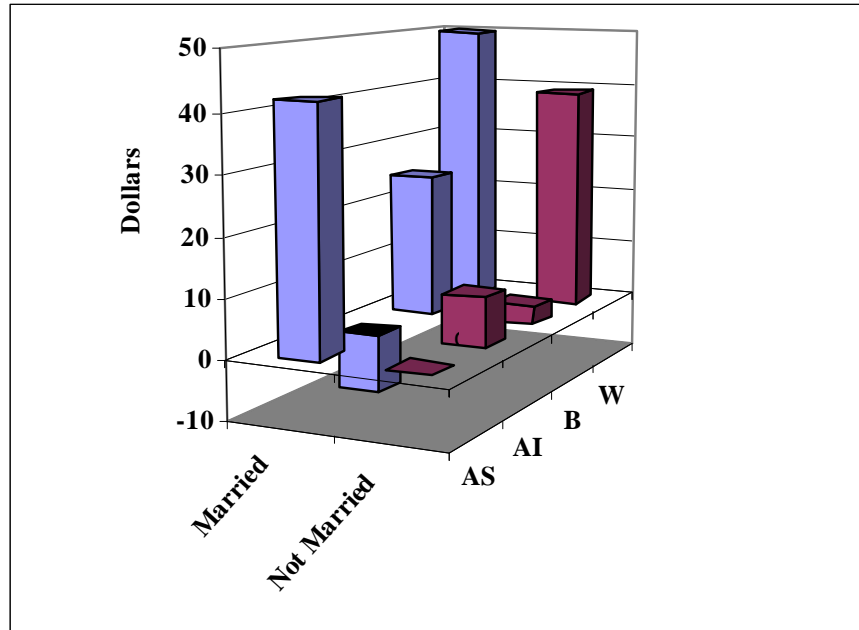


Figure 8

Average Quarterly Net Secondary Income and Household Income Level Interactions

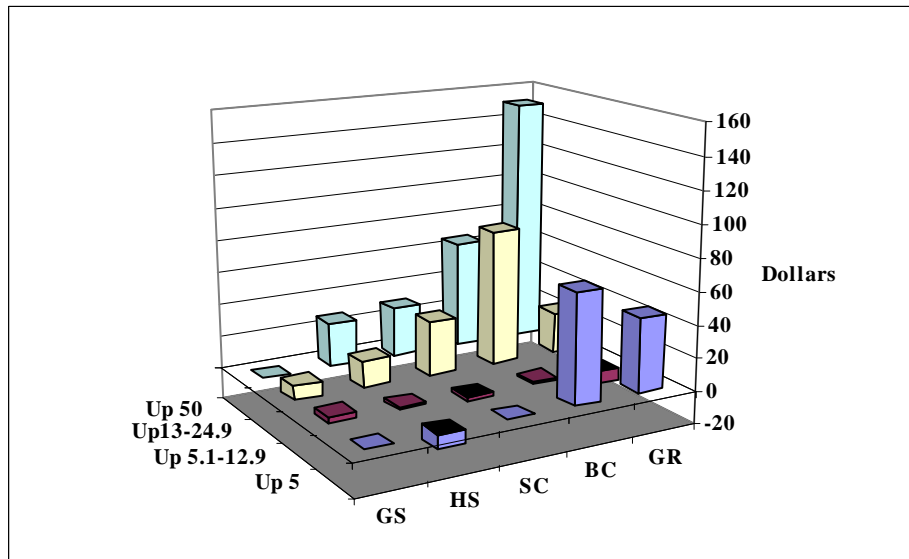
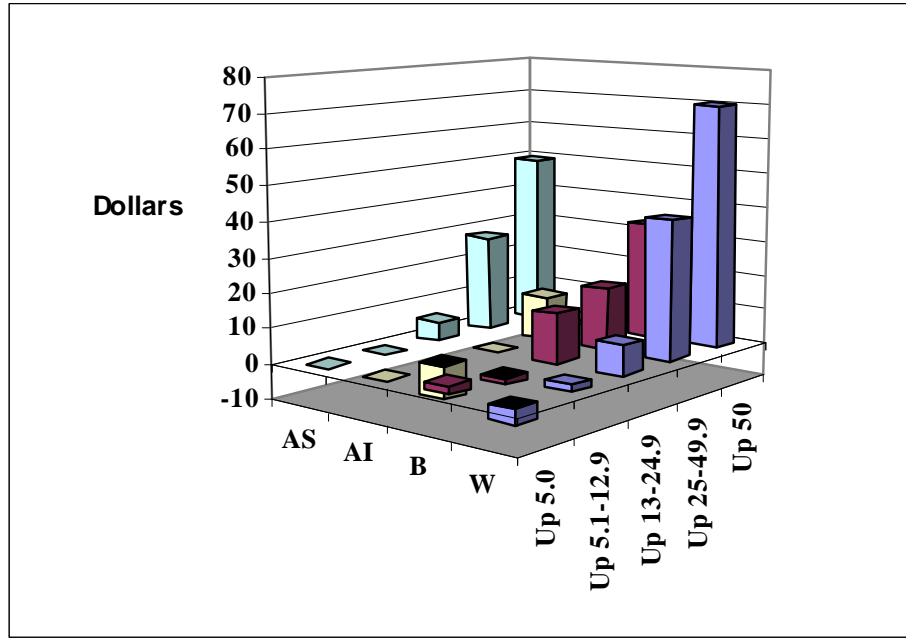
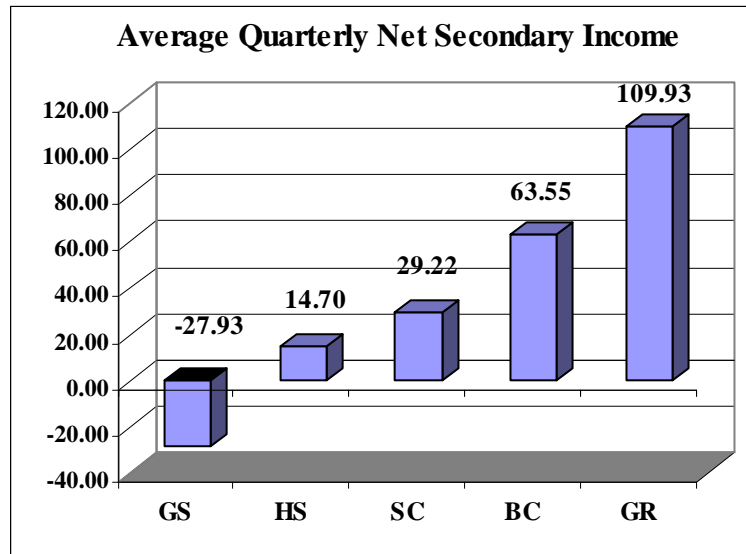


Figure 9



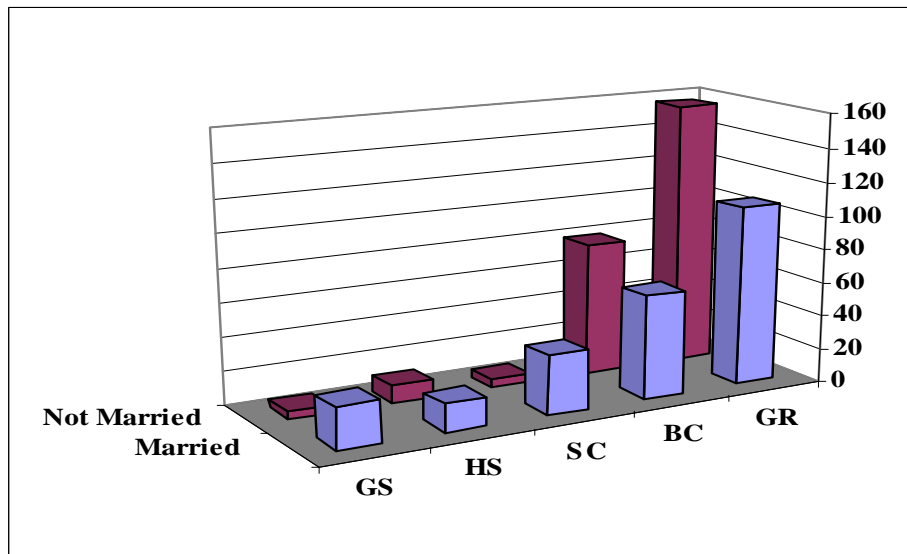
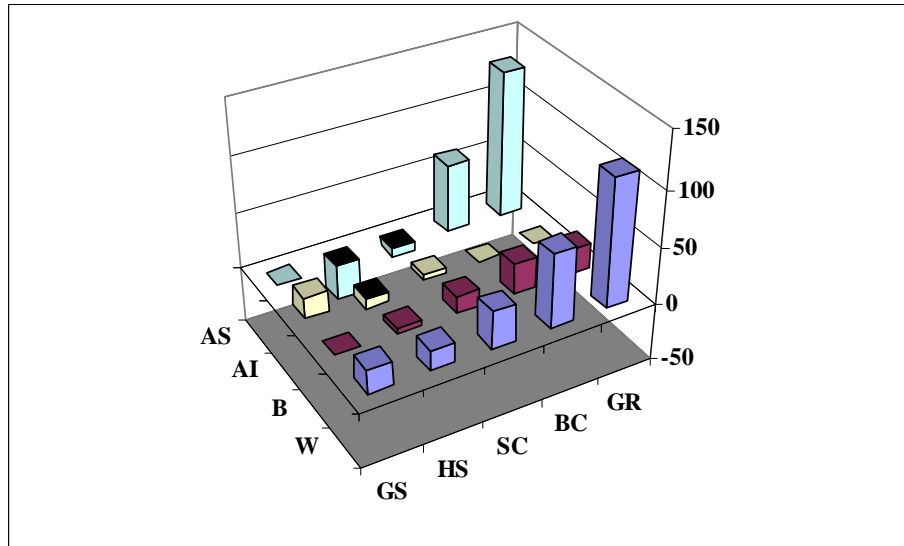
married secondary earners have a higher income than those not married if they have a junior college degree or lower. The situation reverses when the secondary earner possesses a bachelor or a higher degree. Since single households have only one source of income, they tend to dedicate themselves to their careers with more continuity than their married counterpart. This is reflected in a higher income received by the former (Figure 10).

