

DOES MOTHERHOOD MEAN WORKING FOR LESS?: THE IMPACT OF HAVING
CHILDREN ON WOMEN'S INCOME

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The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts with a major in Sociology.

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ABSTRACT

This study addresses the overall question: what effect does being childfree have on married women's income? Using data from the ATUS 2005-2007, three sets of hypotheses were tested to assess different theoretical relationships between motherhood and income. Questions explored include: Do married women hit a "maternal wall"? Does educational attainment affect income for women differently based on parental status? And are mothers disproportionately "crowded" into inferior economic positions? Findings indicate that age and level of education significantly impact income, as does occupational sector. On average, women with children do earn less per week (\$615) than women without children (\$651). Interestingly, however, women with children occupy a higher percentage of the white-collar high skill job categories (50%) than women without children (44%). Multivariate analyses suggest that women with children earn slightly more than childfree women at the weekly earnings level. However, explanations for this finding vary. This research yields some surprising results and implications of this research are substantial.

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TABLE OF CONTENTS

SECTION	Page
1. INTRODUCTION.....	1
2. LITERATURE REVIEW.....	4
2.1 Individualist Models.....	4
2.2 Structuralist Models.....	8
2.3 Gender Models.....	10
2.4 Conceptual Model.....	16
3. DATA AND METHODOLOGY.....	17
3.1 Methodology.....	17
3.2 Variables.....	18
3.2.1 Dependent Variables.....	18
3.2.2 Independent Variables.....	18
3.3 Hypotheses.....	20
4. RESULTS.....	20
5. CONCLUSION.....	25
5.1 Discussion.....	25
5.1.1 Individual Level.....	26
5.1.2 Structural Level.....	27
5.1.3 Gender Level.....	28
5.2 Limitations.....	29
5.3 Implications.....	32
REFERENCES.....	35
APPENDIX.....	41

1. Introduction

In drastic comparison to the 1960's, the number of women in the workforce by the year 2000 had increased to 74% (Bachu and O'Connell, 2001; Avellar and Smock, 2007). Additionally, women were obtaining more education and training than ever before. Thirty years ago, only 43% of women had twelve or more years of education, but by 1990 that percentage had increased to 75% (Spain and Bianci, 1996; Avellar and Smock, 2003). Increasing education has expanded opportunities for women to work outside the home. Even women with children compose an ever-expanding portion of the workforce. Women with children under six years of age represented only 44% of the labor force in 1970, but that number grew substantially to 71% by 1998 (Casper and Bianci, 2001; Avellar and Smock, 2003). Women have been making moves to improve their economic standing, yet there has been less progress towards equal treatment of women in the workforce.

Unfortunately for women in the working ranks, there are still many disadvantages they face. Interestingly, the disadvantages experienced by women are further stratified by family status. Mothers face discrimination at many levels, including access to jobs and job training and gender based pay discrimination (Cornell, 2007). While the pay gap between men and women has been narrowing, the pay gap between mothers and non-mothers has been expanding, so much so as to overtake the gap in earnings between men and women (Waldfogel, 1998). Researchers have coined several terms, including „family gap“, „maternal wall,“ and „maternal wage gap“, to describe the discrepancies in pay between mothers and non-mothers when controlling for all other factors (Crittenden, 2001; Masser, Grass, and Nesic, 2007). Several variables may explain why this

discrepancy exists, including women taking time away from the workplace for child bearing, which could lead to less experience and time on the job (Becker, 1985); women making different investments in human capital, such as in education and training (Avellar and Smock, 2007); and women's socialization into different roles as children, including the gender roles they learned as appropriate (van Putten, Dykstra, Schippers, 2008). However, net of additional factors, women experience a penalty for having children. In fact, there is a penalty for each child a woman has (Budig and England, 2001; Anderson, Binder and Krause, 2002; Avellar and Smock, 2007). According to Correll, Bernard and Paik (2007), women experience a 5% wage penalty per child (Budig and England 2001; Anderson, Binder, and Krause 2003; Correll 2007), while other studies attribute a wage penalty of up to 29% for the presence of multiple children (Anderson, Binder, and Krause, 2002).

Regardless of the percentage, the "motherhood penalty" is detrimental to all women in the workplace. Research has found that all women face some disparity because employers expect they will have children at some point during their employment (Anderson, Binder, and Krause, 2002). However, women with children, especially young children, are more disadvantaged in comparison to both men and child-free female employees (Glauber, 2007; Ashraf, 2007, Roos, 2005). The disadvantage begins early in the employment process. Despite the Equal Employment Opportunity Commission prohibiting discriminating against a woman on the basis of pregnancy, pregnant women are still being rejected for employment on that premise (EEOC, 2009). In fact, discrimination charge filings have increased dramatically in the past ten years, from 4,000 to 6,000 in 2008 (EEOC, 2009). An experiment done by

Masser et al. (2007) found that women who gave indicators that they were pregnant, or were already mothers, were perceived as less favorable candidates, even if their interviews were successful and identical to child-free women's interviews. According to a study conducted by Correll, Bernard and Paik (2007), childfree women receive 2.1 times as many callbacks as mothers with similar qualifications. Mothers are 79% less likely to be hired than women without children, even when mothers have equal resumes and job experience with non-mothers (Correll, Bernard and Paik, 2007).

Thus, previous research suggests that being a mother creates a risk for an economically disadvantaged position not imposed upon non-mothers (Correll, et. al, 2007; Budig and England, 2001). Employer discrimination is most evident when women, especially mothers, are passed over for promotion or placed in jobs with lesser economic return, regardless of increases in education and other human capital (Avellar and Smock, 2003). However, employer discrimination is only part of the picture. Mothers further experience discrimination based on the stereotypical perceptions of employers and co-workers (McQuillan, Grail, Schreffler, and Tichenor, 2008).

For example, social expectations magnify bias in the employment situations of mothers and other women. The cultural tensions, from a societal perspective, between valuing motherhood and career success that have been characterized as "competing devotions," are imposed on mothers (Blair-Loy, 2003; McQuillan, Greil, Schreffler, and Tichenor, 2008). Women are expected to perform the majority of child rearing and family responsibilities, as well as maintain a successful career, if their choice is to do both. However, accommodations necessary from either their employers or husbands to assist mothers in accomplishing both fall short (Blair-Loy, 2006; McQuillan, Greil and

Schreffler, and Tichenor, 2008). While employers are encouraged to establish policies that support childbearing and rearing practices they are not *required* to include these policies. While it is clear that a maternal wall exists, opinions vary in terms of where that wall originates. Some researchers assert that wage discrepancies are due to individual choices, while others believe that the issues are integrated into our society at the structural level. Each of these perspectives will be reviewed in the next section.

2. Literature Review

2.1 Individual Model

2.1.1 Rational Choice Theory

Rational choice theory has the basic premise that humans are rational, thinking beings who possess desires and beliefs. An individual will act to satisfy their desires in an ordered manner based on resources available to them (Parsons, 2005). While individuals seek to satisfy their needs, they also aim to minimize the costs they incur, while maximizing their benefits (Coleman, 1990). Women have applied several strategies to navigate their work and family roles, which allows them to maximize their work roles and minimize the costs of motherhood. The first strategy, which can be explained by both rational choice and human capital theories, is delayed childbirth (Cherry, 2003; cited in Avellar and Smock, 2007); the second strategy is job choice; and the third strategy is investing in training and education, as well as gaining work-related experience (Becker, 1992; Anderson, Binder and Krause, 2003). Each of these strategies decrease the likelihood that women will be without work as a result of pregnancy or child rearing (Cherry, 2003; cited in Avellar and Smock 2007).

