

Evaluating the Poverty Status of Single Parent Families: Evidence of the Feminization of Poverty

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ABSTRACT

The term feminization of poverty was first introduced in the 1970s to describe the rising number of single female-headed households who were in poverty in the United States. Recently, however, single fathers are a growing demographic group. Using data from the U.S. Census Bureau's 2013 Current Population Survey, we estimate the size of the gender poverty gap of among single-headed families. We extend our analysis using the Oaxaca-Blinder decomposition to assess whether any of this gap can be attributed to discrimination. Our results suggest that the feminization of poverty still persists and that this may be, in part, due to gender-based discrimination.

INTRODUCTION

Over the past three decades, the term feminization of poverty has been used to describe the rising number of single female-headed households who are in poverty (Chant, 2006; Goldberg and Kremen, 1990; Minkler and Stone, 1985; Pearce, 1978, 1990). Recently, however, this rate has decreased to approximately 30 percent (U.S. Census Bureau, 2013b). Furthermore, the number of single fathers has risen. For every single father that existed in 1969, there are 9 single fathers today (Livingston, 2013).

Despite the growing number of single fathers, single mothers may continue to be at greater risk of falling into poverty than their male counterparts. Previous research suggests that the gender poverty gap, the difference in poverty rates for women and men, can be attributed to more women serving as single-heads of families compared to men (Christopher et al., 2002; Bianchi, 1999). But labor market discrimination, pathways into single-parenthood, and the timing of single-parenthood may help to explain why mothers are more at risk than fathers. Indeed, women are more likely to retain custody of children following a couple's dissolution (Starrels, Bould and Nicholas, 1994).

In this paper we explore whether single-mother families are more likely than single-father families to be in poverty. Using data from the U.S. Census Bureau's 2013 Current Population Survey, we estimate a family's probability of being in poverty given its characteristics, including the sex of the family head. We then estimate how much of the poverty gap among single-parent families can be explained by these characteristics and how much of the gap cannot be explained as a means to measure gender-based

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discrimination. We conclude with gendered policy recommendations to address the poverty gap among single parent families.

OVERVIEW OF GENDER DIFFERENCES IN POVERTY

In 2012, women were more likely than men to be in poverty, regardless of age (U.S. Census Bureau, 2013b). The poverty gap also persists among single-parent households. Twenty-four percent of single father families were in poverty compared to 43 percent of single mother families in 2012 (Livingston, 2013). While the number of single mother households (approximately 8.6 million) continues to surpass the number of single father households (approximately 2.6 million), there are only four times as many single mother households today than in 1969, compared to nine times as many single father households (Livingston, 2013). Approximately one-quarter of single parent householders are men, compared to 14 percent in 1960 (Livingston, 2013).

Previous research has estimated a high correlation between being a single mother and being in poverty, controlling for individual, household, and community characteristics (Brown and Hirschl, 1995; Lichtenwaller, 2005; McLaughlin and Sachs, 1988; Starrels, Bould and Nicholas, 1994). Single fathers tend to be older, have higher levels of educational attainment, and are more likely to be White compared to single mothers. While factors such as the parent's level of educational attainment and employment status, and the presence of children have been shown to affect a family's risk of being in poverty, little research is being done to capture the changing social trends in single parenthood and the rise of single father households (Livingston, 2013, Coley, 2001). Indicators such as changing patterns of fatherhood and evidence concerning the impact of paternal involvement on children's development may be causing this population to emerge more rapidly (Coley, 2001).

Inter-household structure and dynamics may also be a factor in explaining why single mothers are at a greater risk of poverty than single fathers. The second parent may be absent for various reasons: divorce or separation, the parents were never married, or incarceration. In cases of divorce or separation, the custodial parent may receive financial support from the absent parent. Historically, women are likely to retain sole or joint custody following a divorce (Cancian and Meyer, 1998; Cancian et al., 2014). More recently fewer mothers retain sole custody of children following a divorce. Joint custody is becoming more common while the percent of fathers with sole custody has remained remarkably stable (Gardner, 1985; Cancian and Meyer, 1998; Cancian et al., 2014). These new trends may contribute to the rising number of single fathers in the United States over the past four decades.