So far, the data seems to suggest that though significant, the net secondary income provided by the second earner does not amount to much at lower levels of income. The data also seems to suggest that marriage status contributes to increasing the value of this secondary contribution. The levels of education as well as levels of household income are also relevant.

We now turn to childcare expenditures. The data suggest that childcare is the single most important expense incurred by working parents. As previously mentioned, the sample used in this study assumes that parents need to access to some degree the childcare market, as it does not consider those with a full-time childcare provider. Table 2 reports the results from the One-Way ANOVA test carried out on education, race, level of income, and education. All are found significant in explaining different levels of childcare expenditures. Table 3 presents the Two-Way ANOVA results, which shed some light on the interaction of these variables on childcare expenditures. With the exception of the overlap between race and education, all other statistics are significant at the 5% significance level. As could be expected,

Figure 10

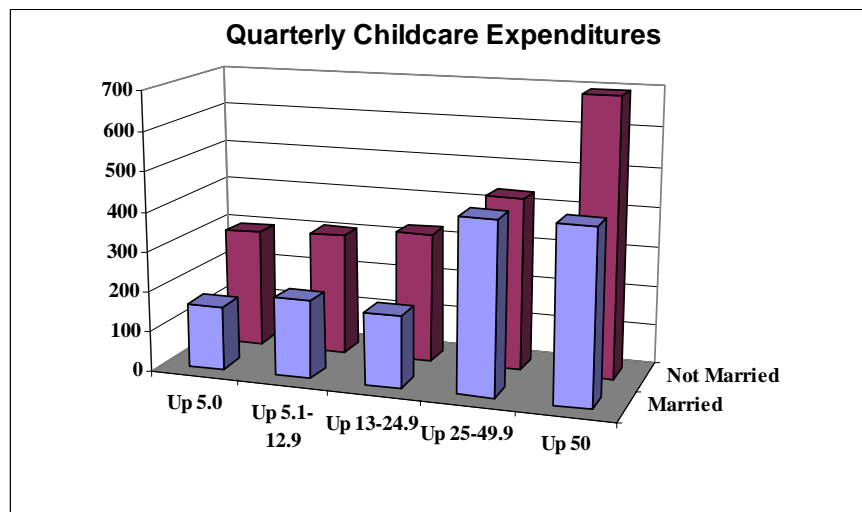
Average Quarterly Net Secondary Income and Household Education Level Interactions



childcare expenditures increase with the level of education of the secondary earner. The gap between the amount spent by a worker with a grade school level education per quarter (\$310), and a worker who possess a graduate degree (\$550), is \$240 per quarter, an increase of almost 44% in expenditures. Yet

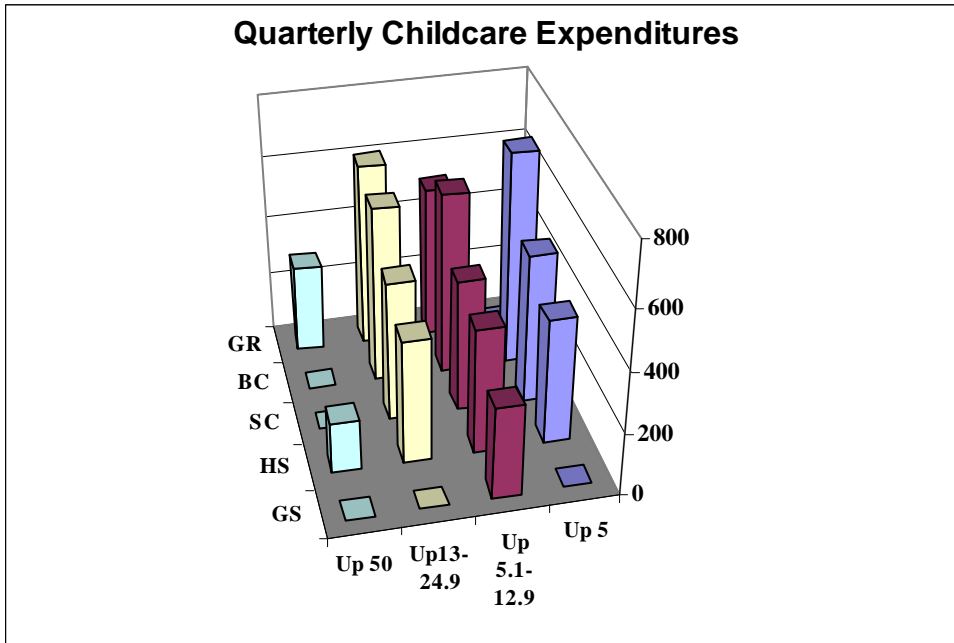
the amount spent is also affected by the marital status and income level of the household. Non-married households spent significantly more in childcare than married couples (Table 2). This is especially true for the lowest three income brackets. Not only does the non married head of household typically have a lower income than the married secondary worker, but also since it is not considered with a spouse, the non-married worker needs to pay for longer hours of childcare. This puts additional pressure on the net income that a non married household is able to bring to the home. Figure 11 shows these results in graphical form.

Figure 11



This pattern is also captured when levels of income and education are combined. Independent of the level of education, the lower the income level, the higher the amount spent on childcare. Similarly, the higher the level of education, the higher the total spent on childcare. An exception to this was found in the highest income bracket (\$50,000 a quarter or higher). One explanation for this could be that secondary earners in this bracket have full-time help at home, and thus, do not require additional childcare (Figure 12).

Figure 12



Results in Table 2 regarding the role of race suggest that the effect of ethnicity in the expenditure is not due to race but to the prevalence of non-married households, especially single mothers, among the black population. As it was previously mentioned, this constitutes a serious problem since single mother households tend to be at the highest risk of poverty (Figures 1 and 2) and possessing the highest childcare burden.

PART IV: CONCLUSIONS

Much has been carried out regarding the cost and quality of childcare in the United States. Also, much has been researched regarding the determinants of women working. The literature thus far suggests that the use of childcare as a substitute for the presence of the mother in the rearing of children, or of some close relative, is far from optimal. The reasons why households continue to seek childcare in spite of such evidence are many and diverse, and have been previously addressed in the paper. Among them, two relevant ones are often advocated: economic needs of the family, and the needs of the mothers to develop professionally outside the home. Among the economic needs, especially difficult is

the situation of single mothers and their children, all of whom are at high risk of falling into poverty. In order to be able to work, single mothers require, for the most part, the use of some type of paid childcare. In the case of married couples, economic need has taken the lead among the reasons provided by the second earner as to why they entered the work force.

This paper aimed to fill a gap in the literature by analyzing the net income contribution of the secondary earner -or only earner in the case of single mothers- to the total income of the household. Net secondary income has been defined as the difference between the disposable income, the childcare expenditures, and other expenditures directly incurred due to the work carried out outside the home and for pay by the second earner, in most cases the mother. If it is worthwhile economically, this income should be greater than zero. We find that this is, in fact, the case. Yet, we also find that for the most part, the net income is economically insignificant. Furthermore, the results suggest that the lower the income and the education of the secondary earner, the higher the probability of the net contribution to the total income of the household to be zero, or possibly negative.

This is relevant at both the microeconomic and the macroeconomic level. On a microeconomic level, it is relevant because the results suggest that a mother might want to weigh the meager income she might be able to access versus the well-documented negative effects that the absence of a parent can have in the normal development of children. They also suggest the convenience of children coming into the world within a stable family, as the data consistently reveals that it is in this structure where the net secondary income is maximized.

From a policy point of view, the results of this study speak to the importance of reinforcing the family through public programs as well as through private sector initiatives. It does not only respond to a normal development of society, but to an optimal way of preventing future social ills and high welfare costs. In doing so, the government contributes towards the maximization of the human and social capital of society while it minimizes its social welfare costs. It also speaks to the important role that the extended family plays in the lives of those who need to use childcare services for their children. The lack of viable childcare provisions not only hamper the normal development of children, but also undermine any efforts to help single mothers overcome poverty. The literature, however, suggests against government provision of such service, as this seems to be of poor quality when it is provided. An alternative could be either the provision of childcare services by private employers, or some type of government assistance that would help women in need afford childcare, thus bringing to their households a net positive primary or secondary income.

Bibliography

- Aguirre, M.S., 1999. "Pollution, environment, and sustainable resources: why the focus on population?", paper presented at Washington Semester and World Capital Programs, American University, March, 1999.
- Aigner, D and Cain, G.C., 1977. "Statistical theories of discrimination in labor markets", *Industrial Labor Relations Review*, 30:1, 275-87.
- Alexander, C.S., (1990). "Acute gastrointestinal illness and child care arrangements", *American Journal of Epidemiology*, 131:1, 124-131.
- Alm, J., Dickert-Conlin, S. and Whittington, L.A., 1999. "Policy watch: the marriage penalty", *Journal of Economic Perspectives*, 13:3, 193-204.
- Alm, J. & Whittington, L.A., 1996. "The rise and fall and rise...of the marriage tax", *National Tax Journal*, 49:4, 571-89.
- American Council of Education, 1998. "Straight talk about college costs and prices", *Report of the National Commission on the Cost of Higher Education*, January 21.
- Anderson, L.J., et al., 1988. "Day care center attendance and hospitalization for lower respiratory tract infections", *Pediatrics*, 82:2, 300-308.
- Arrow, K., 1973. "The theory of discrimination", in *Discrimination in Labor Markets*, ed. O. Ashenfelter and A. Rees, Princeton, NJ: Princeton University Press, pp. 3-33.
- Barglow, P., Vaughn, B. B., and Molitor, N., 1987. "Effects of maternal absence due to employment on the quality of infant-mother attachment in a low-risk sample", *Child Development*, 58, 945-954.
- Barnett, W.S., 1995. "Long-term effects of early childhood programs in cognitive and school outcomes", *The Future of Children*, 5:3.
- Barnett, W.S., Young, J. and Schweinhart, L.J., 1994. "How preschool education contributes to cognitive development and school success: An empirical model." Paper presented at the Rutgers Invitational Symposium on Education. New Brunswick, NJ, October 28.
- Barnett, R.C., Brennan, R.T., Raudenbush, S.W., Pleck, J.H., & Marshall, N.L., 1995. "Change in job and marital experience and change in psychological distress: A study of women and men in dual earner couples", *Psychology of Women Quarterly*, 18:1, 105-127.
- Baruch, G., Biener, L., and Barnett, R.C., 1987. "Women and gender in research on work and family", *American Psychologist*, 42:1, 130-136.
- Becerra, R.M. and Chi, I., 1992. "Child-care preferences among low-income minority families", *International Social Work*, 35:1, 35-47.
- Becker, G. S., 1964. *Human Capital*, New York: National Bureau of Economic Research.
- Becker, G. S., 1981. *A treatise on the family*, Cambridge, MA: Harvard University Press.
- Becker, G. S., 1985. "Human Capital, effort, and the sexual division of labor", *Journal of Labor Economics*, 3:1, 33-58.
- Belsky, J., 1986. "Infant day care: A cause for concern", *Zero to Three*, 6:5,1-7.
- Belsky, J., 1988. "The 'Effects of Infant Day Care Reconsidered'", *Early Childhood Research Quarterly*, 3:2, 235-272.
- Belsky, J., 1992. "Consequences of Child Care for Children's development: A Deconstructionist View", in Alan Booth (ed.), *Child Care in the 1990's: Trends and Consequences*. Hillsdale, NJ: Erlbaum.
- Belsky, J. and Braungart, J.M., 1991. "Are insecure-avoidant infants with extensive day care experience less stressed by and more independent in the Strange Situation?" *Child Development*, 62:4, 567-571.
- Belsky, J. and Eggebeen, D., 1991. "Maternal employment and young children's socio-emotional development", *Journal of Marriage and the Family*, 53:4, 1083-1098.