The first strategy, delaying childbirth, allows time for a woman to obtain education and gainful employment, and then develop tenure in that position. Research supports this position. Delayed childbirth has been attributed to women defensively positioning themselves in gainful work positions (Avellar and Smock 2007; McQuillan et al, 2008; Edwards 2002). However, women who postpone having children to get their education also increase their odds of remaining child-free in order to gain the rewards that result from their investments in human capital (Houseknect 1987; Myers 1997 in McQuillan et al 2008). Heavily invested career women incur greater costs from a career interruption to become mothers, regardless of the efforts they have put in to avoid the motherhood penalty (McQuillan, Greil, Schreffler, and Tichenor, 2008; Edwards, 2002). For example, they may be passed up for promotions, even after acquiring education, and investing time within the workplace to gain experience.

2.1.2 Human Capital Theory

Human Capital theorists also argue that humans are rational beings who make decisions to invest to varying degrees in their personal capital, including developing the skills that allow one to move up the job ladder (Aulette, Wittner, Blakely, 2008; Becker, 1962). Like Rational Choice theory, some important forms of human capital investment are schooling, job training, and experience (Becker, 1995). According to Human Capital theory, all women are at a disadvantage compared to the “ideal” male worker. Human Capital theorists assert women are not as committed to paid work, women invest less in their personal capital, and women have less training and education; all of which lead to lower wages for women (Aulette, Wittner, Blakely, 2008; Becker, 1985).

Yet, research has shown that women are equally committed to their careers as men, so the most plausible explanation for the wage deficit from a Human Capital perspective is that women choose jobs that pay less (Aulette et. al, 2008). Research finds that women do choose jobs that allow them to more effectively juggle conflicts in work and family roles. Women tend to choose jobs that are female-typical with high starting pay rates, though the jobs usually do not offer any long-term benefits (Reskin and Hartman, 1985). Mothers choose jobs with more flexible hours, and that are in closer proximity to their children, among many other accommodating qualities, but a lower overall rate of return (Anderson et. al, 2002).

Even when controlling for job choice, research has found that the wage penalty women experience still exists (Waldfogel and Mayer, 2000), leading to an investigation of women's level of investment in job training, education, and experience that allow them to navigate work and family roles. Human capital theory suggests one gains worth by participating in investments, such as on-the-job training and education (Becker, 1992). On-the-job training increases an employee's overall utility to the firm, establishes bonds between worker and employer, and ultimately increases wages (Becker, 1992). Education similarly increases a worker's worth to the employer. Educational attainment provides broad skills that allow one to enter a wide array of positions that may require those skills (Becker, 1992). The skill-set learned in college and other degree programs increases a person's utility, in addition to any job training they may have received.

In order to learn the skills necessary to begin accumulating experience within their occupation, workers participate in different methods of training (Becker, 1992). Acquiring education is one such method. Generally, more education results in higher

returns for all workers. Women have been closing the gap in education with men, and mothers have been closing the gap in education with childfree women (Avellar and Smock, 2003; Anderson et al, 2003). In 2003, 31% of women between the ages of 25 and 29 had a bachelor degree or higher (Census Bureau, 2009). While education improves work roles, research has indicated other benefits of higher education. Women who are college graduates are more likely to work from home and have flexible schedules, which are more conducive to family responsibilities (Anderson et. al, 2003). However, mothers still complete approximately one year less education than childfree women (Avellar and Smock, 2007; Anderson et. al, 2003). Women who have higher education levels also report more effort at work, though their returns have remained steady (Anderson et al, 2003). Overall, research has found that even controlling for human capital, such as education, women still earn less than men, and mothers earn less than non-mothers.

Finally, on- the- job training as a mode of human capital is inconsistent among female employees due to gender barriers within the workplace (Aulette et. al, 2008). Women may choose jobs that require very little on-the-job training so they can maximize their returns during the short period of time they will work, however, women do this most commonly if they expect to have children. They know that any firm-specific training will be lost when they leave the position for childbearing and rearing (Anderson et. al, 2003). Through this strategy, women maximize their ability to manage family responsibilities and minimize their investment in the workplace, and as a result gain very little human capital (Anderson et. al, 2003). Unfortunately, higher returns are often an outcome on-the-job training experiences. Most often, with age comes experience, so

a person who is older would likely receive higher returns, according to Human Capital theorists (Becker, 1992). However, when women take time away from the workplace for childbearing and rearing, as mentioned before, they are penalized for not gaining experience (Budig and England, 2001). Yet, similar to other human capital factors (i.e. education), controlling for work experience does not eliminate the wage penalty for women (Anderson et al., 2003).

Human capital and rational choice theories offer many possibilities as to why women earn less than men overall. However, these variables aside, women still earn less. Thus, individual level theories do not consistently explain the wage gap between men and women, or mothers and non-mothers.

2.2 Structural Model

Structural theorists believe the work world is divided into two parts. According to these theories, certain groups, such as white men, tend to occupy a position within certain sectors of work, such as a CEO or supervisor. Each of these positions also carries a certain level of prestige, and prestige is related to income and desirability. Based on these assumptions, two closely related structural frameworks have been considered in the research on the wage gap: 1.) Dual Economy theory and 2.) Segmented Labor Market theory.

Dual Economy Theory suggests two distinct parts of the economy, the core and the periphery. Jobs within the core sector, such as supervisors or CEO's, have a high capital-to-labor ratio (O'Conner, 1972). These jobs are found in large national and international corporations, and are mostly dominated by white men (O'Conner, 1972; Magnussen, 2009). Periphery jobs, including service workers and teachers, have low

wages, and narrow job ladders, and are most often occupied by women (Reich et. al, 1973; Aulette et. al, 2008). The positions within the periphery sector of work provide little or no on-the-job training, which is key to Human Capital theory.

Similarly, Segmented Labor Market Theory asserts two divisions: primary, such as goods producing industries, and secondary sectors, such as service industries (Reich et. al, 1973). The primary sector offers stable jobs with high wages, which require high skilled workers. The secondary sector provides low wages and limited job ladders like in periphery jobs (Reich et al, 1973). Secondary sector jobs often require little skill and are occupied mostly by women and minorities.

These organizational divisions separate not only men and women, but also separate women with children and childfree women. One explanation as to why women remain in less lucrative jobs is that women who have family responsibilities will not be able to perform the same duties as men or childfree women (Magnussen, 2009). Often, the primary and core jobs require overtime or travel that it is believed mothers would not be able to accommodate. Thus, while all women are marginalized into less desirable positions, women with children are considered less dedicated and available for work responsibilities than all other workers (Miree and Frieze, 1999; Magnussen, 2009).

Consequently, the secondary jobs that women most commonly occupy, such as secretaries and teachers, have lower occupational prestige scores (Aulette et. al, 2008). Female-dominated, secondary, low prestige jobs have lower wages, while high prestige positions have higher wages (Reiss, 1961; Treiman, 1977 in Magnussen, 2009; Miree and Frieze, 1999). While, women have been a growing force in almost all occupations in the paid labor force, their job categories have remained stable (Aulette et. al, 2008).

Women continue to dominate low paid positions with limited job ladders, and upward mobility is exceptionally restricted for women with children (Aulette et. al, 2008; Magnussen, 2009). For further illumination, researchers turn to gender theories.

2.3 Gender Model

Structural and individual models acknowledge the disadvantages of women and other minorities within labor markets. However individual level models argue that the disadvantages of these groups can be overcome by various investments in human capital, while structural theories argue that women choose to be in occupations that are more accommodating to motherhood. Feminists and gender theorists disagree; asserting that disadvantage is a process of devaluation and sorting. Many explanations, from crowding theory to socialization, have been formulated in regard to gender segregation found within work structures.