METHODS

The feminization of poverty was first introduced by Pearce (1978) to characterize rising poverty rates of women, single mothers in particular, in the United States.¹ Since then, numerous studies have criticized

Pearce's method as well as developed new approaches to measure the gender poverty gap in the United States and abroad (Bianchi, 1999; Christopher et al., 2002; Kimenyi and Mukum, 1995; McLanahan et al., 1989; McLanahan and Kelly, 1999; Pressman, 1998, 2002; Starrels et al., 1994). Here we examine absolute poverty rates as measured using the official U.S. poverty measure and the feminization of poverty as measured using the poverty gap between single father and mother families.

The Oaxaca-Blinder decomposition method is widely used to estimate discrimination between groups (for articles related to the gender wage gap, see Stanley and Jarrell, 1998; Oaxaca and Ransom, 1999; Deininger, Jin, and Nagarajan, 2013; Fang and Sakellariou, 2011; racial discrimination, see Duncan and Sandy, 2013; Sen, 2014; and learning outcomes, see Tansel, 1999). Blinder (1973) and Oaxaca (1973) lead the standard practice of decomposing the gender wage gap into two portions: a segment attributable to difference in skills between women and men, alongside differences in labor market returns to these skills. The effects of these differing endowments for men and women are estimated using separate regression models. We use the Oaxaca-Blinder decomposition in our analysis in order to determine which factors explain the poverty gap between single male- and female-headed families. The decomposition allows us to estimate the effect of these factors and discrimination on a family's likelihood of being in poverty.

DATA AND MEASURES

We use data from the 2013 March Supplement of the Current Population Survey (CPS) to analyze the poverty gap and income gap of female-headed families and male-headed families in 2012. The CPS is administered by the U.S. Census Bureau to collect annual household-level income data. Households are selected using a probability selection sample of 100,000 households. People who reside in institutions (e.g. nursing homes and prisons) are excluded from the sample. Person-level data is collected from all household members age 15 or older through personal and telephone interviews.

We examine households composed of a single family unit (at least one biological or adopted child under age 25). We exclude complex household and family structures, including households with more than one family, families with a cohabitating partner, and families with foster children¹, to strengthen our assumption of income pooling across household members. Our sample includes 5,916 single parent families: 1,078 male-headed families (18.22 percent) and 4,868 female-headed families (81.78 percent).

Using a probit model, we estimate the probability of a family being in poverty, controlling for the presence of children, the parent's education, the parent's race, the household's geography, and the state unemployment rate. A family is classified as being in poverty if its total income is less than its official poverty threshold², as determined by the U.S. Census Bureau. In 2012, the official poverty threshold for a single parent household with two children was \$18,498 (U.S. Census Bureau, 2013a). As of 2012, the official poverty rate for the United States was calculated at 15.0 percent. Of these 5,916 families, using national sample weights, approximately 31.5 percent are in poverty³. Of the 1,078 male householders, 14.6 percent

fall below the poverty line, and 35.3 percent of the 4,838 female householders fall below the poverty line ($p < 0.01$).

EXPLANATORY FACTORS

In general, men and women are most likely to be in poverty at the start and end of adulthood. In our analysis sample, single mothers typically are younger than single fathers: mothers are likely to be 35 to 44 years old and fathers are likely to be 45 to 54 years old ($t = 15.89$, $p < 0.01$).

Most families in our sample have one child present (47.3 percent). Fewer families have two children (34.2 percent) or three or more children (18.5 percent). When analyzing the distribution of number of children in the household by gender, we find a vast majority of the male-headed families have one child present (60.2 percent). While this percentage is less for female-headed families, the range of the number of children is greater for mothers. Female-headed families are also more likely to have two or more children than their male counterparts. Single fathers have an average of 1.53 children whereas single mothers have an average of 1.85 children ($t = -10.0$; $p < 0.01$).

Approximately 52 percent of the householders are White (not Hispanic), and 22 percent are in poverty. Fewer householders are Black (not Hispanic) (23 percent), Hispanic (19 percent), or some other race (5 percent). However, non-White householders are more likely to be in poverty: 43 percent of Black householders, 43 percent of Hispanic householders, and 27 percent of householder of some other race. This is consistent with other studies that have found that non-Whites are more likely to be in poverty (Cawthorne, 2008; Starrels, Bould and Nicholas, 1994).

In our analysis sample, most householders had completed some college (35 percent). Fewer householders had less than a high school diploma (12 percent), a high school diploma or general education degree equivalent (GED) (30 percent), or a Bachelor's degree or more (22 percent).

We also control for whether the household is located in an urban or rural area. Approximately 81 percent of the families reside in an urban area; 17 percent of families reside in a rural area.