- Belsky, J. and Rovine, M. J., 1988. "Nonmaternal care in the first year of life and the security of infant-parent attachment", *Child Development*, 59:1, 157-167.
- Berg, A.T., Shapiro, E.D., and Capobianco, L.A., 1991. "Group day care and the risk of serious infectious illnesses", *American Journal of Epidemiology*, 133:1, 154-163.
- Berk, S.F., 1985. *The Gender Factory: The apportionment of work in American households*. New York: Plenum Press.
- Beutel, A.M. and Marini, M.M., 1995. "Gender and values", *American Sociological Review* 60:1, 43-48
- Bergmann, B., 1974. "Occupational segregation, wages and profits when employers discriminate by race or sex", *Eastern Economic Journal*, 1:1, 103-109.
- Bergmann, B., 1986. *The economic emergence of women*. New York: The Hawthorn Press.
- Bergmann, B., Sacks, S. and Leif, H., 1975. "The two-professional marriage: A new conflict syndrome", *Journal of Sex and Marital Therapy*, 1:3, 242-253.
- Bianchi, S.M. and Robinson, J., 1997. "What did you do today? Children's use of time, family composition, and the acquisition of social capital", *Journal of Marriage and the Family*, 59:2, 332-344.
- Bianchi, S. M. and Spain, D., 1986. *American Women in Transition*. New York: Sage.
- Bielby, D. and Bielby, W.T., 1988. "She works hard for the money: Household responsibility and the allocation of work effort", *American Journal of Sociology*, 93:4, 1031-1059.
- Blair, S.L. and Lichter, D.L., 1991. "Measuring the division of household labor", *Journal of Family Issues*, 12:1, 91-113.
- Blank, R.M., 1989. "The role of part-time work in women's labor market choices over time", *The American Economic Review*, 79:2, 295-299.
- Blau, F.D., 1985. *The Economics of Child Care*. New York: Russell Sage Foundation.
- Blau, F. D., 1986. "The economic status of women and family well-being", Testimony to the House Select Committee on Children, Youth, and Families, U.S. Congress.
- Blau, F.D. and Beller, A., 1988. "Trends in earning differentials by gender, 1971-1981", *Industrial and Labor Relations Review*, 41:3, 513-529.
- Blau, F.D. and Ferber, M.A., 1986. *The Economics of Women, Men and Work*. Englewood Cliffs, NJ: Prentice Hall.
- Blau, F.D. and Grossberg, A.J., 1992. "Maternal labor supply and children's cognitive development", *Review of Economics and Statistics*, 74:3, 474-481.
- Blau, F.D. and Kahn, L.M., 1994. "Rising wage inequality and the U.S. gender gap", *American Economic Review*, 84:2, 23-28.
- Blood, R. and Wolfe, D. 1960. *Husbands and wives: The dynamics of married living*. New York: Free Press.
- Blumberg R.L., 1984. "A general theory of gender stratification", in R. Collins (ed.), *Sociological Theory*, San Francisco; Jossey-Bass, 23-101.
- Blumberg, R. L. (ed.), 1991. *Gender family and the economy: The tripling overlap*. Beverly Hills, CA: Sage.
- Blumberg, R.L. and Coleman, M.T., 1989. A theoretical look at the gender balance of power in the American couple. *Journal of Family Issues*, 10:225-250.
- Blumsteinn, P. and Schwartz, P., 1983. *American couples: Money, work, sex*. New York: William Morrow.
- Booth, A., Johnson, D.R., White, L.K., and Edwards, J.N., 1984. "Women, outside employment, and marital instability", *American Journal of Sociology*, 90:3, 567-583.
- Bowlby, J., 1982. *Attachment and Loss: Attachment*. New York: Basic Books.

- Brayfield, A., 1992. "Employment resources and housework in Canada", *Journal of Marriage and the Family*, 54:1, 19-30.
- Brayfield, A., 1995. "Juggling jobs and kids: The impact of employment schedules on fathers' caring for children", *Journal of Marriage and the Family*, 57:2, 321-332.
- Bretherton, I., 1985. "Attachment theory: retrospect and prospect", in I. Bretherton and E. Waters (eds.), *Growing points on attachment theory and research*. Monographs of the Society for Research in Child Development, 50, 1 and 2.
- Bretherton, I., 1992. "The origins of attachment theory: John Bowlby and Mary Ainsworth", *Developmental Psychology*, 28:3 759-775.
- Brines, J., 1994. "Economic dependency, gender, and the division of labor at home", *American Journal of Sociology*, 100:4, 652-688.
- Bronfenbrenner, U. and Crouter, A.C., 1982. "Work and family through time and space", in S. Kamerman and C. Hayes (eds.), *Families that work: Children in a changing world*. Washington, DC: National Academy Press, 39-83.
- Bronfenbrenner, U. and Morris, P., 1998. "The ecology of developmental processes", in W. Damon and R. Lerner (eds.), *Handbook of child psychology*. New York: Wiley, 993-1028.
- Brooks-Gunn, J., Gross, R., Klebanov, P., McCarton, C., McCormick, M., Bradley, R., and Scott, D., 1994. "Effects of early educational intervention in families who do and who do not receive welfare: the infant health and development program", paper presented at research briefing, Board on Children and Families, December 5-6. Teachers College, Columbia University.
- Broverman, I.K., Vogel, S.R., Broverman, D.L., Clarkson, F.E., & Rosenkrantz, P.S., 1972. "Sex-role stereotypes: A current appraisal", *Journal of Social Issues*, 28:1, 59-78.
- Brown, C.S., 1980. "Equalizing differences in the labor market", *Quarterly Journal of Economics*, 91:1, 113-134.
- Brown, Roger., 1986. *Social Psychology: The Second Edition*. New York: Free Press.
- Bryant, W.K., & Zick, C.D., 1996. "An investigation of parent-child shared time", *Journal of Marriage and the Family*, 58:1, :227-238.
- Bumpus, M.F., Crouter, A.C., & McHale, S.M., 1999. "Work demands of dual-earner couples: Implications for parents' knowledge about children's daily lives in middle childhood", *Journal of Marriage and the Family*, 61:2, 465-475.
- Burr, W. R., Leigh, G.K., Day, R.D., & Constantine, J., 1979. "Symbolic interaction and the family", in W.R. Burr, R. Hill, F.I. Nye, & I.L. Reiss (eds.), *Contemporary Theories About the family*, New York; Free Press. Vol. 2, 42-111.
- Campbell, K.E., 1988. "Gender differences in job-related networks", *Work Occupations* 15:1, 179-200.
- Carliner, G., 1980. "Wages earnings and hours of first, second, and third generation American males", *Economic Inquiry*, 18:1, 87-102.
- Carlson, Allen C., 1993. *From Cottage to Work Station: The Family's Search for Social Harmony in the Industrial Age*. San Francisco: Ignatius Press.
- _____, 2000a. "Dangerous Homes", *The Family in America*, 14:2, 1.
- _____, 2000b. "Incubating Tough Bugs" in *The Family in America*, 40:1
- _____, 2000c. "Unemployment in the Family, in New Research", *The Family in America*, June.
- _____, 1995a. "Working Mothers, Androgynous Children", *The Family in America*, May.
- _____, 1995b. "Equal but separated, in New Research", *The Family in America*, April.
- _____, 1993. "The Poor Get Poorer – For Good, in New Research", *The Family in America*, March.
- _____, 1989a. "Mother's Best, in New Research", *The Family in America*, December.