Crowding theory suggests that occupations typically held by women pay less because replacement labor is easy to find (Bergmann, 1986). Instead of having equal access to all jobs, in comparison to men, women are channeled into a small share of jobs, few of which allow for growth and advancement (Bergmann, 1989). When women do try to enter male-typical positions, that have opportunities for advancement, they are likely to exit these jobs due to the resistance from males in the occupation, which results in the formation of a large pool of available women workers (Bergmann, 1989). Because of this collection of women ready and willing to work but without jobs, women accept whatever paid position they can get, crowding them into low paid occupations.

A second gender perspective holds that gender socialization is a lifelong process of reinforcing female and male roles (Jacobs, 1989). Socialization involves a degree of

social control, by which society teaches young people its values and beliefs (Jacobs, 1989). For instance, the division of labor is taught at an early age defining for female's and male's appropriate positions during childhood, the most formative period in which an individual's beliefs take shape, and where gendered behaviors are rooted (van Putten, Dykstra, Schippers, 2008). Ideas about gender roles are further reinforced within education and work environments. Education, for example, was once justified for women only as a way to find a husband and improve their marriage skills (Jacobs, 1989).

Thus, beliefs in one social institution, like the family, influence beliefs held in other institutions, such as work. For instance, the occupational status of women not only depends on their own educational attainment, but also the educational attainment and occupation trajectories of their mothers (van Putten, Dykstra, Schippers, 2008). Daughters of working mothers find it more acceptable and desirable to work than do daughters of nonworking mothers (van Putten, Dykstra, Schippers, 2008).

What is more, social control theory suggests that even when women aspire toward a "male occupation", they may abstain from acquiring the skills for that occupation if no other women are present (Jacobs, 1989). Instead, women focus on obtaining their education in traditionally female occupations (Evans and Diekman, 2009). If a woman is hired into a male-typical position, she often will have difficulties winning acceptance from peers and subordinates, and have difficulties getting the help she needs to learn her position (Jacobs, 1989). In addition, women in male-dominated jobs experience harassment in the form of exclusion from on-the-job training, as well as isolation from other workers and clients. For example, professional ties are often made in out-of-office

social events. In a study of professional salespeople, women were found to be excluded from male gatherings (e.g. golf outings, strip clubs, lunches etc), which served as social networking opportunities and informal meetings (Morgan and Martin, 2006).

However, as mentioned earlier, women can encounter resistance at every level of the employment process, not only after they are employed. Even before a woman is selected and hired for a job, any evidence she may provide during the interview process that she is a mother, dispels to her disadvantage any employer-perceived competence (Masser, Grass, Nestic, 2007). Competence is instead perceived as warmth, and this perception is associated with diminished employer interest in hiring, promoting, or training a woman (Masser, Grass, Nestic, 2007). The beliefs that employers associate with motherhood are consistent with social stereotypes, including the idea that women will take an extended leave if they get pregnant, or will be less dedicated or motivated to perform their job duties after having children (Edwards, 2002; McQuillan et al, 2008;Waldfogel, 1998).

Women are kept from obtaining certain jobs through lack of information as well. Women are ill-informed about job markets and do not share equal access to jobs through social networks with men (Reskin and Roos, 1982). Social networks can provide access to useful information, services, commodities and jobs (Lin et. al, 1988; Furstenberg, 2005; in van Putten et. al, 2008). During childhood and young adulthood social networks begin to be formed. In part, parents can supply social connections for their children. Mothers who are employed can share their employment networks with their daughters, placing their daughters at an advantage in comparison to daughters of nonworking mothers (van Putten, Dykstra, Schippers, 2008). While social networks

used by women to obtain employment often lead to lower paying jobs than men (Loury, 2002), daughters of working mothers achieve higher occupational status than those of nonworking mothers (van Putten, Dykstra, Schippers, 2008).

Thus, it is believed that the sex roles of men and women instilled during socialization spill over into work environments. The social roles that are taught as appropriate for women affect women's choice of college major, their career goals and mobility, as well as the power structure within their own families (Jacobs, 1989). For example, women who are raised in a family where both parents work and do housework already perceive egalitarian arrangements as normal. Therefore, these women are likely to transfer these beliefs to their own family structure; while women raised in a "male breadwinner" family may mold their career aspirations to reproduce that structure (Evans, 2009). Likewise, women entering male-dominated positions, are often seen as deviant and are patronized by others in the position (Jacobs, 1989). Thus, socialization into gender stratified roles has been seen to have deleterious effects on women overall (Edwards, 2002; Waldfogel, 1998).

A third perspective suggests that women are segregated in the work place based on their own preferences, as well as employer preferences, otherwise known as worker and employer queues (Reskin and Roos, 1982). Worker queues are based on social and cultural differences that create preferences among a particular group (Kaufman, 2002). This idea emphasizes that groups, such as women, self-segregate based on their preferences. For example, as human capitalists suggest, women choose occupations that are accommodating to their family responsibilities (Kaufman, 2002). Employer queues, on the other hand, are based on perceived stereotypes of a certain

group (Kaufman, 2002). Employers use sex and race as inexpensive screening tools when looking at job applicants. Jobs are deemed “appropriate” or “inappropriate” for certain groups based on social beliefs about the group; as a result, employers are able to discriminate against the group that is deemed an inappropriate match for the position (Kaufman, 2002). Employers do not prefer to hire women for positions that require vast on-the-job training, because they do not want to invest in women without being sure their institution will reap the reward of that training. Based on most employers’ queues, then, white men are at the top or front, followed by white women, then minorities (Bisping and Fain, 2000). Being placed in an employer queue has a clear gendering effect, with women found in queues for low pay and low status jobs (Fernandez and Mors, 2008).

Such stereotyping of individuals, or treatment based on common beliefs about the group in which they occupy a position, is another form of institutional discrimination (Phelps, 1972). Stereotyping can result in the application of cultural schemas and favoritism toward members of a particular group (Gorman, 2005). While structural mechanisms that affect hiring and other employment processes are “gender neutral,” employers are able to discriminate using interactional mechanisms (e.g. interviews) against a particular group (Gorman, 2005). Thus, research supports that institutional segregation and the discrimination women encounter occurs at four different points in the employment process: pre-employment, training, job access and assignment, and job mobility and retention (Reskin and Roos, 1982).

Overall, research has found that work performed by women is devalued, as is a woman’s status as a mother (Glauber, 2007). Employers are an integral part of the

discrimination of women in the workplace. At any time in the hiring, promotion or compensation decisions, employers have the opportunity to restrain women from attaining a superior or equal work status to that of men (Glauber, 2007). In addition, women of different social standpoints encounter different levels of the motherhood wage penalty. White mothers have the largest penalty, which increases with every additional child, 6%, 10%, and 7% for 2, 3, and 4 children respectively (Glauber, 2007). Conversely, Hispanic women, and African American women with fewer than three children, encounter no motherhood penalty whatsoever (Glauber, 2007). Glauber's (2007) research suggests African American mothers spend more time in the workforce in comparison to their White and Hispanic counterparts and therefore encounter less of a wage penalty. Another implication is that African American and Hispanic women occupy the lowest occupational positions, allowing little room for a wage penalty (Glauber, 2007).