Using data from the U.S. Bureau of Labor Statistics, we control for the state average annual unemployment rate (Bureau of Labor Statistics 2012). This variable attempts to control for labor market variations across states. Unemployment rates range from three percent to 11.5 percent, with a mean of approximately 7.8 percent in 2012.

PROBIT MODEL RESULTS

Our main result is that single mothers are 0.134 more likely to be in poverty than single fathers ($p < 0.01$), holding all other factors at their means⁴ (see table 1). The sex of the family-head uniquely predicts the poverty status of the family unit, suggesting that poverty is still a unique, female experience. Moreover, gender-based discrimination may help to explain why women are more likely to be in poverty. We find that

mothers are more likely to be in poverty at every age. This is consistent with Rank and Hirschl (2001) findings wherein women are more likely to be in poverty at every age. They further conclude that the probability decreases following middle-age and rises during late adulthood. Families are less likely to be in poverty as the householder's age increases above age 41 ($p < 0.01$), with the lower probabilities of being in poverty for older parents (60 year old parents are 0.17 less likely to be in poverty) and higher probabilities of being in poverty for younger parents (20 year old parents are 0.19 more likely to be in poverty). The poverty gap between single mothers and single fathers is widest among young parents and shrinks among older parents. Older parents are more likely to have older children that are no longer a financial burden on them. If the mother or father became a single parent at a young age, they are less likely to have had high educational attainment and work experience, putting them at greater risk for poverty (Card and Wise, 1978).

Table 1: Predicted Probability of Being in Poverty: Probit Estimates

Variable	Marginal effect	Standard error	
Householder's sex	0.134	0.021	***
Householder's age	-0.009	0.001	***
Number of own children	0.061	0.006	***
Householder's race: Black, not Hispanic	0.079	0.016	***
Householder's race: Hispanic	0.044	0.018	**
Householder's race: Other	0.033	0.028	
Householder's education: High school or less	0.131	0.019	***
Householder's education: Some college	-0.113	0.015	***
Householder's education: Bachelor's degree or more	-0.269	0.021	***
Urban residence	-0.059	0.018	***
State unemployment rate	.001	.004	

Note: Sample of 5,916 families and weighted population estimate of 8,542,754 families. Statistical significance reported at the 10 percent (*), 5 percent (**), and 1 percent (***). Omitted categories: householder's race: White, not Hispanic and householder's educational attainment: high school diploma or GED. Marginal effects calculated at variable means.

A family's probability of being in poverty increases as the number of children in the family increases. We also find that the predicted probabilities of being in poverty by householder's sex are statistically different. Regardless of the number of children in the family, single mothers are more likely to be in poverty than single fathers. Mothers with one child are nearly 0.20 more likely to be in poverty; fathers must have 3 or 4 children before they have a similar increased likelihood of being in poverty. The poverty gap persists among families with less than ten children, and is greatest among families with five or six children. The poverty gap shrinks for families with fifteen or more children, an uncommon occurrence given that the mothers and fathers have fewer than two children on average in our sample. This finding suggests that the poverty gap cannot be explained entirely by differences in the number of children in single mother and single father families.

We also find evidence that suggests that Black ($p < 0.01$) and Hispanic ($p < 0.05$) single parents are more likely to be in poverty compared to White single parents. The probability of being in poverty was two times

greater for Black single parents compared to Hispanic single parents. This is consistent with the literature on race and poverty (Cawthorne, 2008; Starrels, Bould and Nicholas, 1994).

Compared to single-parents with a high school diploma or GED equivalent, single parents who did not graduate from high school are more likely to be in poverty ($p < 0.01$). Single parents with higher levels of educational attainment have a decreasing probability of being in poverty, at an increasing rate. Single parents with a Bachelor's degree or more are more than twice as likely to not be in poverty as single parents with only some college. Indeed, the family-head's educational attainment is the greatest predictor of a family's predicted probability of being in poverty. Though, the family-head's gender is the second greatest factor. This finding is also consistent with the literature, which finds that higher levels of educational attainment are correlated with higher family incomes and lower levels of poverty.