- _____, 1989. "Time with Junior, in New Research", *The Family in America*, January.
- _____, 1988. "Family Finances in New Research", *The Family in America*, June.
- _____, 1987. "Working Mothers and Delinquent Daughters", *The Family in America*, May.
- Caughy, M.O., DiPietro, J. & Strobino, M., 1994. "Day-care participation as a protective factor in the cognitive development of low-income children", *Child Development* 65:3, 457-71.
- Cherlin, A.J., 1992. *Marriage, divorce remarriage*. Cambridge, MA: Harvard University Press.
- Chilcoat, H.D. & Anthony, J.C., 1996. "Impact of parent monitoring on initiation of drug use through late childhood", *Journal of American Academy of Child and Adolescent Psychiatry*, 35:1, 91-100.
- Chilman, C.S., 1993. "Parental employment and child-care trends: Some critical issues and suggested policies", *Social Work*, 38:2, 451-460.
- Christensen, Bruce, 2000. "The end of Patriotism: Tearing up the 'Seedbed of the State'", in *The Family in America*, 14:2, 1-7.
- Clarke-Stewart, K. A., 1988. "The effects of infant day care reconsidered: Risks for parents, children, and researchers", *Early Childhood Research Quarterly*, 3:2, 293-318.
- Clarke-Stewart, K.A., 1989. "Infant day care: Maligned or malignant?", *American Psychologist*, 44:2, 266-273.
- Cogan, J.F. & Berger, F., 1978. *Family Formation, Labor Market Experience, and the Wages of Married Women*, R-2310-NICHD, The Rand Corporation.
- Cohn, V.L., 1991. "Human Attachment – What we know", Contract No. HHS-100-90-0035 of the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services.
- Colin, V. L., 1996. *Human Attachment*, New York, NY: McGraw-Hill.
- Conger, R.D., Elder, G.H., Jr., Lorenz, F.O., Conger, J.K., Simons, R.L., Whitebeck, L.B., Huck, S., & Melby, N.J., 1990. "Linking economic hardship to marital quality and stability", *Journal of Marriage and the Family*, 52:4, 643-656.
- Congressional Budget Office, 1997. *For Better or For Worse: Marriage and the Federal Income Tax*. Washington, DC: Congress of the United States.
- Connell, R., 1995. *Masculinities*. Berkeley: University of California Press.
- Cooke, K., 1987. "The Withdrawal From Paid Work of the Wives of Unemployed Men: A Review of Research", *Journal of Social Policy*, 16:2, 371-381.
- Coontz, S., 1997. *The Way We Really Are: Coming to Terms with America's Changing Families*, New York: Basic Books.
- Corcoran, M. 1979. Women's experience, labor force withdrawals, and women's wages: Empirical results using the 1976 Panel of Income Dynamics. *Women in the Labor Market*, ed. C. B. Loyd, E.S. Andrews, C.L. Gilroy, pp. 216-245. New York: Columbia University Press.
- Corcoran, M., Datcher, L., & Duncann, G.J. Information and influence networks in labor markets. In *Five Thousand American Families – Patterns of Economic Progress*, vol. VIII, 1980. ed. G.J. Duncan, J.N. Morgan, pp. 1-37. Ann Arbor, Mich: Inst. Soc. Res.
- Corcoran, M., & Duncan, G., 1979. "Work history, labor force attachment and earnings differences between the races and sexes", *Journal of Human Resources*, 14:1, 3-20.
- Corcoran, M., Duncan, G., & Ponza, M., 1983. "A longitudinal analysis of white women's wages", *Journal of Human Resources*, 18:3: 497-520.
- Corcoran, M., Duncan, G., & Ponza, M., 1984. "Work experience, job segregation, and wages", in B.F. Reskin (eds.), *Sex segregation in the workplace: Trends, explanations, remedies*, Washington, DC, National Academy, pp.171-1911.

- Cost, Quality, and Child Outcomes Study Team, 1995. Cost, Quality, and Child Outcomes in Child Care Centers, Public Report. Denver: Economics Department, University of Colorado–Denver. ED 386 297.
- Coverman, S., 1985. “Explaining husband’s participation in domestic labor”, *Sociological Quarterly*, 26, 81-97.
- Coverman, S., 1986. “Occupational segmentation and sex differences in earnings”, *Research Society Stratification Mobility*, 5:1,139-72.
- Coverman, S. & Sheley, J., 1985. “Changes in men’s housework and childcare time, 1965-1975”, *Journal of Marriage and the Family*, 48:3, 413-422.
- Coverman, S. & Sheley, J., 1986. “Change in men’s housework and child-care time, 1965-1975”, *Journal of Marriage and the Family*, 48:3, 413-422.
- Crispell, D. (1994). “Child care choices don’t match mom’s wishes”, *American Demographics*, 16:1, 11-13.
- Crowell, J.A., & Treboux, D., 1995. “A review of adult attachment measures: Implications for theory and research”, *Social Development*, 4:2, 294-327.
- Congressional Research Service, 1999. *Report for Congress: Federal Programs for Children and Families: A Tool for Connecting Programs to People*, published by the IEL Policy Exchange, special report No.15. based on: CRS Report for Congress: Children and Their Families: Federal Programs and Tax Provisions, by Joe Richardson and Sharon House, Coordinators, Domestic Social Policy Division, Congressional Research Service, The Library of Congress. May 12, 1999.
- Culkin, M., Morris, J.R., & Helburn, S.W., 1991. “Quality and the true cost of child care”, *Journal of Social Issues*, 47:71-86.
- Current Population Survey, Table 5, Employment status of the population by sex, marital status presence and age of own children, 1998-99 annual averages.
- Danziger, S. & Gottschalk, P., 1986. “How have families with children been faring?” Paper presented for the Joint Economic Committee U.S. Congress.
- Danziger, S., G. Jakuboson, S. Schwartz, and E. Smolensky, 1982. “Work and Welfare as Determinants of Female Poverty and Household Headship,” *Quarterly Journal of Economics*, 97:3, 519-34
- Darian, J.C., 1975. “Convenience of work and the job constraint of children”, *Demography*, 12:2, 245-255.
- Davidson, Sara., 1984. “Having it all”, *Esquire*, June, 54-60.
- Dawson, D.A., 1991. “Family structure and children’s health and well being”, *Journal of Marriage and the Family*, 50:4, 619-648.
- Day Care in Denver” in *The Family in America*, ed. Alan Carlson, 13:4.
- Day Care Germs, in *The Family in America*, ed. Alan Carlson, April 1991
- Daymont, T.N., & Andrisani, P.J., 1984. “Job preferences, college major, and the gender gap in earnings”, *Journal of Human resources*, 19:3, 408-28.
- Daymont, T.N. & Staltham, 1983. “A. Occupational atypicality: Changes, causes, and consequences”, in *Unplanned Careers: The Working Lives of Middle Aged Women*, L.B. Shaw (ed.), Lexington, Mass. Heath, 61-76.
- De Beauvoir, Simone, 1949/61, *The Second Sex*, New York: Bantam Books. Originally published in French, 1949.
- Desai, S.P., Chase-Landsdale, R.L., & Michael, R.T., 1989. “Mother or market? Effects of maternal employment on the intellectual ability of four year old children”, *Demography*, 26:1, 545 –562.
- Desai, S. , & Waite, L.J., 1991. “Women’s employment during pregnancy and after the first birth: Occupational characteristics and work commitment”, *American Sociological Review* 56:3, 551-566.

- Dickert-Conlin, S., 1999. "Taxes and Transfers: Their effect on the decision to end a marriage", *Journal of Public Economics*, 73:2:217-40.
- 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.
- Drobnic, S., Blossfeld, H.P., & Rohwer, G., 1999. "Dynamics of women's employment patterns over the family life course: A comparison of the United States and Germany", *Journal of Marriage and the Family*, 61:1, 133-146.
- Duncan, G. & Corcoran, M., 1984. "Do Women Deserve to Earn Less Than Men?", in *Years of Poverty, Years of Plenty*, edited by Greg Duncan with Richard Coe, Mary Corcoran, Martha Hill, Saul Hoffman, and James Morgan, Ann Arbor: University of Michigan, Institute for Social Research, 153-72.
- Duncan, G. & Hoffman, S., 1978. "Training and earnings. In Five Thousand American Families", *Patterns of Economic Progress*, G.J. Duncan (ed), J.N. Morgan, Ann Arbor, Michigan: Institute for Social Research.
- Durkheim, E., 1984. *The division of labor in society*. New York: The Free Press. (Original work published in 1893).
- Dutton, D., 1988. *The domestic assault of women: Psychological and criminal justice perspectives*. Boston: Allyn and Bacon.
- Eberstadt, 1995. *Tyranny of Numbers: Mismeasurement and Misrule*, American Enterprise Institute, Washington DC.
- Engelmann, D.J. and D.T. Lichter, 1991. "Are Fathers Fungible? Patterns of Co-resident adults men in maritally disrupted families and young children's well-being", *Journal of Marriage and the Family*, 53:4, 958-972.
- Ekstron, R., Goertz, M. & Rock, D.A., 1988. *Education and American youth*. Philadelphia: Palmer Press.
- Ellwood, David, 1985. "Working Off Welfare: Prospects and Policies for Self-Sufficiency of Female Family Heads," unpublished manuscript (Cambridge Massachusetts:Harvard University.
- Engelmann, B. & and Hiester, M., 1995. "The long-term consequences of infant day-care and mother-infant attachment", *Child Development*, 66:2, 474-485.
- England, P., 1982. "The failure of human capital theory to explain occupational sex segregation", *Journal of Human Resources*, 17:2, 358-70.
- England, P., 1984. "Wage appreciation and depreciation: a test of neoclassical economic explanations of occupational sex segregation", *Social Force*, 62:4, 726-49.
- England, P. & McCreary, L. 1987. "Gender Inequality in Paid Employment." Pp. 286-320 in *Analyzing Gender*, edited by B. Hess and M. Ferree. Newbury Park, Calif.: Sage.
- England, P., Farkas, G., Kilbourne, B.S., Dou, T., 1988. "Explaining occupational sex segregation and wages: Findings from a model with fixed effects", *Am. Soc. Rev.* 53:4, 544-58.
- England, P. & McLaughlin, S., 1979. "Sex Segregation of Jobs and Male-Female Income Differentials", in *Discrimination in Organizations*, Rodolfo Alvarez, Kenneth Lutterman, and associates (eds.), San Francisco: Jossey-Bass, 189-213.
- Erdwins, C.J. & Buffardi, L.C., 1994. "Different types of day care and their relationship to maternal satisfaction, perceived support, and role conflict", *Child and Youth Care Forum*, 23:1, 41-54.
- Eriksen, J.A., Yancey, W.L., & Eriksen, E.P., 1979. "The division of family roles", *Journal of Marriage and the Family*, 41:2, 301-313.