According to the literature reviewed, women are expected to have children and care for their children; however, women are discriminated against, whether they choose to have children or not (Bergmann, 1986; Morgan and Martin, 2006). Women who do have children or plan to have children find themselves being stereotyped as less dedicated and less able to participate in highly demanding careers, regardless of their ability to eliminate career-family conflicts, such as having childcare (Reskin and Roos, 1982; Jacobs, 1989; McQuillan et. al, 2008). Though women have closed the gap in education with men, they have not seen the return for such an investment (Jacobs, 1989). Women have also ventured into male-dominated occupations, but have rarely been welcomed by their new coworkers (Jacobs, 1989). While theorists have

investigated a variety of avenues to explain why women remain at an economic disadvantage at work, a comprehensive explanation has rarely been formulated.

2.4 Composite Model

Through an examination of a multitude of classical sociological theories, including individual, structural and gender level theories, a composite model was developed and tested (see figure 1). This model is a combination of the ideas proposed by previous theories in regard to women with children and women without children. Much of the prior research conducted is linked to a single model to explain either the gender gap or the motherhood penalty. In the current research a multilevel model is used in order to assess the utility of competing explanations, and to investigate the broadest array of variables and their relationships to one another.

As mentioned previously, individual theorists assert individuals are rational thinking beings who make choices about investing in human capital to increase their productivity, which could lead to the possibility of higher income. These human capital choices would include things such as on-the-job training, job experience and skill, and education. Structuralists, on the other hand, argue that organizations are comprised of economic positions in which each position has a range of income independent of individual attributes. They would focus on things such as occupational position and prestige, industrial location and union membership. Finally, while individualists and structuralists view the negative effects of gender as something that can be overcome by effort, feminists argue that gender is a means by which women are devalued and sorted in the workplace. The gender component would focus on social identity factors that are used in this process such as gender, marital status, and children.

3. Data and Methodology

3.1 Methodology

The data for this research come from The American Time Use Survey (ATUS, 2007), which is sponsored by the U.S. Bureau of Labor Statistics and is conducted by the U.S. Census Bureau. This national survey collects information about how people spend their time, as well as where and who they spend their time with during a typical day (ATUS, 2007). The surveys were conducted using a Computer Assisted Telephone Interviewing (CATI) instrument. The ATUS is comprised of a nationally representative sample. Participants in the survey include Current Population Survey (CPS) respondents who had completed the eighth and final interview for the survey (ATUS, 2007).

In the current study the data is a pooled sample of the 2005 through 2007 American Time Use Surveys (ATUS, 2007). The total sample size of the pooled 2005-2007 ATUS is 38,148. However, the sample under investigation has been restricted to include only women of prime working age (25-59), who are married and employed (excluding armed forces). Thus, the final sample consists of 2,451 women (54.5%) who have children under 18, and 2,047 (45.5%) who do not have children under 18. A relative weight has been applied to all cases to assure the sample is representative of the actual population. This technique ensures that the sample reflects the population parameters while decreasing the likelihood that statistically significant differences are found due to an inflated sample size.

3.2 Variables

3.2.1 Dependent Variables

The dependent variable for this study is income, which is based on weekly earnings. Income is an interval level variable measured in raw U.S. dollars, with a minimum of \$5.15 and a maximum of \$3,000 weekly, including full-time and part-time workers. In this data the mean weekly income is \$632.

3.2.2 Independent Variables

Individual level variables include age and education. Age is measured in years and is an interval level variable. Again, this sample has been restricted to those women between the ages of 25 and 59 to encompass those of prime working age. Education is a five level ordinal variable, and is coded into less than high school, high school diploma, some college (including associate's degrees), bachelor degree, and graduate or professional degree. A binary was created for each level of education, with an additional binary for college degree (1=yes,0=no).

Structural level variables include government employment, hours worked per week, occupational level and prestige, and industry level. A binary variable was created to indicate government employment (1=yes, 0=no). Hours worked per week are measured in raw hours, and is an interval level variable. A binary was created in order to denote whether respondents work full time (1=yes, 0=no), or if the respondent works part time.

A 25 level nominal occupation variable is used to indicate what type of job the respondent has (e.g. food preparation and service, personal care, management, etc.). The occupation variable was first refined to 13 levels with broader categories

(management, professional, sales, etc.), and then further reduced into 4 levels with even broader ranges (blue-collar high-skill, blue-collar low-skill, white-collar high-skill and white-collar low-skill). A binary was created for each of the 4 levels to indicate the respondent's position within one category (1=yes, 0=no).

Occupational prestige is an interval level variable. The prestige score assigned to occupations were taken from rating systems developed at NORC in 1963 and 1965 by Robert W. Hodge (Nakao and Hodge, 1990). The concept of prestige is defined as the respondents' estimation of the social standing of occupations (Nakao and Hodge, 1990). Occupational prestige ranges from 0 to 100 (100=highest).

Industry level is a 16 level nominal variable with categories including mining, construction, wholesale, etc. Industry level is refined to fewer, more encompassing categories in the 4 level nominal level variable, with the following categories: agriculture, goods, service and government. A binary level variable was then created based on industry level to indicate whether the respondent's employment was in goods (coded as 1) or services (coded as 0).

Gender level variables include occupational sex segregation, race, the presence of children, the employment status of spouses, and the time spent on leisure and household activities. Occupational sex segregation is an interval level variable in which a value under 1 would mean women are underrepresented, and a value of over 1 would mean women are overrepresented. Industry sex segregation is similarly distinguished. A combination variable was created for race and ethnicity (1=white non-Hispanic, 2=black non-Hispanic, 3=Hispanic, 4= Asian non-Hispanic, 5= other non-Hispanic). Race/ethnicity is a nominal level variable. Binaries were created for each category of the

race/ethnicity variable (1=yes, 0=no). A binary variable was also created to indicate minority status (white and Asian non-Hispanics are non-minorities), and was coded as 1=minority and 0=non-minority. Since this research is comparing income, Asian respondents are coded as a non-minority because they typically make a similar income to whites.

A binary variable, presence of children, was delineated to indicate whether women had a child or children under the age of 6 (1=yes, 0=no). A binary was also created to indicate the presence of children under 18 (1=yes, 0=no).

Other gender level variables include the total time the respondent spent on household labor, time spent on civic activities, time spent on leisure activities, time spent on work and education, and time spent on personal care. Each is an interval level variable, measured in hours. For each of these categories a binary variable was created, 1 indicated that the respondent participated in the activity, and 0 indicated that the respondent did not participate in the activity.

3.3 Hypotheses

Individual Segment

- 1.) As age increases, income increases, net of other factors.
- 2.) As educational attainment increases, income increases, net of other factors.

Structural Segment

- 3.) Those in core sectors will receive a higher income than those in the periphery sectors of work, net of other factors.
- 4.) As occupational skill increases, income increases, net of other factors.

Gender Segment

5.) Women with children will be sorted into inferior economic positions.

6.) Women with children will earn less than women without children, net of other factors.

4. Results

4.1 Univariate and Bivariate Results

Tables 1A and 1B display the univariate and bivariate results, comparing weekly earnings of women with children and women without children. Women without children earn more than women with children weekly difference (\$651 vs \$616, $t=3.01$, $df=4496$, $p<.001$), and this is significant, though not meaningful. A Cohen's D less than .20 was used to establish meaningful differences in terms of effect size. Therefore, women with children earn 94.6% of what women without children earn weekly. Within the individual-level factors, women with children were younger than women without children (39 vs. 47, $t=30.91$, $df=4496$, $p<.001$). Women with children were more likely to have less than a high school diploma than women without children (6.5% vs 4.3%, $t=-3.11$, $df=4496$, $p<.001$), women with children were also more likely to have a bachelor degree than women without children (24.8% vs 21.4%, $t=-2.68$, $df=4496$, $p<.01$). Women without children were more likely to have a high school diploma than women with children (33.63% vs 27.6%, $t=4.37$, $df=4496$, $p<.001$). Women with children were less likely to live in a rural area than women with children (18.5% vs 20.9%, $t=2.03$, $df=4496$, $p<.05$). No statistical significance between mothers and childfree women was found on having a college degree nor living in a southern region of the United States.