Table 2: Oaxaca-Blinder Decomposition Estimates

Poverty status	Coefficient	Standard error	
Differential			
Male householder	0.155	0.014	***
Female householder	0.365	0.010	***
Difference	-0.209	0.017	***
Explained			
Householder's age	-0.051	-0.006	***
Number of children	-0.022	0.003	***
Householder's race: Black, not Hispanic	-0.013	0.003	***
Householder's race: Hispanic	-.0.003	0.002	***
Householder's race: Other	0.000	0.000	
Householder's education: High school or less	-0.005	0.002	***
Householder's education: Some college	0.005	0.002	***
Householder's education: Bachelor's degree or more	-0.009	0.003	***
Urban residence	0.002	0.001	**
State unemployment rate	-0.000	0.000	
Total	-0.097	0.010	***
Unexplained			
Householder's age	0.456	0.077	***
Number of children	-0.065	0.029	***
Householder's race: Black, not Hispanic	0.009	0.007	
Householder's race: Hispanic	0.009	0.007	
Householder's race: Other	-0.001	0.004	
Householder's education: High school or less	-0.002	0.006	
Householder's education: Some college	0.046	0.012	***
Householder's education: Bachelor's degree or more	0.043	0.009	***
Resides in an urban area	0.049	0.031	
State unemployment rate	0.098	0.066	
Total	-0.113	0.016	***

Note: Sample of 5,916 families and weighted population estimate of 8,542,754 families. Statistical significance reported at the 10 percent (*), 5 percent (**), and 1 percent (***). Omitted categories: householder's race: White, not Hispanic and householder's educational attainment: high school diploma or GED. Marginal effects calculated at variable means.

Single parent families who reside in urban-areas are less likely to be in poverty compared to similar families living in rural-areas ($p < 0.01$). This may in part be due to increased access to public services and more employment opportunities in urban areas (Starrels, Bould and Nicholas, 1994).

OAXACA-BLINDER DECOMPOSITION RESULTS

We used the Oaxaca-Blinder decomposition to estimate the proportion of the poverty gap that could be attributed to discrimination (see table 2). Mothers are more than twice as likely to be in poverty (probability of 0.37) compared to fathers (probability of 0.15)⁵. Approximately 46 percent of the poverty gap can be explained by the family-head's age, race, and level of educational attainment, the number of children in the family, whether the family resides in a rural or urban area, and the family's respective state unemployment rate. Alternatively stated, these factors cannot explain 54 percent of the poverty gap. Variation in the family-head's age and race and the number of children in the family are the greatest explanatory factors of the poverty gap between single mothers and single fathers. Moreover, the family-head's age is the most influential factor in the unexplained component of the poverty wage gap.

Our findings suggest that the timing by which mothers and fathers become single parents may differ significantly and may help to explain why single mothers are at greater risk of being in poverty compared to single fathers. If mothers are likely to become single parents when children are young whereas fathers are more likely to become single parents when children are older, then, even if mothers and fathers begin families at the same age, single mothers will be younger than single fathers⁶. Also, families who enter poverty with young children may remain in poverty longer (Ratcliffe and McKernan, 2010). Coupled with young parents being less likely to have high levels of educational attainment, young mothers who have not completed college may face significant barriers to obtain a college degree given their family responsibilities.

DISCUSSION

We find evidence that suggests that the feminization of poverty stills exists in the United States. While we only examined a subset of families, single parents with no cohabitating partner and with at least one child under age 25, we find that single mothers are more likely to be in poverty than single fathers. Apart from the parent's sex, a parent's level of educational attainment has the greatest effect on the family's predicted probability of being in poverty.

Future research should focus on those factors causing single mothers to be at a greater risk of poverty. Firstly, while we find some evidence to suggest that single mothers and fathers have different pathways to becoming single-parents, additional research is needed to determine how such pathways impact the family's poverty status. Furthermore, families are increasingly more complex, including cohabitating partners (Bumpass and Lu, 1999; Goldstein and Kenney, 2001; Kennedy and Bumpass, 2008) and three or more generations living in one household (Provencher, 2011; Snyder, McLaughlin, and Findeis, 2006). "Grandmother" headed families are becoming more common among families in rural areas (Snyder, McLaughlin, and Findeis, 2006). These families may face particularly severe economic hardship due to their unique structure and source of income (Snyder, McLaughlin, and Findeis, 2006). Finally, research should consider how these changing characteristics influence a family's poverty status, and leverage this

information to inform policymakers on how to develop programs and services for families to reduce their likelihood of falling into poverty.