- Feenberg, D.R. & Rosen, H.S., 1995. "Recent developments in the marriage tax", *National Tax Journal*, 48,1:91-101.
- Ferber, M.A. & Birnbaum, B., 1980. "One job or two jobs: The implications for young wives", *Journal of Consumer Research*, 7:1, 263-271.
- Ferree, M.M., 1990. "Beyond separate spheres: Feminism and Family research", *Journal of Marriage and the Family*, 52:4, 866-884.
- Ferree, M.M., 1991. "The gender division of labor in two-earner marriages: Dimensions of variability and change", *Journal of Family Issues*, 12:1, 158-180.
- Fleming, Anne Taylor, 1986. "The American Wife", *New York Times Magazine*, October 26.
- Folbre, Nancy, 1994. *Who Pays for the Kids? Gender and the Structures of constraint*. New York: Routledge.
- Fuchs, V.R., 1986, "Sex differences in economic well-being", *Science*, 232:459-64.
- Fuchs, Victor R., 1988. *Women's Quest for Economic Equality* Cambridge, MA: Harvard University Press.
- Fuerst, J.S. & Fuerst, D., 1993. "Chicago experience with an early childhood program: The special case of the Child Parent Center Program", *Urban Education* 28:1, 69-96.
- Fuller, B., Holloway, S.D. & Liang, X., 1995. *Which families use non-parental child care and centers? The influence of family structure, ethnicity, and parental practices*. Cambridge, MA: Department of Human Development and Psychology, Harvard University.
- Furchgott-Roth, D., 1995. "Working Wives Widen 'Income Gap'," *Wall Street Journal* June 20.
- Furchtgott-Roth, Diana & Christine Stolba, 1999. *Women's Figures*. Washington D.C.: The AEI Press.
- Galinski, E., Howes, C, Kontos, S. & Shinn, M., 1994. "The study of children in family day care and relative care - Key findings and policy recommendations", *Young Children*, 50:58-61.
- Gallagher, M., 1998. "Day Careless", *National Review*, January, 26, 37-43.
- Gallagher, Margaret & Barbara Defoe Whitehead, End No Fault Divorce? *First Things*, August/September 1997:24-30.
- Gamble, T. J., & Zigler, E., 1986. "Effects of infant day care: Another look at the evidence", *American Journal of Orthopsychiatry*, 56:26-42.
- Garfinkel, I., 1994. "The child-support revolution", *Economic Issues for Work and Family*, 84, 2:81-85.
- Garfinkel, Irwin & McLanahan, Sara, 1986. *Single Mothers and their Children: A New American Dilemma*. Washington, DC: The Urban Institute Press.
- Gelles, R., 1974. *The violent home: A study of physical aggression between husbands and wives*. Beverly Hills: Sage.
- Gershuny, J. & Robinson, J.P., 1988. "Historical shifts in the household division of labor", *Demography*, 25:537-553.
- Gerson, K. 1993. *No man's land: Men's changing commitments to family and work*. New York: Basic Books
- Glass, J., 1998. "Gender liberation, economic squeeze, or fear of strangers: Why fathers provide infant care in dual-earner families", *Journal of Marriage and the Family*, 60:821-834.
- Glass, J., & Camarigg, V., 1992. "Gender, parenthood, and job-family compatibility", *American Journal of Sociology*, 98:131-151.
- Glass, J., & Fujimoto, T., 1994. "Housework, paid work and depression among husbands and wives", *Journal of Health and Social Behavior*, 35:179-191.
- Glezer, W.P., 1991. "Viral respiratory infections", *Pediatric Annals* 20:403-441.
- Goode, W.J., 1960. "A theory of role strain", *American Sociological Review*, 25:483-496.

- Goode, W.J., 1992. "Why men resist", in B. Thorne, & M. Yalom (eds.), *Rethinking the family: Some feminist questions*, Boston, MA: Northeastern University Press, 303-32..
- Gorman, E., 1999. "Bringing home the bacon: Marital allocation of income-earning responsibility, job shifts, and men's wages", *Journal of Marriage and the Family*, 61:110-122.
- Granovetter, M., 1974. *Getting a Job: A Study of Contacts and Careers*. Cambridge, Mass: Harvard University Press.
- Gray, S.W., Ramsey, B. & Klaus, R., 1982. *From 3 to 20: The Early Training Project*, Baltimore, MD: University Park Press.
- Greenstein, N.T., 1990. "Marital disruption and the employment of married women", *Journal of Marriage and the Family*, 52:657-676.
- Greenstein, N.T., 1995. "Gender ideology, marital disruption, and the employment of married women", *Journal of Marriage and the Family*, 57:312-342.
- Greenstein, N.T., 1996. "Gender ideology and perceptions of the fairness of the division of household labor: Effects on marital quality", *Social Forces*, 74:1029-1042.
- Gronau, R. 1988. Sex-related wage differentials and women's interrupted labor careers – the chicken or the egg. *Journal of Labor Economics*. 6:277-301.
- Grossmann, K.E., and Grossmann, K., 1991. *Attachment Across the Life Cycle*, London: Tavistock/Routledge
- Hagan, J., A.R. Gillis, and J. Simpson, 1985. "The Class Structure of gender and delinquency: towards a power-control theory of common delinquent behavior", *American Journal of Sociology*, 90:4, 1151-1178.
- Hanson, S.L. & Ooms, T., 1991. "The economic costs and rewards of two-earner, two-parent families", *Journal of Marriage and the Family*, 53:622-634.
- Hartmann, Heidi., 1976. "Capitalism, patriarchy, and job segregation by sex." In *Women and the Workplace*, ed. Martha Blaxall and Barbara Reagan. Chicago: University of Chicago Press.
- Hartmann, H., 1981. The family as the locus of gender, class, and political struggle: The example of housework. *Signs*, 6:365-394.
- Haskins, R., 1985. "Public School Aggression Among Children with Varying Day-Care Experience," *Child Development*, 56:689-703.
- Haurin, R.J., 1992. "Patterns of childhood residence and the relationship to young adult outcomes", *Journal of Marriage and the Family*, 54:846-860.
- Hayes, C.D., Palmer, J.L. & Zaslow, M.J. (eds.), 1990. *Who Cares for America's Children: Child Care Policy for the 1990's*. Washington, DC: National Academy Press.
- Heckert, D.A., Nowak, T.C., & Syder, K.A., 1998. "The impact of husbands' and wives' relative earnings on marital disruption", *Journal of Marriage and the Family*, 60:690-703.
- Hefferan, C., 1979. "Saving behavior in multiple earner families", paper presented at the annual meeting of the American Council of Consumer Interests.
- Heyns, B., & Catsambis, S., 1986. "Mother's employment and children's achievement: A critique", *Sociology of Education*, 59:140-151.
- Hill, M.S., 1979. "The wage effects of marital status and children", *Journal of Human Resources*, 14:579-94.
- Hillier, D.V. & Philliber, W.W., 1986. "The division of labor in contemporary marriage: Expectations, perceptions, and performance", *Social Problems*, 33:191-201.
- Hochschild, A., 1989. *The second shift*. New York: Viking.
- Hochschild, A., 1997. *The time bind: When work becomes home and home becomes work*. New York: Holt.

- Hock, E., DeMeis, D., & McBride, S., 1988. "Maternal separation anxiety: It's role in the balance of employment and motherhood in mothers of infants", in A.E. Gottfried & A.W. Gottfried (eds.), *Maternal employment and children's development: Longitudinal research*, New York: Plenum Press, 191-229.
- Hoekelman, R.A., 1991. "Day care, day care: Mayday! Mayday!", *Pediatric Annal* 20:403-441.
- Hofferth, S.L., 1995. "Caring for children at the poverty line", *Children and Youth Services Review*, 17:1-31.
- Hofferth, S.L., Brayfield, A., Diech, P., & Holcomb, P., 1991. *National childcare survey, 1990*. Urban Institute Report 91-5. Washington, DC: Urban Institute Press.
- Hofferth, S.L. & Wissoker, D.A., 1992. Price, quality, and income in child care choice. *Journal of Human Resources*, 27:70-111.
- Honig, M., 1973. "The Impact of AFDC Income, Recipient Rates, and Family Dissolution", *Journal of Human Resources*, 9:303-22;
- Hood, J. C., 1983. *Becoming a two job family*. New York: Praeger.
- Hood, J. C., 1986. "The provider role: Its meaning and measurement", *Journal of Marriage and the Family*, 48:349-359.
- Howes, C. & Hamilton, C.E., 1992. "Children's relationships with child care teachers: Stability and concordance with parental attachments", *Child Development*, 63:867-878.
- Howes, Carollee, and Ellen Smith, 1994. "Effects of Typical Child Care on Children in Poverty", paper presented at research briefing, Board on Children and Families, December 5-6, 1994. University of California at Los Angeles.
- Huber, J., & Spitze, G., 1980. "Considering divorce: An expansion Becker's theory of marital instability", *American Journal of Sociology*, 86:75-90.
- Huber, J., & Spitze, G., 1983. *Sex stratification: Children, housework, and jobs*. New York: Academic Press.
- Hurwitz et al., 1991. "Risk of respiratory illness associated with day-care attendance: A nationwide study", *Pediatrics*, 87:62-67.
- Jacobs, J.A., 1985. "Sex segregation in American higher education", *Women Work* 1:191-214.
- Jacobson, J.L. & Wille, D.E., 1984. "Influence of attachment and separation experience on separation distress at 18 months", *Developmental Psychology*, 3:477-484.
- Jester, R.E. & Guinagh, B.J., 1983. "The Gordon Parent Education Infant and Toddler Program", in *As the twig is bent...Lasting effects of preschool programs*, Consortium for Longitudinal Studies, ed. Hillsdale, NJ: Erlbaum.
- Johnson, W., & Skinner, J., 1983. *Becoming a two-job family*. New York: Praeger.
- Johnson, W., & Skinner, J., 1986. "Labor supply and marital separation", *American Economic Review*, 76:455-469.
- Johnson, J.L. & Walker, T., 1987. "Primary prevention of behavior problems in Mexican-American Children", *American Journal of Community Psychology*, 15:375-85.
- Jones, F. L., 1983. "Sources of Gender Inequality in Income: What the Australian Census Says", *Social Forces*, 62:134-52.
- Kalleberg, A. & Rosenfeld, R.A., 1990. "Work in the family and in the labor market: A cross national reciprocal analysis", *Journal of Marriage and the Family*, 52:331-346.
- Kalmuss, D. & Strauss, M., 1990. "Wife's marital dependency an wife abuse", in M. Strauss & R. Gelles (eds.), *Physical violence in American families*, New Brunswick: Transaction Publishers, 369-382.
- Kammerman, S.B., 1979. "Work and family in industrialized societies", *Signs* 4:632-50.
- Kammerman, S.B. & Khan, A., 1987. *The responsive workplace*. New York: Columbia University Press.