Within the structural-level factors (Table 1B), women with children work fewer hours weekly than women without children (36 vs 38, $t=7.00$, $df =4496$, $p<.001$). Women with children were less likely to work full time than women without children (70.8% vs 78.5%, $t= 5.96$, $df =4496$, $p\le .001$). Women with children were more likely to occupy white-collar high-skill jobs than women without children (50% vs 44%, $t=-3.95$, $df =4496$, $p<.001$), and less likely to occupy white-collar low skill positions (30% vs 38%, $t=5.04$, $df =4496$, $p<.001$). A higher proportion of women in the full sample were found in blue-collar high-skill and blue-collar low-skill categories, though no significant differences were found.

Finally, within the gender-level factors, women with children were more likely to be members of a minority group (25% vs 15%, $t=-8.52$, $df =4496$, $p<.001$). Both groups of women were equally likely to occupy a position that is dominated by women. As depicted in Table 2, women with children participate at a lower rate in employment related labor than women without children (67% vs 70.7%; $t=-4.35$, $df =4496$, $p<.001$), and are more likely to participate in household labor than women without children (98.0% vs 94.1%, $t=-6.94$, $df =4496$, $p\le .001$). Women with children also participate in household labor intensive, including cooking, cleaning, laundry, childcare and travel associated with childcare, at a higher rate than women without children (94.6% vs 79.8%, $t=-15.61$, $df =4496$, $p<.001$). Women with children in every age category and in every earning quintile participate in household intensive labor at higher rates than women without children. Women with children also participate in household intensive labor at significantly higher rates at every educational level than women without children, except those who have less than a high school diploma. This finding is also

true for women in each occupational level and part-time and full-time work status. Subsequently, the unpaid labor women with children participate in results in an extra three weeks worth of work per year. This results in the potential loss of \$398 per week if that time had been invested in the paid labor force (Table 4).

4.2 Multivariate Results

Table 3 contains results for the Ordinary Least Square (OLS) regressions. The adjusted r-square for the full sample is .537, with the composite model explaining 54% of the variance in weekly income.

This research hypothesizes that as age, a proxy for experience, increases, income will also increase, net of other factors. This hypothesis was supported as seen in Table 3, women with children earn an increase of \$3 per week per one year of age and women without children earn \$4 more per week ($p < .001$). The second individual level hypothesis of this research, as education increases, income increases, net of other factors, was also supported. Increased educational attainment shows an increase in wages for the full sample, women with and women without children. In comparison to the reference group, less than a high school diploma, women earned a significant increase in earnings at every educational level ($p < .001$). Women with children received a higher rate of return at a bachelor degree level than women without children, and this was a meaningful difference (\$310 vs \$207; $p < .001$). A modified Chow of less than .05 established this finding as a meaningful difference, in regards to effect size. In addition, a decrease in wages for living in rural areas and southern regions was found for the full sample and both groups of women.

At the structural level, the current research hypothesized that those in core sectors would earn more than those in periphery sectors, net of other factors. This hypothesis was supported. Women in the goods-producing sector of work have a significant increase in weekly earnings (\$47, $t= 3.42$; $p<.001$). Union membership also has a significant, positive effect on earnings (\$61, $t=4.53$, $p<.001$).

In regards to skill, this research hypothesized that as skill level increased, income will increase net of other factors. A trend in increased earnings for increased skill level can be seen in Table 3, lending some support to the hypothesis. Using blue-collar low-skill positions as a reference group, women earn significantly more within the blue-collar high-skill (\$57, $t=2.12$, $p<.05$), white-collar low-skill (\$134, $t=10.35$, $p<.001$), and white-collar high-skill (\$236, $t=17.78$, $p<.001$) categories.

Finally, in terms of gender, this study hypothesized women with children will earn less than women without children, net of other factors. This hypothesis was not supported by this research. Women with children earn \$20 more weekly than women who do not have children ($t=2.16$, $p<.05$). In addition, the last hypothesis of this study was not supported. Women with children were not found to be sorted into inferior economic positions. If this were the case, women would have disproportionately occupied lower skilled categories, and would earn significantly less than women without children. As seen in Table 1B, women with children do not occupy higher proportions of the white-collar low-skill through blue-collar low-skill categories, nor do they earn less, as previously discussed. Hence, the last hypothesis is not supported.

Figure 3 shows results for unique variance for each model segment for the full sample, for women with children and for women without children. The structural model

accounts for the greatest explanation of unique variance for the full sample (74.7%), for childfree women (75%) and for women with children (72%). The individual model provides the next greatest explanation for all three groups (full sample 22.1%; women without children 23.4%; and mothers 26.2%). Lastly, the gender segment explains the least amount of unique variance, which is 3.2% for the full sample, 1.6% for women without children and 1.8% for women with children.

5. Conclusion

5.1 Discussion

Women have been a growing presence in the workforce since the 1960's (Bachu and OConnel, 2001; Avellar and Smock, 2007). However, existing research continues to find that working women do not receive the same benefits from their workforce participation as men. Recent research also suggests that different groups of women may experience different compensation as well. The current study aimed to assess this difference by exploring the impact of having children on a woman's income. Previous literature argues women with children, or even the perceived potential to have children, experience negative impacts at every level of the employment process, including applying, interviewing and compensation (Anderson et. al, 2002). Classical sociological theories at different levels of analysis have been used to assess which factors have bearing on women's income distributions once hired into a position. The current study finds that some of the assumptions of these theories can be used to explain differences in income among women as well

5.1.1 Individual Level

At the individual level, Human Capital theory suggests that increased investment in personal capital (such as workforce experience and education) should result in increased income overall (Aulette, Wittner, Blakely, 2008; Becker, 1962). As explained previously, within Human Capital Theory, age is used as a proxy for work experience (Becker, 1992). The current research hypothesized: as age increased, income would increase, net of other factors. The results of this research supported this proposition. Both women who had children and those who did not have children experienced increased income based on age (Table 3).

Educational attainment was the second Human Capital investment assessed. It was hypothesized that as educational attainment increased, income would increase, net of other factors. The current findings lend support to this hypothesis. In the full sample, women did experience a significant increase in weekly earnings per level of education. Though, the benefits of educational investments varied to some degree amongst women. Women with children, at the Bachelor degree level, received a greater return on the investment than women without children at the same level. A possible explanation for this could be that women with children who obtain higher levels of education get jobs in high skill sectors of work. As they obtain higher levels of education, they become a commodity, and may be more difficult to replace. This may also suggest that women with children who obtain higher levels of education apply a discrimination avoidance strategy, such as delaying childbirth, in order to establish themselves in the workplace, have a competitive skill level, and therefore have increased returns. Regardless, this finding suggests that while all women benefit from a

college education, women with children may actually benefit more from having a Bachelor level degree than do women without children.