ENDNOTES

1. A family's poverty status is determined by comparing a family's income to its poverty threshold. A family with income less than its threshold is defined as "in poverty." Poverty rates are calculated as the total number of families in poverty divided by the total number of families. In this paper, we use the official U.S. poverty thresholds as determined by the U.S. Census Bureau.
2. We present national estimates throughout our paper using national sample weights.
3. All regression estimates available from the authors upon request.
4. Hamilton, Martin, and Ventura (2013) found that the majority of women in the United States had their first child between the ages of 20 and 24 in 2012.

REFERENCES

- Bianchi, Suzanne (1999). Feminization and Juvenilization of Poverty: Trends, Relative Risks, Causes, and Consequences. *Annual Review of Sociology*, 25, 307 -333.
- Blinder, Alan S. (1973). Wage Discrimination: Reduced Form and Structural Estimates, *The Journal of Human Resources*, 8(4), 436-455.
- Brown, David and Hirschl, Thomas. (1995). Household Poverty in Rural and Metropolitan-Core Areas of the United States. *Rural Sociology*, 60(1), 44-66.
- Bumpass, Larry and Lu, Hsien-Hen (1999). Trends in Cohabitation and Implications for Children's Family Contexts in the U.S. (Working Paper No. 98-15). Retrieved from the Center for Demography and Ecology website:
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.36.6044&rep=rep1&type=pdf>.
- Bureau of Labor Statistics (2012). Local Area Unemployment Statistics: Unemployment Rates for States. Retrieved from <http://www.bls.gov/lau/lastrk12.htm>.
- Cancian, Maria and Meyer, Daniel. (1998). Who gets custody? *Demography*, 35(2): 147-157.
- Cancian, Maria, Meyer, Daniel, Brown, Patricia and Cook, Steven. (2014). Who gets custody now? Dramatic changes in children's living arrangements after divorce. *Demography*, 51(4): 1381-1396.
- Card, Josefina J and Wise, Laress L (1978). Teenage mothers and teenage fathers: the impact of early childbearing on the parents personal and professional lives. *Family Planning Perspectives*, 10(4), 199-205.
- Cawthorne, Alexandra (2008). The Straight Facts on Women in Poverty. *Center for American Progress*. Retrieved from http://www.americanprogress.org/wp-content/uploads/issues/2008/10/pdf/women_poverty.pdf

- Chant, S. (2006). Re-thinking the “feminization of poverty” in relation to aggregate gender indices. *Journal of Human Development*, 7(2), 201-220.
- Christopher, Karen, England, Paula, Smeeding, Timothy M., and Ross Phillips, Katherin (2002). The Gender Gap in Poverty in Modern Nations: Single Motherhood, The Market, and the State. *Sociological Perspectives*, 45(3), 219-242.
- Coley, Rebekah L. (2001). (In) visible men: emerging research on low-income, unmarried, and minority father. *American Psychologist*, 56(9), 743-753.
- Deininger, Klaus, Jin, Songqing, and Nagarajan, Hari (2013). Wage Discrimination in India's Informal Labor Markets: Exploring the Impact of Caste and Gender. *Review of Development Economics*, 17(1), 130-147.
- Duncan, Kevin and Sandy, Jonathon (2013). Using the Blinder-Oaxaca Decomposition Method to Measure Racial Bias in Achievement Tests. *The Review of Black Political Economy*, 40(2), 185-206.
- Fang, Zheng and Sakellariou, Chris (2011). A Case of Sticky Floors: Gender Wage Differentials in Thailand. *Asian Economic Journal*, 25(1), 35-54.
- Gardner, R. A. (1985). Recent trends in divorce and custody litigation. In *Academy forum*, 29(2), 3-7.
- Goldberg, G.S. and Kremen, Eleanor (1990). *The feminization of poverty: Only in America?* Westport, CT: Praeger Publishers.
- Goldstein, Joshua R. and Kenney, Catherine T. (2001). Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Women. *American Sociological Review*, 66, 506-519.
- Hamilton, Brady E., Martin, Joyce A., Ventura, Stephanie J. (2013). Births: Preliminary Data for 2012. *National Vital Statistics Reports*, 63(3), 1-20.
- Kennedy, Sheela, and Bumpass, Larry (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*, 19, 1663-1692.
- Kimenyi, Mwangi S., and Mukum Mbaku, John (1995). Female Headship, Feminization of Poverty and Welfare. *Southern Economic Journal*, 62(1), 44-52.
- Lichtenwalter, Sara (2005). Gender Poverty Disparity in US cities: Evidence Exonerating Female-Headed Families. *Journal of Sociology and Social Welfare*, 32(2), 75-96.
- Livingston, Gretchen (2013). The Rise of Single Fathers. Washington, DC: PewResearch: Social & Demographic Trends.
- McLanahan, Sara S, Sorensen, Annemette, and Watson, Dorothy (1989). Sex Differences in Poverty, 1950-1980. *Signs*, 15(1), 102-122.
- McLanahan, Sara S. and Kelly, Erin L. (1999). The Feminization of Poverty: Past and Future. Janet Saltzman Chafetz (Ed.), *Handbook of the Sociology of Gender* (pp.127-145). New York: Kluwer Academic/Plenum Publishers.