- Katz, L.F. and K.M. Murphy, 1992. "Changes in relative wages 1963-1987, supply and demand factors", *Quarterly Journal of Economics*, 2:1, 35-78.
- Kesler, R., & McRae J., 1982. "The effect of wives' employment on the mental health of married men and women", *American Sociological Review*, 47:216-266.
- Kingsbury, N., & Scanzoni, J., 1993. "Structural functionalism", in P.G. Boss, W.J. Doherty, R. LaRossa, W.R. Schumm, & S.K. Steinmetz (eds.) *Sourcebook of family theories and methods: A contextual approach*, New York: Plenum Press, 195-217.
- Kisker, E.E. & Silverberg, M., 1991. "Child-care utilization by disadvantaged teenaged mothers", *Journal of Social Issues*, 47:159-177.
- Kisker, E.E., R. Maynard, A. Gordon, and M. Strain, 1989. *The Child Care Challenge: What Parents Need and what is available in three metropolitan areas*, Princeton: NJ, Mathematica Policy Research Institute.
- Kluwer, E., Heesink, J.A.M., & Van de Vliert, E., 1996. "Marital conflict about the division of household labor and paid work", *Journal of Marriage and the Family*, 58, 4: 958-69.
- Kogan, M.D., 2000. "Factors associated with tympanostomy tube insertion among preschool-aged children in the United States", *American Journal of Public Health*, 90:245-250.
- Korenman, S. and D. Neumark, 1992. "Marriage, Motherhood, and Wages", *Journal of Human Resources*, 27:233-55.
- Krein, S.F., & Beller, A.A, 1988. "Educational attainment of children from single parent families: differences by exposure, gender, and race", *Demography*, 25:221-234.
- Lajewski, H.C., 1959. *Child care arrangements of full time working mothers* (Children's Bureau Publication 378, U.S. Department of Health, Education, and Welfare). Social Security Administration: Washington, DC: Government Printing Office.
- Lally, J.R., Mangione, P., & Honig, A., 1988. "The Syracuse University Family Development Program: Long-range impact of an early intervention with low-income children and their families", in D. Powell (Ed.), *Parent education as early childhood intervention: Emerging directions theory research and practice*. Norwood, NJ: Ablex.
- Lamb, M, K. Sterubug, and M. Prodromidis, 1992. "Non-Maternal care and the security of infant-mother: a reanalysis of the data", *Infant Behavior and Development*, 15:1, 71-83.
- Lazear, E.P. & Michael, R.T., 1980. "Real income equivalence among one-earner and two-earner families", *American Economic Review*, 70:203-208.
- Leibowitz, A., 1977. "Parental inputs and children's achievements", *Journal of Human Resources*, 12:247-267.
- Leibowitz, A., Klerman, J.A., & Waite, L.J., 1992. "Employment of new mothers and child-care choice: Differences by children's age", *Journal of Human Resources*, 27:112-133.
- Leigh, J.P., 1983. "Sex differences in absenteeism", *Industrial Relations*, 22:349-361.
- Lennon, M.C., 1994. "Women, work and well-being: The importance of work conditions", *Journal of Health and Social Behavior*, 35:235-247.
- Lennon, M.C. & Rosenfield, S., 1994. "Relative fairness and the division of housework: The importance of options", *American Journal of Sociology*, 100:506-531.
- Lehrer, E., 1983. "Determinants of child-care mode choice: An economic perspective", *Social Science Research*, 12:69-80.
- Levy, F.S. & Michael, R.C., 1985. "The economic future of the baby boom", paper presented for the Joint Economic Committee, U.S. Congress.

- Love, J. M.; Schochet, P. Z.; & Meckstroth, A., 1996. *Are they in any real danger? What research does—and doesn't—tell us about child care quality and children's well-being*, Plainsboro, NJ: Mathematica Policy Research. ED 415 030.
- MaCurdy, T., Green, T.D. & Paarsch, H., 1990. "Assessing Empirical Approaches for Analyzing Taxes and Labor Supply", *The Journal of Human Resources*, 25:414-90.
- MacMillan, R., & Gartner, R., 1999. "When she brings home the bacon: labor force participation and the risk of spousal violence against women", *Journal of Marriage and the Family*, 6: 947-958.
- Madden, J., 1985. "The Persistence of Pay Differentials: The Economics of Sex Discrimination", in *Women and Work*, vol. 1, Laurie Larwood, Ann H. Stromberg, and Barbara A. Gutek (eds.), Beverly Hills, Calif.: Sage, 76-114.
- Major, B. McFarlin, D. Gagnon, D., 1984. "Overworked and underpaid: On the nature of gender differences in personal entitlement", *J. Pers. Soc. Psych.* 47:1399-1412.
- Main, M., Kaplan, N., & Cassidy, J., 1985. "Security of infancy, childhood and adulthood: A move to the level of representation", in I. Bretherton & E. Waters (eds.), *Growing Points of Attachment Theory and Research*, Chicago: University of Chicago Press, 66-104.
- Malkiel, B., & Malkiel, J., 1973. "Male-female pay differentials in professional employment", *American Economic Review*, 63:693-705.
- Manchester, J., 1988. "The baby boom, housing, and financial flows", *American Economic Review*, 78:70-75.
- Mancy, Robyn, 1991. *Creating a Female Dominion in American Reform: 1890-1935*. New York: Oxford University Press.
- Marini, M.M., 1989. "Sex differences in earnings in the United States", *Annual Review of Sociology*, 15:343-380.
- Marini, M.M & Brinton, M.C., 1984. "Sex typing in occupational socialization", in *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, (ed.) B.F. Reskin,, Washington D.C.: National Academic Press, 191-232.
- Marks, S.R., 1977. "Multiple roles and role strain", *American Sociological Review*, 42:921-936.
- Mason, K.O. & Kuhlthua, K., 1989. "Determinants of child care ideal s among mothers of pre-school aged children", *Journal of Marriage and the Family*, 5:593-603.
- Matas, L., R. A. Arend, and L. A. Sroufe, 1978. "Continuity of adoption in the second year: The relationship between quality of attachment and later competence," *Child Development*, 49:2, 547-556.
- McBride, S. & Belsky, J., 1988. "Characteristics, determinants, and consequences of maternal separation anxiety", *Developmental Psychology*, 24:407-414.
- McCartney, K., 1984. "Effect of quality of day care environment on children's language development", *Developmental Psychology*, 20:244-260.
- McDonald, M.S., & Monroe, "E. A follow-up study of the 1966 Head Start program, Rome City Schools", Unpublished paper, 1981.
- McLanahan, S., & Bumpass, L., 1988. "Intergenerational consequences of family disruption", *American Journal of Sociology*, 94:130-152.
- McLanahan, S., & Sandefur, G. 1994. *Growing up with a single parent: What helps, what hurts*. Cambridge, MA: Harvard University Press.
- Mead, Margaret. 1952. *Male and Female*. New York: William Morrow.
- Menaghan, E.G. & Parcel, T.L, 1990. "Parental employment and family life: Research in the 1980's", *Journal of Marriage and the Family*, 52:1079-1098.

- Meyers, M.K. & van Leuwen, K., 1992. "Child-care preferences and choices: Are AFDC recipients unique?", *Social Work Research & Abstracts*, 28:28-34.
- Michael, R. T., & Tuma, N. B., 1985. "Entering into marriage and parenthood by young men and women: The influence of family background", *Demography*, 22:515-544.
- Milkie, M. & Peltola, P., 1999. "Playing all the roles: Gender and the work-family balancing act", *Journal of Marriage and the Family*, 61, 2: 476-90.
- Miller, L.B. & Bizzell, R.P., 1983a. "The Luisville Experiment: A comparison of four programs", in *As the twig is bent....lasting effects of preschool programs*, Consortium for Longitudinal Studies (ed.), Hillsdale, NJ: Erlbaum.
- Miller, L.B. & Bizzell, R.P., 1983b. "Longterm effects of four preschool programs: Sixth, seventh and eighth grades", *Child Development*, 54:725-41.
- Miller, L.B. & Bizzell, R.P., 1984. "Longterm effects of four preschool programs: Ninth and tenth grade results", *Child Development* 55,6:1570-87.
- Milne, A.M., Myers, D.E., Rosenthal, A., & Ginsburg, 1986. "Single parents, working mothers, and the educational achievement of school children", *Sociology of Education*, 59:125-133.
- Mincer, J., 1974. *Schooling, Experience, and Earnings*. New York: Columbia University Press.
- Mincer, J. & Polachek, S.W., 1974. "Family Investments in human capital: Earnings of Women", *Journal of Political Economics*, 82: S76-S108.
- Mincer, J. & Polachek, S.W., 1978. Women's earnings reexamined. *Journal of Human Resources*, 13:118-34.
- Mincer, J., & Ofek, H., 1982. Interrupted work careers: Depreciation and restoration of human capital. *Journal of Human Resources*, 17:3-24.
- Moffit, R.A., Reville, R. & Winkler, A., 1998. "Beyond single mothers: Cohabitation and Marriage in the AFDC program", *Demography*, 35,3:259-78.
- Moore, K. A. & M. A. Burt., 1982. *Private Crisis, Public Cost:Policy Prospectives on Teenage Childbearing*, Washington, DC: Urban Institute.
- Moore, K.A., & Waite, L.J., 1981. "Marital disruption, early motherhood and early marriage", *Social Forces*, 60:20-40.
- Morrow, A.L., Townsend, I.T. & Pickering, L.K., 1991. "Risks of enteric infection associated with child care", *Pediatric Annal* 20:403-441.
- Muncy, Robyn. 1991. *Creating a Female Dominion in American Reform, 1890-1935*. New York: Oxford Press.
- Myers, D.E., Milne, A.M., Baker, K., & Ginsburg, A., 1987. "Student discipline and high school performance", *Sociology of Education*, 60:18-33.
- National Child Care Survey, 1990. Urban Institute Report 91-5. Hofferth, S.L., Brayfield, A., Deich, S. & Holcomb, P. Washington, DC: The Urban Institute Press.
- National Child Care Information Center (NCCIC), 2000. *New Findings* <http://www.nccic.org/pubs.html>
- NICHD Early Child Care Research Network, National Institute of Child Health and Human Development, 1997. "Familial factors associated with the characteristics of nonmaternal care for infants", *Journal of Marriage and the Family*, 59:389-408.
- NICHD Early Child Care Research Network, 1998. "Early child care and self control, compliance, and problem behavior at twenty-four and thirty-six months", *Child Development*, 69:1145-1170.
- NIW News Release, 1997. "Peth-Pierce, R. National Institute of Child Health and Development", April 3, <http://www.nih.gov/news/pr/apr97/nichd-03.htm>