5.1.2 Structural Level

As a result of obtaining higher levels of education, one would expect to get a better job than someone with a lower level of education because they have more to offer in terms of personal capital. Theoretically, if a woman acquired a higher education, and acquired valuable skills, they would be placed in a high-skill level job. Accordingly, Structural level theories suggest the workplace is divided into separate sectors of work positions, some of which are more desirable and lucrative than others and often require more training and education. The current research hypothesized, then, that those in the core sectors, i.e. the positions which offer higher returns, would earn more than those in the periphery sectors of work, net of other factors. Overall, this hypothesis was supported. Women in the goods producing sector, or the core sector, did earn more weekly than those in service jobs, or the periphery sector. However, there were no differences in the proportion of women with and without children occupying jobs in this sector. Furthermore, the percentage of women in the goods producing sector was small (10%), suggesting that women may still be primarily found within the service sector of work, as previous literature suggests.

Likewise, structural theorists suggest that occupations are stratified by skill level. Previous literature has suggested that women do not frequently occupy high-skilled jobs at the same rate as men (Aulette et. al, 2008; Reich et. al, 1973). However, it is suggested that higher skilled jobs are associated with higher pay. Along these lines, the current study found that women in higher skilled jobs, had higher incomes than

those in lower skilled jobs (hypothesis 4). More specifically, women in blue-collar high-skill positions earned \$57 more than those in the blue-collar low-skill positions, and the increases were true for white-collar low-skill and white-collar high-skill workers as well. However, these findings are true for women in general. While, it was found that women with children benefit significantly more from occupying a position in the blue-collar high-skill sector of work in comparison to those in blue-collar low-skill positions, the difference between mothers and childfree women is not large enough to result in a meaningful difference. Thus, in regards to the effects of skill level, women's income experiences are essentially the same regardless of parental status.

5.1.3 Gender Level

Finally, after assessing both individual and structural level factors, it is clear that these theories may be better at explaining the factors that influence how much women as a collective make, but may be less useful in explaining pay deficits between mothers and childfree women. In an effort to further investigate the pay gap, previous research has suggested that the types of positions women occupy may be related to other gender processes. Along these lines, it was hypothesized that women with children would be disproportionately sorted into inferior economic positions. If this were the case, women with children would be found occupying higher percentages of the lower-skilled positions and making significantly less weekly income than women without children. However, the results of the current research did not support this proposition. Instead, women with children were actually found occupying a larger percentage of the white-collar high-skill sector, while childfree women occupied a higher percentage of white-collar low-skill positions (Table 1B). One possible explanation for this finding may be

that employers do not invest in childfree women because they are perceived as in the running to have children. When comparing the actual percentages of high-skill and low-skill workers, however, there were no significant differences between mothers and childfree women. In addition, there were no meaningful differences between the income of women with children and childfree women at any particular occupational skill level (Table 3), suggesting that women with children do not disproportionately occupy lower skilled/lower paid positions. In fact, previous literature theorized that women with children would earn less overall due to increased family responsibilities. For instance, gender theorists have suggested that women with children are perceived by employers to be less dedicated to the workplace and work related responsibilities, due to their competing devotion to their household and childcare responsibilities (Edwards, 2002; McQuillan et. al, 2008). Thus, the current study hypothesized that women with children would make less than women without children, net of other factors. Therefore, this hypothesis was not supported. Surprisingly, women with children earned significantly, but only slightly, more weekly earnings than women without children. Women with children participate in unpaid labor at significantly higher rates than women without children. The time they invest in unpaid labor decreases their potential earnings in the paid labor force. The overall lack of support for gender level factors may be due to limitations with the data, and the restrictions used in this research.

5.2 Limitations

There are several factors that affect the current study. First, sample restrictions made to only include married women limit the variation of the results on income. Further

investigation that includes single mothers and single non-mothers would offer more depth in the analysis of variations among women. First, including single women with children would allow for differences in experience based on parental status. Single women with and without children may be evaluated differently by employers, which could have several implications for their economic return. Secondly, including single and married women would offer further insights into the impact of marriage on a woman's income. It is possible that marriage provides a cushion to women with children not experienced by single mothers. In addition, previous research suggests the motherhood penalty may vary by race and ethnicity. Due to the combination of minority women as part of the sample restrictions in this study, differences in income between women of different races could not be assessed. Thus, future research would benefit from including different groups of women, including those of different races and marital statuses.

Second, due to the limitation of the ATUS, weekly earnings were the only option for analyzing income for women. Looking at lifetime, or even annual, earnings may offer a more accurate assessment of the impact of time away from work for childcare responsibilities on income. Weekly earnings only result in information about women in their current work roles and full-time or part-time status. In addition, investigating the lifetime or annual earnings of women and men may result in interesting findings in regards to the motherhood penalty versus what fathers' experience. Other information that may be valuable to include is the past experience or uninterrupted time in the workforce, because each of these factors have been suggested to impact the earnings

of an individual. Taking into account a parent's absence from the workforce would yield more comprehensive results about the impact on income they may suffer or benefit.

Third, gender level limitations of this research include the inability to assess discrimination within the work place. The ATUS does not offer any information about workplace discrimination. Nor does it assess the fit between work and family relationships. In order to assess main factors that impact overall income, especially pertaining to women, a discrimination variable is necessary. Future research should also include some assessment of gender ideology, due to the fact that couples may have different arrangements that could have different impacts on women's earnings overall. Fourth, while a multitude of previous research studies indicate women experience a motherhood penalty as substantial as 29% (Anderson, et. al, 2002), the current research did not show that women with children make significantly less than women without children. Previous literature has suggested that having multiple children often resulted in a larger impact on income per increase in the number of children. However, this variable could not be accurately assessed with the dataset used. Therefore, future research may be strengthened by exploring both the impact of the age of a child and the number of children in the household.

Finally, the composite model of this study was relatively inclusive of many of the factors that have been shown to impact income, however, some of the gaps in this research have just been illuminated. The structural level variables carry the most predictive power of all of the variables included, which are often the least important according to previous theorists who focus most of their attention on human capital. Structural level factors are also not within the individual's control. Overall, the findings

of the current study do suggest the importance of incorporating variables from multiple theories, as was done in the current study in order to more fully understand the impact on income for women with children and women without children.

5.3 Implications

While the EEOC has policies protecting women from pregnancy discrimination, and the Family and Medical Leave Act protects some employees for taking leave due to various caregiving responsibilities, women may still experience a penalty for having children. As discussed above, researchers need to continue to evaluate a variety of factors in order to assess where such penalties lie, whether in the form of discrimination, or at another structural or gender level.

Currently, there is no federal law that prohibits employers from discriminating against employees based on the full range of family responsibilities they may be juggling. However, some legislators are looking more closely at ways in which the government can support families. To date, twenty-two states have local laws protecting employees from family responsibility discrimination (<http://worklifelaw.org>, 2010). However, specific protections for women with children are practically nonexistent. Further research should continue to assess the impact on income women and men experience as a result of their family responsibilities.

The results of this research suggest structural level factors have the most bearing on the income of women, regardless of their parental status. Structural factors also include the ratio of female employees in a particular position or sector of work. European employment policies suggest that increasing female participation within the

labor force may increase their wages (Bergemann and van den Berg, 2006). Countries with low female labor market participation report lower wages for the positions that are dominated by women. Therefore, workplace policies that demand equal representation of women within male dominated fields need development. Increased female labor market participation may decrease the vulnerability of wages for women (Bergemann and van den Berg, 2006). Policies similar to those in Europe, such as the Employment Guidelines of the EU, which emphasize reconciliation of work and family responsibilities, should be enforced within the United States, where women suffer penalties for childcare responsibilities (Bergemann and van den Berg, 2006).