- McLaughlin, Diane K. and Sachs, Carolyn (1988). Poverty in Female-headed Households: Residential Differences. *Rural Sociology*, 53(3), 287-306.
- Minkler, M., & Stone, R. (1985). The feminization of poverty and older women. *The Gerontologist*, 25(4), 351-357.
- Oaxaca, R. L. (1973) Male-Female Wage Differentials in Urban Labor Markets. *International Economic Review*, 14, 693-709.
- Oaxaca, Ronald L. and Ransom, Michael R. (1999). Identification in Detailed Wage Decompositions. *The Review of Economics and Statistics*, 81(1), 154-157.
- Pearce, Diana (1978). The Feminization of Poverty: Women, Work and Welfare. *The Urban and Social Change Review*, 11 (1,2), 28-36.
- Pearce, Diana (1990). Welfare is not for women: Why the war on poverty cannot conquer the feminization of poverty. *Women, the state, and welfare*, 265-279.
- Pressman, Steven (1998). The gender poverty gap in developed countries: Causes and Cures. *The Social Science Journal*, 35(2), 275-286.
- Pressman, Steven (2002). Explaining the Gender Poverty Gap in Developed and Transitional Economies. *Journal of Economic Issues*, 36(1), 17-40.
- Provencher, Ashley (2011). Unit of Analysis for Poverty Measurement: A Comparison of the Supplemental Poverty Measure and the Official Poverty Measure. *Census Bureau, August*, 2.
- Rank, Mark R. and Hirschl, Thomas A. (2001). The Occurrence of Poverty across the Life Cycle: Evidence from the PSID. *Journal of Policy Analysis and Management*, 20(4), 737-755.
- Ratcliffe, Caroline, and McKernan, Signe-Mary (2010). Childhood Poverty Persistence: Facts and Consequences (Brief 14). Retrieved from The Urban Institute website: <http://www.urban.org/UploadedPDF/412126-child-poverty-persistence.pdf>.
- Ruggles, Patricia (1994). *Drawing the Line*. Washington, D.C.: Urban Institute.
- Sen, Bisakha (2014). Using the Oaxaca-Blinder decomposition as an empirical tool to analyze racial disparities in obesity. *Obesity: A Research Journal*. DOI: 10.1002/oby.20755.
- Snyder, Anastasia R., McLaughlin, Diane K. and Findeis, Jill (2006). Household Composition and Poverty among Female-Headed Households with Children: Differences by Race and Residence. *Rural Sociology*, 71(4), 597-624.
- Stanley, T.D. and Jarrell, Stephen B. (1998). Gender Wage Discrimination Bias? A Meta-Regression Analysis. *The Journal of Human Resources*, 33(4), 947-973.
- Stanley, T.D. and Jarrell, Stephen B. (2004). Declining Bias and Gender Wage Discrimination? A Meta-Regression Analysis. *The Journal of Human Resources*, 39(3), 828-838.
- Starrels, Marjorie E, Bould, Sally, and Nicholas, Leon J. (1994). The feminization of poverty in the United States: gender, race, ethnicity, and family factors. *Journal of Family Issues*, 15, 590-607.

Tansel, Aysit (1999). General Versus Vocational High School and Labor Market Outcomes in Turkey.

Human capital: population economics in the Middle East, 258-272.

U.S. Census Bureau (2012). *Poverty Thresholds, 2012*. [Table 1]. Retrieved from

<https://www.census.gov/hhes/www/poverty/data/threshld/>.

United States Census Bureau. (2013a). Current Population Survey, 2013 Annual Social and Economic Supplement.

U.S. Census Bureau (2013b). Table POV34: Single Year of Age -- Poverty Status: 2012, Below 100% of Poverty -- All Races. Retrieved from

http://www.census.gov/hhes/www/cpstables/032013/pov/pov34_100.htm.