- Nock, S., 1995. "Commitment and dependency in marriage", *Journal of Marriage and The Family*, 52:503-514.
- Nock, S.L., & Kingston, P.W., 1988. "Time with children: The impact of couples' work-time commitment", *Social Forces*, 67:59-85.
- Nock, S., 1995. "Commitment and dependency in marriage", *Journal of Marriage and the Family*, 57:503-514.
- Nyquist, A.C., 1999. "Antibiotic use and abuse in clinical practice", *Pediatric Annals*, 28:453-459.
- O'Neill, J., 1985. "The trend in the male-female wage gap in the United States", *Journal of Labor Economics*, 3:91-116.
- Oppenheimer, V.K., 1997. "Comment on the rise of divorce and separation in the United States.1880-1990", *Demography*, 34:467-472.
- Parcel, T.L., & Meneghan, E.G., 1994. *Parent's jobs and children's lives*, New York: Adeline de Gruyter.
- Parcel, T.L. & Mueller, C.W., 1983. *Ascription and Labor Markets: Race and Sex differences in Earnings*, New York: Academic Press.
- Parsons, T., & Bales, R., 1955. *Family socialization and interaction process*, New York: The Free Press.
- Pass, R.F., 1991. "Day care centers and the spread of Cytomegalovirus and Parvovirus B19", *Pediatric Annal* 20:403-441.
- Patten, P., 1999. "Child care: Is it good for children?", *Parent News* <http://npin.org/pnews/1999/pnew599/int599a.html>
- Perkins, W.H., & DeMeis, D.K., 1996. "Gender and family effects on the second-shift: Domestic activity if college educated young adults", *Gender & Society*, 10:78-93.
- Perry, S., 1988. "The supply of female part-time labor over the life cycle", *Applied Economics*, 20:1579-1587.
- Perry-Jenkins, M. & Folk, K., 1994. "Class, couples, and conflict: Effects of the division of labor on assessments of marriage in dual-earner families", *Journal of Marriage and the Family*, 56:165-180.
- Pereszty, A., 1986. "Annual price survey: Family budget costs", *Supplement to Family Budget Standard*, New York: Community Council of Greater New York.
- Phelps, E.S., 1972. "The statistical theory of racism and sexism", *Am. Econ. Rev.* 62:659-61.
- Phillips, D.A., 1996. "How does child care affect children's well-being?" in *New Findings on Children, Families, and Economic Self Sufficiency A Summary of a Research Briefing*, ed. Deborah A. Phillips & Anne Bridgeman, National Academy Press. Electronic Version <http://nccic.org/research/newfind/howdoes.html>
- _____ (ed), 1995. *Child care for low-income families: Summary of two workshops*. Washington, DC: National Academy Press.
- Phillips, D.A., Voran, M., Kisker, E. Howes, C. & Whitebook, M., 1994. "Child care of children in poverty, : Opportunity or inequity?", *Child Development*, 65:472-492.
- Pleck, R. 1985. *Working wives, working husbands*. Beverly Hills, CA: Sage.
- Pogrebin, L.C. 1983. *Family politics: Love and power on an intimate frontier*. New York: McGraw-Hill.
- Polachek, S. W., 1976. Occupational segregation: An alternative hypothesis. *Journal of Contemporary Business*, 5:1-12.
- Polachek, S. W., 1978. "Sex differences in college major", *Ind. Labor Relat. Rev.* 31:498-508.
- Polachek, S. W., 1979. "Occupational segregation among women: Theory, evidence, and a prognosis", in C.B. Loyd, E.S. Andrews, & C.L. Gilroy (eds.) *Women in the labor market*, New York: Columbia University Press, 137-170.

- Polachek, S. W., 1981. "Occupational self-selection: A human capital approach to sex differences in occupational structure", *Rev. of Econ. Stat.*, 63:60-69.
- Potichek, J.L., 1992. "Employed wives orientation to breadwinning: A gender theory analysis", *Journal of Marriage and the Family*, 54:548-558.
- Powell, M.A. & Parcel, T.L., 1997. "Effects of family structure on the earnings attainment process: Differences by gender", *Journal of Marriage and the Family*, 59:419-433.
- Presser, H.B., 1988. "Place of child care and medicated respiratory illness among young American children", *Journal of Marriage and the Family*, 50:995-1005.
- Presser, H.B., 1994. "Employment schedules among dual earner spouses and the division of labor by gender", *American Sociological Review*, 59:348-364.
- Presser, Harriet B., 1995. "Are the interests of women inherently at odds with the interests of children or the family? A viewpoint", in: *Gender and family change in industrialized countries*, Karen O. Mason and An-Magritt Jensen (eds.), Clarendon Press: Oxford, England, 297-319.
- Preston, A.E., 1994. "Why have all the women gone?", *The American Economic Review*, 84: 5, 1446-1462.
- Price-Bonham, S. & Murphy, D.C., 1980. "Dual-career marriages: Implications for the clinicians", *Journal of Marital and Family Therapy*, 6:181-188.
- Rainwater, L., M. Rein, and J. Schwartz, 1986. *Income packaging in the welfare state : a comparative study of family income*. Oxford: Clarendon Press; New York : Oxford University Press.
- Ramey, C., MacPhee, D., & Yeates, K., 1982. "Preventing Developmental Retardation: A General Systems Model", in L. Bond & J. Joffe (eds.), *Facilitating Infant and Early Childhood Development, Primary Prevention of Psychopathology*, Vol. 6, 177-230.
- Reskin, Barbara F. & Heidi I. Hartmann (eds.), 1986. *Women's Work, Men's Work: Sex Segregation on the Job*. Washington, D.C.: National Academy Press.
- Rexroat, C. & Shehan, C., 1987. "The family life cycle and spouses' time in housework", *Journal of Marriage and the Family*, 49:737-750.
- Rice, D.G., 1979. *Dual-career marriage: Conflict and treatment*. New York: The Free Press.
- Risman, B., & Johnson-Sumerford, D., 1998. "Doing it fairly: A study of post-gender marriages", *Journal of Marriage and the Family*, 60:23-40.
- Robertson, B.C., 2000. *There's No Place Like Work: How Business, Government, and Our Obsession With Work Have Driven Parents From Home*. Dallas: Spenser Publishing Company,.
- Robinson, J., 1988. "Who's doing the housework?", *American Demographics*, 63:24-28.
- Robinson, J.P., 1993. *The demographics of time use*. Ithaca, NY: American Demographics.
- Robinson, J.P., & Converse, P., 1972. "Social change reflected in the use of time", in A. Campbell & P. Converse (eds.), *The human meaning of social change*, New York: Russell Sage Foundation, 17-86.
- Robinson, J.P., & Milkie, M.A., 1998. "Back to the basics: Trends in and role determinants of women's attitudes toward housework", *Journal of Marriage and the Family*, 60:205-218.
- Robinson, J. & Spitze, G., 1992. "Whistle while you work: The effect of household task performance on women's and men's well-being", *Social Science Quarterly*, 73:844-861.
- Roderick, M., 1994. "Grade retention and school dropout: Investigating the association", *American Educational Research Journal* 31,4:729-59.
- Rogers, S. J., 1999. "Wives' income and Marital Quality: Are there reciprocal effects?", *Journal of Marriage and the Family*, 61:123-132.
- Rosenfeld, R.A., 1983. "Sex segregation and sectors: An analysis of gender differences in returns from employer changes", *Am. Sociol. Rev.* 48:637-55.