Individual level factors had the second most explaining power for the results in this study. Action that should be taken at the individual level include increasing educational attainment and redefining male dominated positions. Educational establishments should offer incentives for women to delay childbirth and continue their education, and assist with job placement after graduating. Women who receive more education and job training before having children were found to suffer no penalty for having children (Jayson, 2010). Other incentives should be given to women who pursue degrees in traditionally male occupations, such as management and professional occupations. Women in managerial positions earn 50% more than women in sales and administrative support, suggesting that education and training within these occupations would contribute to higher wages for women (BLS,1999).

Lastly, gender level factors explained the least amount of the variability on income in this research, however, gender factors should be considered some of the most important. The devaluation of unpaid labor was exhibited in this research (Table

4). Women with children work more hours than women without children, when taking into account household labor. At a societal level, women are devalued in the workforce and in the home. Employers should be mandated to provide services, such as childcare and household labor assistance, to women who are managing work-family conflicts. Whether the childcare is onsite or offsite, it would enable women to invest more time in paid labor, and minimize their unpaid labor. However, regardless if employers offer assistance, men should increase their participation in household labor, in order to make an equitable negotiation of the time their partner spends in the paid labor force.

Overall, policies that are in place to protect workers need to be reconfigured to include the varying degrees of work-family roles. O'Leary (2009) suggests that basic labor standards need to be updated to include family friendly employee benefits and laws that do not exclude women from employee benefits. There is a need for paid family leave, social security benefits that include time taken away from the workforce for childcare responsibilities, and increased support for childcare and early education to help parents cope with their dual responsibilities (O'Leary, 2009).

Aside from differing levels of possible solutions for the pay deficit between women with childcare responsibilities and those who do not, April 20, 2010 was declared National Equal Pay Day (whitehouse.gov, 2010). A task force was developed in order to increase the enforcement of pay discrimination laws. The next step will be to develop laws that prohibit discrimination based on family responsibilities, as the enforcement is already in place.

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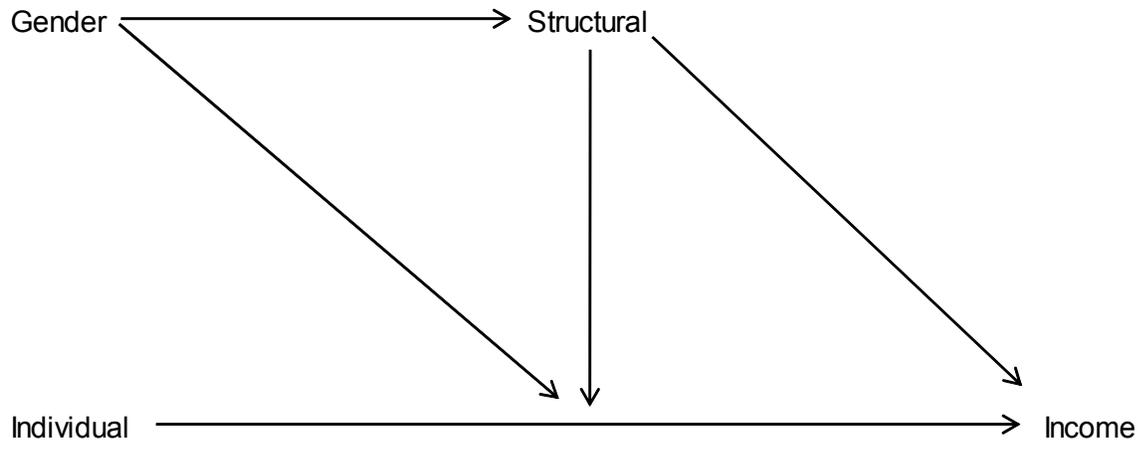
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APPENDIX

Figure 1
Income Determination Model



(Wright, 1992)

Table 1A
Values for Full Sample by Presence of Child

Variables	full sample	w/o child	¹ ²	w/child	paygap w/ to w/o child
Dependent Variable:					
Weekly Earnings (mean):	\$632	\$651	***	\$616	94.57%
Weekly Earnings (median):	\$560	\$580		\$528	91.11%
Weekly Earnings (centile):	50%	52%		46%	
(stddev)	(384)	(378)		(389)	
Individual Level Factors:					
Age (years):	42.44	46.73	*** ^	38.86	
	(9.37)	(9.68)		(7.4)	
% College Degree (0,1):	36%	35%		37%	
	(.48)	(.48)		(.48)	
	(100%)	(100%)		(100%)	
% Less than High School (0,1):	5.50%	4.34%	***	6.46%	
% High School Diploma (0,1):	30.4%	33.63%	***	27.6%	
% Some College (0,1):	28.2%	27.07%		29.1%	
% Bachelor Degree (0,1):	23.21%	21.36%	**	24.75%	
% Graduate Degree (0,1):	12.77%	13.60%		12.08%	
% Midwest & South (0,1):	62%	63%		61%	
	(.49)	(.48)		(.49)	
% Rural (0,1):	19.6%	20.9%	*	18.5%	
	(.4)	(.41)		(.39)	
Sample n (weighted):	4,498	2,047		2,451	
	100%	45.51%		54.49%	

¹ = *** p<0.001; ** p<0.01; * p<0.05

² = effect size greater =>.20

Table 1B
Values for Full Sample by Presence of Child

Variables	full sample	w/o child	¹ ²	w/child
Structural Level Factors:				
Hours per week:	37.0	38.2	*** ^	36.0
	(10.79)	(10.21)		(11.15)
(median)	40.0	40.0		40.0
Full-Time Work (0,1):	74.3%	78.5%	*** ^	70.8%
% Government worker (0,1):	22.8%	23.6%		22.0%
	(.42)	(.42)		(.41)
% Union member (0,1):	11.7%	11.8%		11.7%
	(.32)	(.32)		(.32)
% Goods Producing Sector (0,1):	10.0%	10.0%		10.0%
	(.3)	(.3)		(.3)
Occupational Prestige:	46.85	46.40	*	47.22
	(13.13)	(12.89)		(13.31)
	(100%)	(100%)		(100%)
% White-Collar High-Skill (0,1):	48.0%	44.0%	***	50.0%
	(.5)	(.5)		(.5)
% White-Collar Low-Skill (0,1):	34.0%	38.0%	*** ^	30.0%
	(.47)	(.48)		(.46)
% Blue-Collar High-Skill (0,1):	3.0%	2.0%		3.0%
	(.16)	(.14)		(.17)
% Blue-Collar Low-Skill (0,1):	16.0%	16.0%		16.0%
	(.37)	(.37)		(.37)
% High-Skill:	51.0%	46.0%		53.0%
Gender Level Factors:				
Occupational Sex Segregation:	1.4	1.4		1.4
	(.52)	(.51)		(.52)
% Minority (0,1):	20%	15%	*** ^	25%
	(.4)	(.35)		(.43)
% with child present (0,1):	54.5%			
	(.5)			
% with child under 6 (0,1):	25.7%	n/a		47.1%
	(.44)			(.5)
Sample n (weighted):	4,498	2,047		2,451
	100%	45.51%		54.49%

¹= *** p<0.001; ** p<0.01; * p<0.05

² = effect size greater =>.20

Figure 2
Weekly Median Earnings by Age cohort by Presence of Child



TABLE 2
Time Use by Presence of Child

All activities including household labor:	percent who participate		weekly hours		Difference for w/child from w/o child			
	w/o child	w/child	w/o child	w/child	wkly diff in hours	yearly diff in days	yearly diff in weeks	yearly diff in weeks
employment related labor	70.7% *** ^	67.0% ^	55.6 *** ^	52.9	-2.6	-5.7	-0.8	
household labor	94.1% *** ^	98.0% ^	25.4 *** ^	35.0	9.6	20.9	3.0	
household labor intensive ³	79.8% *** ^	94.6% ^	13.2 *** ^	23.2	10.0	21.6	3.1	
civic related labor	14.3%	15.4%	14.1	15.0	0.9	2.0	0.3	
personal related labor	100.0%	100.0%	65.2	64.0	-1.2	-2.7	-0.4	
leisure/recreational related labor	99.6%	99.8%	36.7	30.8	-5.8	-12.7	-1.8	
Household labor direct ³								
Spouse work status:								
no work	79.2% *** ^	93.8% ^	14.8 *** ^	19.5	4.7	10.3	1.5	
works PT	76.0% *** ^	91.1% ^	15.8 * ^	21.1	5.3	11.6	1.7	
works FT	80.2% *** ^	94.8% ^	12.8 *** ^	23.6	10.8	23.4	3.3	
Age-cohorts:								
25 to 29	60.8% *** ^	95.1% ^	12.9 *** ^	26.3	13.4	29.0	4.1	
30 to 34	74.8% *** ^	94.9% ^	10.6 *** ^	24.9	10.0	21.6	3.1	
35 to 39	74.3% *** ^	95.6% ^	11.5 *** ^	23.3	10.0	21.6	3.1	
40 to 44	81.8% *** ^	94.2% ^	12.3 *** ^	23.2	10.0	21.6	3.1	
45 to 49	81.7% *** ^	93.9% ^	12.9 *** ^	20.5	10.0	21.6	3.1	
50 to 54	82.6% *** ^	91.5% ^	13.5 *** ^	20.6	10.0	21.6	3.1	
55 to 59	84.7% *** ^	97.8% ^	14.8	17.0	10.0	21.6	3.1	
Earnings quintiles:								
lowest 20th pct	89.1% *** ^	95.6% ^	16.8 *** ^	27.3	10.5	22.7	3.2	
second 20th pct	81.5% *** ^	94.1% ^	14.9 *** ^	23.2	8.3	18.1	2.6	
third 20th pct	83.8% *** ^	94.3% ^	13.0 *** ^	21.0	8.0	17.3	2.5	
fourth 20th pct	72.7% *** ^	93.2% ^	10.4 *** ^	21.7	11.3	24.6	3.5	
highest 20th pct	72.1% *** ^	96.1% ^	10.7 *** ^	21.7	11.1	24.0	3.4	
Education:								
less than H.S. dipl.	91.7%	90.1%	16.5 ** ^	23.1	6.6	14.4	2.1	
H.S. diploma	85.5% *** ^	93.3% ^	15.5 *** ^	21.6	6.1	13.3	1.9	
some college	80.6% *** ^	94.8% ^	11.9 *** ^	22.7	10.8	23.4	3.3	
College deg (BA/BS)	73.9% *** ^	96.2% ^	11.6 *** ^	25.3	13.7	29.8	4.3	
Graduate or professional	69.3% *** ^	96.7% ^	10.8 *** ^	23.5	12.7	27.5	3.9	
Job status:								
white-collar high-skill	75.7% *** ^	96.2% ^	11.6 *** ^	23.7	12.1	26.3	3.8	
white-collar low-skill	82.5% *** ^	93.5% ^	14.0 *** ^	21.6	7.6	16.5	2.4	
blue-collar high-skill	88.5% * ^	97.8% ^	13.3 *** ^	24.2	10.9	23.5	3.4	
blue-collar low-skill	83.6% *** ^	91.5% ^	15.7 *** ^	24.3	8.7	18.8	2.7	
Work hours:								
part-time	87.8% *** ^	96.7% ^	15.7 *** ^	28.3	12.6	27.3	3.9	
full-time	77.6% *** ^	93.8% ^	12.5 *** ^	21.0	8.5	18.5	2.6	

¹= *** p<0.001; ** p<0.01; * p<0.05

² = effect size greater =>.20

³ Household direct intensive = cooking, cleaning, laundry, childcare & travel associated with childcare

TABLE 3
OLS Regression Analysis for the Income Determination Model
(Dependent variable = weekly earnings)

Variables:	Full sample		w/o child present		w/child present	
	unstd. ¹	std.	unstd. ¹	std.	unstd. ¹	std.
Individual-level factors:						
Age (years)	\$3 ***	0.085	\$4 ***	0.108	\$3 ***	0.054
Age centered square	\$0 ***	-0.052	\$0 ***	-0.082	\$0	-0.026
Less than HS (0,1)	ref grp		ref grp		ref grp	
High Sch dipl or less (0,1)	\$59 ***	0.071	\$43	0.054	\$65 **	0.075
Some college (0,1)	\$128 ***	0.150	\$93 ***	0.109	\$152 ***	0.178
Bachelor degree (0,1)	\$267 ***	0.293	\$207 ***	0.224 [^]	\$310 ***	0.344
Graduate degree (0,1)	\$397 ***	0.345	\$367 ***	0.333	\$416 ***	0.348
Midwest & South (0,1)	-\$32 ***	-0.040	-\$49 ***	-0.063	-\$22 *	-0.027
Rural (0,1)	-\$79 ***	-0.082	-\$74 ***	-0.080	-\$89 ***	-0.089
Structural-level factors:						
Hours per week	\$16 ***	0.457	\$17 ***	0.448	\$16 ***	0.467
Government Worker	-\$23 *	-0.025	-\$9	-0.010	-\$35 *	-0.037
Union member (0,1)	\$61 ***	0.051	\$41 *	0.035	\$78 ***	0.064
Goods-producing (0,1)	\$47 ***	0.037	\$45 *	0.035	\$52 **	0.041
White collar high (0,1)	\$236 ***	0.307	\$252 ***	0.332	\$222 ***	0.286
White collar low (0,1)	\$134 ***	0.165	\$144 ***	0.185	\$122 ***	0.144
Blue collar high (0,1)	\$57 *	0.024	\$90 *	0.035	\$31	0.014
Blue collar low (0,1)	ref grp		ref grp		ref grp	
Gender:						
W/child present (0,1)	\$20 *	0.026				
Occ.Sex-Seg.Index	-\$70	-0.094	-\$65 ***	-0.088	-\$72 ***	-0.097
Minority based on Income (0,1)	-\$41 ***	-0.042	-\$44 ***	-0.041	-\$40 ***	-0.044
Spouse hours work	-\$1 **	-0.025	-\$1	-0.028	-\$1	-0.022
HHL cleaning (0,1)	-\$11	-0.014	-\$10	-0.012	-\$12	-0.014
HHL laundry (0,1)	-\$14	-0.017	-\$17	-0.021	-\$11	-0.013
HHL food prep (0,1)	-\$37 ***	-0.044	-\$55 ***	-0.069	-\$25 *	-0.027
(Constant):	-\$239 ***		-\$236 ***		-\$227 **	
Adjusted R-sq.	0.537 ***		0.531 ***		0.542 ***	

¹ = *** p < 0.001; ** p < 0.01; * p < 0.05

² significant difference between women with children and women without children at the .05 level

TABLE 4
Lost Weekly Earnings by Presence of Child

All activities including household labor	percent who participate		weekly hours		lost earnings per week	
	w/o child	w/child	w/o child	w/child	w/o child	w/ child
household labor	94.1% ¹	98.0% ²	25.4 ³	35.0	-\$432	-\$599
household labor intensive ³	79.8% ¹	94.6% ²	13.2 ³	23.2	-\$226	-\$397

¹= *** p<0.001; ** p<0.01; * p<0.05

² = effect size greater =>.20

³ Household direct intensive = cooking, cleaning, laundry, childcare & travel associated with childcare

Figure 3
Shares of Unique Variance Explained