- Rosenfeld, R.A., 1984. "Job changing and occupational sex segregation: Sex and race comparisons", in *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, ed. B.F. Reskin, Washington, DC: Natl. Acad. Press, pp. 56-86.
- Rosenfeld, R.A., & Kalleberg, A.L., 1990. "A cross-national comparison of the gender gap in income", *American Journal of Sociology*, 96, 1:69-106.
- Ross, C.E., 1987. "The division of labor at home", *Social Forces*, 65:816-833.
- Ross, Heather L., & Isabel Sawhill, 1982. *Time of Transition; The Growth of Families Headed By Women*. Washington, DC: Urban Institute.
- Ruggles, S., 1997. "The rise of divorce and separation in the United States, 1880-1990", *Demography*, 34:455-466.
- Rushing, B., & Schwab, A., 1995. "The health effects of work and family role characteristics: Gender and race comparisons", *Sex Roles*, 33:59-75.
- Rutter, M., 1985. "Resilience in the face of adversity: protective factors and resistance to psychiatric disorder", *British Journal of Psychiatry*, 147:598-611.
- Sale, S.G., 1984. "Family day care homes", in J. Greenman & R. Fuqua (eds.), *Making day care better* (pp.21-43). New York: Teachers College Press.
- Sanchez, L., 1994. "Gender, labor allocations, and the psychology of entitlement within the home", *Social Forces*, 73:533-553.
- Sander, W., 1990. "More in the determinants of the fertility transition", *Social Biology*, 37:52-58.
- Sandell, S.H. & Shapiro, D., 1978. An exchange: The theory of human capital and the earnings of women: A reexamination of the evidence. *Journal of Human Resources*, 13:103-117.
- Saphilios-Rothschild, C., 1967. "A comparison of power structure and marital satisfaction in urban Greek and French families", *Journal of Marriage and the Family*, 29:345-352.
- Sawhill, I., 1976. "Discrimination and Poverty among Women Who Head Families", *Signs*, 2:201-11.
- Scanzoni, J., 1972. *Sexual bargaining: Power politics in the American marriage*. Englewood Cliffs, NJ: Prentice-Hall.
- Scanzoni, J., 1978. *Sex roles, women's work, and marital conflict: A study of family change*. Lexington, MA: Heath.
- Scarr, S., 1998. "American child care today", *American Psychologist*, 53:95-108.
- Schweinhart, L.J., Barnes, H.V., Weikart, D.P., 1993. "Significant benefits: The High/Scope Perry Preschool study through age 27", Monographs of the High/Scope Education Research Foundation. No. 10. Ypsilanto, MI: High/Scope Educational Research Foundation.
- Schwartz, P., 1994. *Love between equals: How peer marriage really works*. New York: The Free Press.
- Seitz, V. & Apfel, N.H., 1994. "Parent focused intervention: Diffusion effects on siblings", *Child Development*, 65:677-83.
- Seitz, V., Rosenbaum, L.K., & Apfel, N.H., 1985. "Effects of family support intervention: A ten-year follow-up", *Child Development*, 56:376-91.
- Shapiro, E.D., 1991. "Bacterial respiratory infections and Otitis Media", *Pediatric Annals* 20:403-441.
- Shapiro, C.N. & Hadler, S.C., 1991. "Hepatitis A and Hepatitis B virus infections in day care settings", *Pediatric Annals* 20:403-441.
- Siebert, S.D., 1974. "Toward a theory of role accumulation", *American Sociological Review*, 39:567-578.
- Skocpol, T., 1992. *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States*. Cambridge: Harvard University Press.
- Smith, J.R. and J. Brooks-Gunn, 1994. "Developmental Effects of Natural Transition in Welfare Receipt", paper presented at research briefing, Board on Children and Families, December 5-6, 1994. Teachers College, Columbia University.

- Smith, J.P. & Ward, M.P., 1984. *Women's Wages and Work in the Twentieth Century*, Rand. Tech. Rep. R-3119-NICHD. Rand Corp., Santa Monica, Calif.
- Sonstein, F.L. & Wolfe, D.A., 1991. "Satisfaction with child care: Perspectives of welfare mothers", *Journal of Social Issues*, 47:15-31.
- Sorensen, E. & Clark, S., 1994. "A child-support assurance program: How much will it reduce child poverty and at what cost?", *Economic Issues for Work and Family*, 84, 2:114-119.
- Spain, Daphne, and Suzanne M. Bianchi, 1996. *Balancing Act: Motherhood, Marriage, and Employment Among American Women*. New York, NY: Russell Sage Foundation.
- Spitze, G., 1988. Women's employment and family relations: A review. *Journal of Marriage and the Family*, 50, 595-618.
- Sroufe, L.A., 1988. "A developmental perspective on day care", *Early Childhood Research Quarterly*, 3:283-291.
- Stafford, F.P., 1987. "Women's work, sibling competition, and children's school performance", *American Economic Review*, 77: 972-980.
- Staines, G.L., 1980. "Spillover versus compensation: A review of the literature on the relationship between work and non work", *Human Relations*, 33:111-129.
- Strober, M.H. & Weinberg, C.B., 1977. "Working wives and major family expenditures", *Journal of Consumer Research*, 4:141-147.
- Symons, D.K. & McLeod, P.J., 1993. "Maternal employment plans and outcomes after the birth of an infant in a Canadian sample", *Family Relations*, 42:442-446.
- Taylor, P., Gwartney-Gibbs, P. & Farley, R., 1986. "Changes in the Structure of Earnings Inequality by Race, Sex, and Industrial Sector, 1960-1980", in Robert Robinson (ed.), *Research in Social Stratification and Mobility*, Vol. 5, Greenwich, Conn.: JAI, 105-38
- Tichenor, V., 1999. "Status and income as gendered resources: The case of marital power", *Journal of marriage and the family*, 61:638-650.
- Thoits, P., 1992. "Identity structures and psychological well being: Gender and marital status comparisons", *Social Psychology Quarterly*, 55:236-256.
- Thompson, L., 1991. "Family work: Women's sense of fairness", *Journal of Family Issues*, 12:181-196.
- Thomson, L. & Walker, A.J., 1989. "Gender in families: Women and men in marriage, work, and parenthood", *Journal of Marriage and the Family*, 51:845-871.
- Treiman, D.J. & Roos, P.A., 1983. "Sex and earnings in industrial society: A nine-nation comparison", *American Journal of Sociology*, 89:612-50.
- Umberson, D., Chen, M.D., House, J.S., Hopkins, K., & Slaten, E., 1996. "The effect of social relationships on psychological well being", *American Sociological Review*, 61:837-857.
- US Bureau of the Census. 1986. *Statistical Abstract of the United States: 1987*. Washington, DC: USGPO. 107.
- US Bureau of the Census. 1987. *Male-Female Differences in Work Experience, Occupation and Earnings: 1984 Current Population Report, P-70, No. 10*. Washington, DC: USGPO.
- US Department of Education, 1996. National Center for Education Statistics, "Integrated Post-Secondary Education Data Systems, Completions", *Surveys*.
- U.S. Department of Labor, Women's Bureau, Facts on Working Women, http://www.dol.gov/dol/wb/public/wb_pubs/wagegap2.htm
- Vanek, J., 1974. "Time spent in housework", *Scientific American*, 231:116-120.
- Van Ijzendoorn, M.H. & Bakermans-Kranenburg, M.J., 1996. "Attachment representations in mothers, fathers, adolescents and clinical groups: A meta-analytic research for normative data", *Journal of Consulting and Clinical Psychology*, 64:8-21.

- Vaughn, B. E., Deane, K. E., & Waters, E., 1985. "The impact of out-of-home care on child-mother attachment quality: Another look at some enduring questions", in I. Bretherton & E. Waters (eds.), *Growing points of attachment theory and research. Monographs of the Society for Research in Child Development*, (1-2 Serial No.209), 1:10-135.
- Verum, J.R., 1992. "Accounting for income mobility changes in the United States", *Social Science Quarterly*, 73:773-785.
- Violato, C., & Russell, C., 1988. *Effects of no-maternal care on child development: A meta-analysis of published research*, The National Foundation for Family Research and Education.
- Volling, B. & Belsky, J., 1993. "Parent, infant and contextual characteristics related to maternal employment decisions in the first year of infancy", *Family, Relations*, 42:4-12.
- Voydanoff, P., 1988. "Work role characteristics, family structure demands, and work/family conflict", *Journal of Marriage and the Family*, 50:749-761.
- Voydanoff, P. & Donnelly, B., 1999a. "Multiple roles and psychological distress: The intersection of the paid worker, spouse, and parent roles with the role of the adult child", *Journal of Marriage and the Family*, 61:725-738.
- Voydanoff, P. & Donnelly, B., 1999b. "The intersection of time in activities and perceived unfairness in relation to psychological distress and marital quality", *Journal of Marriage and the Family*, 61:739-751.
- Waite, L.J., Leibowitz, A., & Witsberger, C., 1991. "What parents pay for: Child-care characteristics, quality and costs", *Journal of Social Issues*, 47:33-48.
- Waldman, E. & Jacobs, E.E. (1978). "Working wives and family expenditures." Proceedings of the 1978 meeting of the American Statistical Association (San Diego). Washington DC: ASA.
- Waldfogel, J., 1997. "Working Mothers Then and Now: A Cross-Cohort Analysis of the Effects of Maternity leave on Women's Pay", in *gender and Family Issues in the Workplace*, F. D. Blau and R. G. Ehrenberg (eds.), New York: Russel Sage Foundation, 92-126.
- Walker, K., 1969. "Homemaking still takes time", *Journal of Home Economics*, 61, 621-624
- Wardwood, L., Fergusson, D.M., & Belsky, J., 2000. "Timing of parental separation and attachment to parents in adolescence: Results of a prospective study from birth to age 16", *Journal of Marriage and the Family*, 62:162-174.
- Weikart, D.P., Bond, J.T., & McNeil, J.T., 1978. *The Ypsilanti Perry Preschool Project: Preschool years and longitudinal results through fourth grade*, Ypsilanti, MI: High/Scope Press.
- Whitebook, M., Howes, C. & Phillips, D., 1990. "Who Cares?", Executive summary of the National Child Care Staffing Study. (Available from Child Care Employee Project, Berkley, CA.)
- Whyte, M., 1990. *Dating, Mating and Marriage*. New York: Adeline de Gruyter.
- Williams, J.E. & Bennett, S.M., 1975. "The definition of sex stereotypes via the adjective check list", *Sex Roles* 1:327-37.
- Wittington, L.A. & Alm, J., 1997. "'Til death or taxes do us part: The effect of income taxation on divorce", *The Journal of Human Resources*, 32,2:388-412.
- Yogev, S., 1983. "Dual-career couples: Conflicts and treatment", *The American Journal of Family Therapy*, 11:38-44.
- Yogev, S. & Brett, J., 1985. "Perceptions of the division of housework and child care and marital satisfaction", *Journal of Marriage and the Family*, 47:609-618.
- Zellner, H., 1975. "The determinants of occupational segregation", in *Sex, Discrimination, and the Division of Labor*, ed. C.B. Loyd, (pp.125-145). New York: Columbia University Press.

- Zigler, E. & Gilman, E., 1996. "Not just any care: Shaping a coherent child-care policy", in E. Zigler, J. Kagan, & E. Hall, (eds.), *Children, families, and government*, Cambridge, England: Cambridge University Press, 94-116.
- Zollinger, G. J., 1995. *Two Paths to Women's Equality: Temperance, Suffrage and the Origins of Modern Feminism*.
- Zill, N., 1988. "Behavior, achievement, and health problems among children in step families: Findings from a national survey of child health", in *The Impact of Divorce, Single Parenting, and Step-Parenting on Children*, E. M. Hertherington and J. Arasteh (eds.), Hillsdale, NJ:Earlbaum.